

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

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In the matter of:

COMMONWEALTH EDISON COMPANY

Docket No. 50-454 OL  
50-455 OL

(Byron Nuclear Power Station,  
Units 1 & 2)

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Location: Rockford, Illinois

Pages: 5426 - 5660

Date: Thursday, April 21, 1983

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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

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In the matter of:	:
COMMONWEALTH EDISON COMPANY	:
(Byron Nuclear Power Station,	: Docket Nos. 50-454 OL
Units 1 and 2)	: 50-455 OL
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Eight Floor Courtroom  
Winnebago County Courthouse  
Rockford, Illinois

Thursday, 21 April 1983

Hearing in the above-entitled matter was re-  
convened, pursuant to adjournment, at 9:00 a.m.

BEFORE:

- IVAN W. SMITH  
Administrative Law Judge
- A. DIXON CALLIHAN  
Administrative Judge
- RICHARD F. COLE  
Administrative Judge

APPEARANCES:

On behalf of the Licensee:

MICHAEL MILLER, Esq.  
ALAN P. BIELAWSKI, Esq.  
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On Behalf of the Regulatory Staff:

STEVEN GOLDBERG, Esq.  
SPENCER PERRY, Esq.  
Office of the Executive Legal Director  
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Washington, D. C. 20555

On behalf of the Intervenors DAARE/SAFE and  
the League of Woman Voters

DIANE CHAVEZ  
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Rockford, Illinois

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Emergency Planning Group

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25I N D E X

WITNESSES:	DIRECT	CROSS	REDIRECT	RECROSS	BOARD	CROSS ON BOARD	VOIR DIRE
E.Erie Jones	5443	5445	5493	5499	5487	5491	
Monte Phillips } Gordon Wenger }	5508	5512	5609	5615	5594	5609	5529
Thomas Bowes	5618	5635					
	Rebuttal:						
	5623						

EXHIBITS:IDENTIFIEDRECEIVED

Applicant's 21  
(IPRA Vol. 1)

5445

P R O C E E D I N G S

(9:00 a.m.)

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3 JUDGE SMITH: Let's go on the record.

4 MR. MILLER: At this time I would like to call  
5 Mr. Erie Jones.

6 JUDGE SMITH: Okay. We will be ready for him  
7 in just a moment. We want to bring up some preliminary  
8 considerations.

9 Mr. Jones, you can take the stand. It is just  
10 a scheduling matter.

11 The Board has somewhat belatedly come to the  
12 realization that the schedule proposed by the parties for  
13 the balance of this proceeding simply is not realistic. We  
14 want to consult with the parties about a change. We propose  
15 that we have no hearings tomorrow; that we complete the  
16 Staff and the utility witnesses today; that next week we  
17 hear only the steam generator and Mr. Levine; and then we  
18 schedule a session for the end of May to clean up the  
19 balance of it.

20 There would be a bifurcated proposed finding  
21 schedule. The issues are clearly severable. The parties  
22 have been forcing evidence through this Board faster than  
23 we can comfortably accept it. We have just come to the  
24 point now where we won't and we simply will not preside over  
25 a hearing where we are not prepared. We need more time for

1 preparation.

2 With those comments we will invite comments from  
3 the parties.

4 MS. JOHNSON: For the League of Women Voters,  
5 and I'm speaking for David Thomas -- I talked with him last  
6 night, trying to get the scheduling worked out. Am I to  
7 understand that you want to postpone the hydrology then, too?

8 JUDGE SMITH: Yes.

9 MS. JOHNSON: Do you have a proposed date for that?

10 JUDGE SMITH: Yes. May 23rd. The week of May  
11 23rd would be set aside for hydrology and the balance of the  
12 emergency planning case.

13 MS. JOHNSON: All right.

14 JUDGE SMITH: However, we are also wondering if  
15 the parties have either attempted to settle hydrology based  
16 on new evidence, or if it might not be amenable to summary  
17 disposition.

18 Is there any consideration of that?

19 MS. JOHNSON: I don't believe so from our viewpoint,  
20 but I would have to talk to our attorney. We assume that  
21 there will be -- that we will need at least two and a half  
22 days, which is what we originally planned, and we were very  
23 concerned about next week's schedule because of that.

24 As far as Mr. Levine goes, our attorney left town  
25 today. He will not be back until Monday. He did not see the

1 rebuttal testimony from Mr. Levine until yesterday, and  
2 he said that he felt that we might want to do discovery,  
3 and he would have to address that when he comes next week.  
4 So we are not certain about having Mr. Levine on next Friday.  
5 We are willing to do it if it can be arranged.

6 JUDGE SMITH: We are thinking about not having a  
7 session next Friday.

8 MS. JOHNSON: We are thinking of not going next  
9 Friday?

10 JUDGE SMITH: Having the steam generator witnesses  
11 beginning the normal schedule Monday afternoon, and then  
12 expecting without hydrology we should be able to finish up  
13 with Mr. Levine on perhaps Thursday. You don't know.

14 MS. JOHNSON: Because of our attorney being away.  
15 He said he was leaving today and would not be back until  
16 Monday. He said he really did not have time to look at it.  
17 He might want discovery, which of course he brought up before,  
18 which might be in the form of a deposition. He is not sure.

19 JUDGE SMITH: Let's put that aside for now.

20 Mr. Miller.

21 MR. MILLER: Yes. Judge Smith, just a general  
22 observation, then I would like to deal with the specifics.

23 I can appreciate the Board's reaction to the rather  
24 overwhelming amount of facts that have been placed before it  
25 over the last six or seven weeks. Nonetheless, it is somewhat



1 disappointing to the Applicant now that we are in the home  
2 stretch to find that one issue under the Board's proposal  
3 would be pushed off until late May. Let me tell you why  
4 it is disappointing.

5 We think that with one more full week we could  
6 conclude steam generator testimony, liquid pathway testimony,  
7 and Dr. Levine, as we had originally scheduled. I tend to  
8 agree with the Board that the balance of emergency planning  
9 is unlikely to be concluded in the time left for this week,  
10 and we will certainly be willing to put that over until a  
11 later time.

12 As I see the process unfolding, at the conclusion  
13 of the evidentiary hearings, the parties are going to be  
14 preparing proposed findings and submitting them to the Board  
15 for its consideration and initial decision. If we are able  
16 to finish everything but emergency planning, the Board will  
17 have before it in a timely fashion proposed findings on all  
18 issues necessary to achieve fuel loading and up to five percent  
19 power testing, should the Board find in the Applicant's favor  
20 on all issues but the emergency planning issue.

21 We believe this week so far we have addressed  
22 whatever onsite emergency planning issues there are so that  
23 the Board would be able to make such findings as would be  
24 necessary to authorize fuel loading and the low power testing.  
25 If we go until May 23rd and push off hydrology and the liquid

1 pathway contention until then, we are looking at a situation  
2 in which proposed findings would not be due on that issue  
3 to the Board until mid-July.

4 JUDGE SMITH: Not necessarily.

5 MR. MILLER: That's the timing that I think is  
6 contemplated by our stipulation. If the hearings went the  
7 week of May 23rd, they would conclude probably sometime the  
8 26th or the 27th of May. The Applicant and the Intervenors  
9 commit to having proposed findings in thirty days, and the  
10 Staff uses its best efforts to have proposed findings within  
11 forty days. There is the Memorial holiday in there.  
12 Realistically, it is July 15th under that type of schedule  
13 before the Board has all of the proposed findings on the  
14 liquid pathway contention.

15 That seems to me even with a November date contem-  
16 plated for fuel load to further complicate the process by  
17 which we come to an initial decision in this proceeding.

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1 JUDGE SMITH: I guess we did not complete our  
2 analysis. In the first place, the Board will not be writing  
3 a decision on all issues simultaneously. There is no use  
4 rushing to the end of the hearing and receiving proposed  
5 findings and have the proposed findings sit on our desks  
6 until we get around to it.

7 On the hydrology issue, assuming we write the  
8 decisions in the order in which the evidence is heard,  
9 hydrology will still be down the line before we can arrive at  
10 it and decide it.

11 If we have the bifurcated approach and we have  
12 two and a half days' evidence of hydrology, let's say in the  
13 week of May 23rd, I don't see why, if the parties could have  
14 had proposed findings on all of the issues in 30 days, I don't  
15 see why they need a full 30 days for such a relatively short,  
16 discrete issue.

17 I would anticipate a shorter period of proposed  
18 findings on hydrology. In any event, next week is just going  
19 to be -- these are highly technical issues. It is hard for  
20 me to follow them so fast. It is just too much.

21 MS. JOHNSON: Your Honor, may I say that we would  
22 be willing, I think -- I have to talk to the attorney -- to  
23 try to reach some kind of agreement on hydrology. That had  
24 not occurred to us and we might try it. I don't know. We  
25 have not, you know, done anything on that order yet.

1 JUDGE SMITH: We have requested that the parties  
2 always look at the evidence as it unfolds as a continuing  
3 process to determine what their current litigative position is. I  
4 have seen issues go to litigation automatically when the parties  
5 really do not dispute the issues anymore, we certainly don't  
6 want that.

7 MS. JOHNSON: There is a serious dispute, but I  
8 think we said we would be willing to explore it. We have not  
9 done that so far.

10 MR. MILLER: May I conclude my comments? I would  
11 assume from the Board's comments that the evidentiary record  
12 would be considered closed on all issues except emergency  
13 planning and hydrology.

14 JUDGE SMITH: Yes.

15 MR. MILLER: With respect to Mrs. Johnson's  
16 comments and the Board's indications that it does not wish  
17 to meet a week from tomorrow, I would have to check with Mr.  
18 Gallo and Dr. Levine as to whether, if there are any conflicts  
19 in his schedule that were set for April 29th, pursuant to,  
20 I think, an agreement with Mr. Thomas.

21 MS. JOHNSON: No, Mr. Thomas has not spoken to  
22 Mr. Gallo at all. He has not heard from him.

23 MR. MILLER: In any event, I am going to make  
24 sure that those communications are opened up.

25 As far as discovery goes, I think that we are

1 willing to be reasonable about this, but Dr. Levine's  
2 testimony addresses one point and one point only -- the  
3 uncertainty band in the Staff's severe accident analysis in  
4 the FES. I don't know what type of discovery would be  
5 appropriate in that circumstance. It takes off -- that is,  
6 the testimony takes off from a document that has been in the  
7 record and available to the parties for many, many months.

8           So, my guess is we would probably oppose any  
9 request for discovery because that simply is just going to  
10 stretch this out interminably. But I would like to check  
11 with Mr. Gallo and Dr. Levine and I will try to report back  
12 to the Board at noontime.

13           JUDGE SMITH: We do not mean to suggest that we  
14 decline to meet on Friday; it's just that we did not think  
15 it would be necessary to meet on Friday if we had a bifurcated  
16 schedule.

17           MS. JOHNSON: Yes.

18           JUDGE SMITH: To summarize --

19           MR. SAVAGE: We have an immediate problem. We  
20 have a witness who is contemplating leaving from New York to  
21 come here today to address the survey issue. Now, we can  
22 still keep him from leaving, but we need to know right away.

23           JUDGE SMITH: I would do that.

24           MR. SAVAGE: All right.

25           MS. JOHNSON: I might add that, of course, what



1 I said to you has to be checked out with the schedule of  
2 Mr. Thomas and Dr. Wood, who is our witness for hydrology.

3 MR. SAVAGE: We now have a witness -- we cannot  
4 find him now. He is probably at the airport, except we do  
5 not know which one, and he is on his way to Rockford to  
6 appear as part of the panel that was to address the survey  
7 issue.

8 MR. STEVEN GOLDBERG: May I be heard on this  
9 before you deliberate further? I think we can appreciate the  
10 Board's legitimate interest that it has expressed on the  
11 pace of the schedule. I guess we believe that the issues  
12 are probably tryable within the timeframe that has been set  
13 aside, and that to an extent, schedules of, you know, legal  
14 and technical schedules have been developed to try to  
15 accommodate that schedule.

16 Looking immediately, I understand from the other  
17 parties that they don't have an extensive amount of questions  
18 for the staff emergency planning witnesses, and that it may  
19 be possible to conclude that issue with Intervenors' direct  
20 case this week, with the planned session for tomorrow.

21 This would be particularly true if the Applicant's  
22 motion to strike the Intervenors' surveys were favorably  
23 decided. And perhaps it is possible to reconsider the  
24 necessity to adjust this schedule as we see emergency planning,  
25 if concludable this week.

1 JUDGE SMITH: It is not solely a question of  
2 can you get these witnesses on the stand and off. As we  
3 have noted before, the parties are specializing. The utility  
4 has had quite a few specialists come in. Mr. Goldberg, you  
5 have had specialists' technical advice sitting at the counsel  
6 table with you all the time, and the Intervenors have come  
7 forward with teams of specialists. We can't do that. We  
8 have to get on top of all of the evidence, and the pace is  
9 trying to force it through us faster than we can, in due  
10 deliberate consideration, accept.

11 Now, with Friday off tomorrow, we would be using  
12 it to get ready for next week, and the weekends that we have  
13 been using. We just need more time to get on top of the  
14 issues. It has finally caught up with us.

15 MR. STEVEN GOLDBERG: We will abide by the  
16 schedule --

17 JUDGE SMITH: If it should turn out today that  
18 we were wrong about the emergency planning, okay, so be it.  
19 We will adjust, we will be flexible. If it should turn out  
20 that your person arrives this afternoon and we can get him  
21 here and go on or maybe have a short session tomorrow. We  
22 are not going to be insensitive to the expense and  
23 inconvenience. We are just simply warning the parties right  
24 now that to do our job correctly, we need more time to  
25 prepare for the hearing. We need a shorter day, and we need

1 more time to study this testimony before it is presented.

2 MR. SAVAGE: What is the proposal? That we do  
3 Mr. Jones and Mr. Wenger and Mr. Phillips today and that's all?

4 JUDGE SMITH: Who else is there?

5 MR. SAVAGE: We had scheduled Mr. Turner and  
6 Mr. Maloney, two of the school superintendents, that are  
7 going to be here at 1:00 o'clock, as will be Mr. Bause. Mr.  
8 Watts is going to be here at 3:00 o'clock under subpoena.

9 JUDGE SMITH: Our view was that we saw no  
10 difficulty having the non-Intervenor witnesses today. We  
11 thought that was quite comfortable. We do not think we can  
12 get all of your case in this week. We anticipate a lot of  
13 debate on the motion to strike. It is just a big task that  
14 you are trying to accomplish. We, in good conscience, cannot  
15 act hastily. You want a deliberative decision.

16 MR. SAVAGE: I am glad you have decided that way.  
17 We do not disagree. We thank you for that, for giving it  
18 due consideration. It is worth it.

19 Mr. Murphy is on his way and we cannot stop him.  
20 If you could do him today --

21 JUDGE SMITH: If he cannot be stopped, if he  
22 gets here --

23 MR. SAVAGE: We cannot put him up on the panel  
24 anymore, but if you would just do him.

25 MR. BIELAWSKI: I cannot really imagine how the

1 Intervenor can attempt to get the survey in without the  
2 assistance of Mr. Murphy.

3 JUDGE SMITH: What we are saying is can't we  
4 take him?

5 MR. SAVAGE: Just him today.

6 JUDGE SMITH: Let's face it --

7 MR. BIELAWSKI: Certainly.

8 JUDGE SMITH: Let's proceed, then, with Mr. Jones.

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1 MR. GREENBERG: I have two matters that have  
2 nothing to do with scheduling.

3 Ms. Whicher wanted me to inform the Court that  
4 Mr. Becker and she are considering a stipulation concerning  
5 what Mr. Zeise might say.

6 JUDGE SMITH: That is another concern we have had.

7 MR. MILLER: It is a concern to us. We have been  
8 negotiating with Ms. Whicher for approximately almost two  
9 weeks now since the subpoena was issued. I spoke with Mr.  
10 Becker yesterday. He understands that this is a process  
11 that either has to be concluded very, very soon one way or  
12 the other, because if there is no possibility of the stipula-  
13 tion that Mr. Zeise has to come out here and testify unless  
14 the Intervenors withdraw their request, and then he would  
15 be subpoenaed to testify. It is stretching out again.

16 MR. GREENBERG: One other quick matter. I would  
17 like to introduce the Court to Mr. Allen Goldberg who is  
18 appearing on behalf of the Intervenors.

19 JUDGE SMITH: All right.

20 Mr. Goldberg.

21 MR. ALLEN GOLDBERG: I will be assisting today.  
22 I have been asked to help. I am a member of the Illinois --  
23 licensed to practice in the State of Illinois, and I practice  
24 in the Chicago area.

25 JUDGE SMITH: Would you state your office address



1 and phone number?

2 MR. ALLEN GOLDBERG: My number is 262-4355. The  
3 address is 6112 North Walcott Avenue, Chicago, Illinois 60626.

4 JUDGE SMITH: Would you give me that letterhead  
5 that you had shown me?

6 And, Mr. Jones, I think we are ready for you now.

7 MR. SAVAGE: We have Lee Walters coming under  
8 subpoena today. Do you not want to have her examined today?  
9 Should we request that she come another day?

10 JUDGE SMITH: When is she to arrive?

11 MR. SAVAGE: Three o'clock.

12 JUDGE SMITH: She is local here?

13 MR. SAVAGE: Yes, she is.

14 JUDGE SMITH: Let's see how we progress. Let's  
15 see if it is really true that you are going to get the Staff  
16 people out.

17 MR. SAVAGE: I ask because she is a physician. I  
18 am sure her day is a very busy one. I have a feeling that if  
19 she comes here, we'll say would you come back again.

20 JUDGE SMITH: I would think that if she is providing  
21 her schedule to come today, we should try to take her. We  
22 will.

23 MR. SAVAGE: All right. Thank you.

24 JUDGE SMITH: Mr. Jones, will you stand while I  
25 administer the oath, please?

1 Whereupon,

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E. ERIE JONES

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was called as a witness by counsel for the Applicant and,

4

having been duly sworn, was examined and testified as follows:

5

DIRECT EXAMINATION

6

BY MR. MILLER:

7

Q Would you state your name for the record?

8

A I am Erie Jones.

9

Q By whom are you employed?

10

A The State of Illinois.

11

Q In what capacity?

12

A I work in the Office of the Governor as the

13

Director of Emergency Services and Disaster Agency.

14

Q Mr. Jones, do you have before you a document, the

15

first two pages of which are entitled, "Summary of testimony

16

of E. Erie Jones," the next six pages of which are entitled,

17

"Testimony of E. Erie Jones?" There is an Exhibit 1 attached

18

to that which is entitled "E. Erie Jones' Biography." Exhibit

19

2 is a notice with respect to Volume 1 of the Illinois

20

Plan for Radiological Accidents.

21

A I do.

22

Q Was the portion of the document that is entitled,

23

"Testimony of E. Erie Jones" prepared under your supervision

24

and control?

25

A Under my supervision, yes.

1 Q Are there any changes or corrections you wish to  
2 make to that document, sir?

3 A No.

4 Q Is it true and correct?

5 A It is true and correct.

6 MR. MILLER: Judge Smith, in addition to the two  
7 exhibits that are attached to Mr. Jones' testimony, Appli-  
8 cant's Exhibit 21, which has previously been identified for  
9 the record, is referred to in Mr. Jones' testimony as Jones  
10 Exhibit 2.

11 I would like to ask that Mr. Jones' testimony and  
12 his Exhibit 1 and the notice portion of Exhibit 2 be bound  
13 into the record as if read, and that Applicant's Exhibit 21,  
14 which is IPRA Volume 1, the remainder of Jones Exhibit 2,  
15 be admitted into evidence.

16 JUDGE SMITH: May I suggest that on the notice  
17 portion, Exhibit 2, the part that is bound in the transcript  
18 that you write on it "Refers to Applicant's Exhibit 21?"

19 MR. MILLER: We will do that for the Reporter.

20 JUDGE SMITH: Are there any objections?

21 MR. GREENBERG: No.

22 JUDGE SMITH: The testimony, the attachments,  
23 and Applicant's Exhibit 21 is received.

24 (The prepared testimony of Mr. E. Erie Jones  
25 follows:)

Dated:  
4/11/83

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	
COMMONWEALTH EDISON COMPANY	)	Docket Nos. 50-454 OL
	)	50-455 OL
Byron Nuclear Power Station,	)	
(Units 1 & 2)	)	

SUMMARY OF TESTIMONY OF  
E. ERIE JONES

Erie Jones is the Director of the Illinois Emergency Service and Disaster Agency (IESDA). His testimony addresses IESDA's responsibilities regarding emergency planning associated with operation of nuclear facilities in Illinois and paragraph 10 of Intervenor's amended emergency planning contention.

Mr. Jones generally describes the role of IESDA in the development of the Illinois Plan for Radiological Accidents (IPRA) and he introduces Volume 1 which is the general planning document applicable to all nuclear facilities in Illinois. Mr. Jones describes the development and the status of this volume as well as the site specific volume for Byron Station. He details the previous testing which has been done of the IPRA at other nuclear facilities in Illinois and states the schedule for testing of the Byron plant. Mr. Jones concludes that there will be an adequate emergency plan at Byron Station before that facility begins operation.

Mr. Jones also addresses Intervenors' contention that the emergency plan is deficient because it relies upon volunteers for effective implementation. Mr. Jones describes his personal observations with respect to the manner in which volunteers respond to emergency situations and concludes that, in his opinion, reliance on volunteers in the Byron plant is not misplaced.



Date 4/11/83

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In The Matter of )  
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COMMONWEALTH EDISON COMPANY ) Docket Nos. 50-454 OL  
 ) 50-455 OL  
 )  
(Byron Nuclear Power Station, )  
Units 1 & 2) )

TESTIMONY OF E. ERIE JONES

Q1: Please state your name and present occupation.

A1: My name is Erie Jones. I am the Director of the Illinois Emergency Service and Disaster Agency (IESDA).

Q2: Briefly outline your educational and professional background.

A2: A resume of my education and professional background is attached as Exhibit 1.

Q3 What is the scope of your testimony?

A3: My testimony addresses generally IESDA's role in emergency planning for nuclear power plants and specifically Intervenors amended contention 10.

Q4: Please describe generally the role of IESDA with respect to emergency planning at Byron.

A4: IESDA is responsible for coordinating the State of Illinois planning and response for any type of emergency including the development of the Illinois Plan for Radiological Accidents (IPRA). IPRA is a multi-volume plan. Volume I is the general planning document applicable to all nuclear facilities. It establishes the concept of operations, chain of command, communications network, and the coordinated response of all participants during a nuclear incident. A copy of Volume 1 is attached as Exhibit 2, and was received in evidence as Applicant's Exhibit 21. Volumes 2 through 5 are the site specific plans for each nuclear station presently licensed to operate in Illinois. These stations are all owned and operated by Edison. The site specific volumes provide detailed procedures for the actions to be taken following a nuclear accident, from initial notification and warning through implementation of protective actions to eventual recovery and reentry. Upon final review and approval, Volume 6 will be the Byron Station site specific plan; it is currently in preliminary draft form and is undergoing detailed review and revision. IPRA has been developed in a coordinated effort among the numerous Federal, State and local governmental agencies and agencies in the private sector. The plan has been developed to interface with the Commonwealth Edison Company Generating Station Emergency Plan (GSEP).

Q5: Was IPRA developed based on guidance provided by federal agencies such as the NRC or FEMA?

A5: Yes. IPRA is based in part upon guidance contained in NUREG 0654 FEMA-REP-1 Rev. 1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants" and NUREG-0396; EPA-520/1-78-016, "Planning Basis for the Development of State and Local Government Radiological Emergency Response Plans in Support of Light Water Nuclear Power Plants."

Q6: Has IPRA been tested in conjunction with planning drills conducted at other nuclear power plant sites in the State of Illinois?

A6: Yes. Volume 1 and the site specific volumes for operating plants have been tested nine times in the context of radiological emergency preparedness exercises related to specific plants. Each exercise was evaluated by FEMA. At each exercise conducted, FEMA found the Illinois state and local governments capable of adequately protecting the public during a radiological emergency at the nuclear power station in question. The exercises were held on the following dates at the indicated nuclear power plants:

<u>Plant</u>	<u>Previous Exercises</u>
Dresden	Oct. 18, 1980 Sept. 30, 1981 June 29, 30, 1982
LaSalle	Dec. 4, 1980 Apr. 15, 1982
Quad Cities	May 20, 1981 Aug. 24, 1982
Zion	July 29, 1981 Jan. 18, 1983

Q7: Is the site specific portion of IPRA pertaining to the Byron Station scheduled to be tested?

A7: Yes. The Byron emergency drill is in the present schedule for the week of August 22, 1983.

Q8: What is the current status of the site specific Volume of IPRA related to Byron?

A8: As I mentioned earlier, Volume 6 of IPRA is currently in preliminary draft form and undergoing detailed review and revision. This draft plan was developed based upon preliminary contacts with organizations and individuals located in the Byron vicinity who are likely to have a role in emergency planning. Portions of the draft Byron Plan have been provided to the appropriate organizations and individuals for further refinement and consideration of particular problems and concerns. As a result of this process, a second version of Volume 6 will be consolidated and reviewed and will be inclusive of those acceptable revisions to the prior draft. Eventually, and as the planning organizations determine that the plan is accurate and workable, this new interim plan will be submitted to the Federal Emergency Management Agency (FEMA) and to other agencies and organizations of the Regional Advisory Committee (RAC) for their review and comments. With the incorporation of the RAC comments, the plan will then be tested during the course of the exercise of the plan. Following the exercise, the plan will again be revised and updated prior to submittal to



FEMA for formal Federal approval.

Q9: Are you aware of any specific matters which cause you to question whether there will be an adequate emergency plan at Byron when the facility begins operation?

A9: No. Due to the number of nuclear stations in Illinois, and the fact that IPRA has been subjected to detailed and intensive scrutiny, I have every confidence that, in the State of Illinois, emergency planning matters are doing well. However, the development of emergency plans is a dynamic and ongoing process. As circumstances and governmental agencies change, their effect on the site specific plans must be considered. The program invites legitimate and acceptable changes. We are currently involved in that process and I have every reason to believe that we will be able to satisfactorily resolve any particular local concerns.

Q10: Mr. Jones, the Intervenors in this proceeding challenge the adequacy of the Byron emergency plan because of the extent of reliance on volunteers to respond to an emergency situation. Do you believe such reliance calls the adequacy of the Byron plan into question?

A10: No. I should preface my remarks on this subject by stating that in large measure the whole operation of emergency services in Illinois, irrespective of the causation of the emergency, is dependent upon using volunteers.



This situation greatly enhances the extent of physical and personnel resources available to respond to emergencies.

The key to assuring effective response is training. It has been my experience as an individual involved on a daily basis with emergencies over the past 10 years that if volunteers are adequately trained there is every reason to expect that they will respond to an emergency as well as paid employees. Thus, with respect to nuclear emergency planning, my agency does not make any distinctions with respect to training for volunteers or paid emergency response personnel.

It is crucial to remember that volunteers are generally motivated solely by a desire to perform a public service. As such, I believe they can be counted on to respond to an emergency. I have personally witnessed the response of volunteers in life threatening situations, such as hazardous materials spills, fires, etc., and have also seen volunteers participate in nuclear training exercises. Based on these observations, I feel confident that reliance on volunteers in the Byron plan is well placed.

E. ERIC JONES  
BIOGRAPHY

E. Eric Jones, director since 1973 of the Illinois Emergency Services and Disaster Agency (formerly Illinois Civil Defense and Office of Emergency Preparedness), possesses a broad background in military service, as a school administrator and as a partner in an architectural firm.

During his service with the U.S. Army, Jones attained the rank of Captain and served as Education Officer, Fifth Army. Prior to that post, he was an instructor in technical/engineering programs.

With B.S. and M.S. degrees from the University of Illinois -- supplemented by courses from several other universities and the Sorbonne in Paris -- Jones held positions as assistant superintendent of Palatine Elementary Schools and president of Penn-Mall Schools.

In the private sector, he was executive vice-president of the Home Builders of Chicagoland and later a partner in the architectural firm of Fitch, LaRocca, Carlington and Jones.

His state service began in 1971 with his participation as chairman of the Illinois Construction Review Task Force.

As director of the state's emergency services agency, Jones has distinguished himself by his all-important philosophy that government exists solely to serve human needs. This attitude is apparent in agency management as well as in Illinois ESDA performance in emergency situations.

Top priorities under Jones leadership have been to strengthen the vital local emergency services agencies and to develop maximum coordination of efforts at local, state and federal levels.

A resident of Palatine, Director Jones is married to the former Margaret Farr and has six children.

EXHIBIT 1

BIOGRAPHICAL DATA FACT SHEET

PERSONAL HISTORY

E. Erie Jones, Jr.  
Route 2  
Box 922  
Crest Springs, Illinois 62922

Telephone: Springfield O: 217/782-2700  
Marion O: 618/997-5847  
Marion H: 618/996-2248

Birthdate: December 11, 1921

Wife: Margaret (Farr) Jones

Children: Erie III      Jacalyn  
          Rebecca        Paula  
          Kimberly      Jennifer

EDUCATIONAL HISTORY

1967 - Advanced Work, Renaissance Colloque, Illinois State University  
1950 - M.S., Ed., University of Illinois  
1948 - B.S., Ed., University of Illinois  
1946 - Attended the Sorbonne, Paris, France  
1946 - Attended Institute de Radium, Paris, France  
1943 - University of South Dakota (in U.S. Army)  
1943 - Dakota State University, (in U. S. Army)

CAREER HISTORY

1975 - Director, Illinois Emergency Services and Disaster Agency  
1973 - 1975 Director, Illinois Civil Defense Agency  
1971 - 1973 Chairman, State of Illinois Construction Review Task Force  
1963 - 1971 Partner, Fitch-LaRuccia-Carlington-Jones, Planner/Architects  
1959 - 1963 Executive Vice President, Home Builders of Chicagoland  
1954 - 1959 President, Para-Wall Schools  
1952 - 1954 Assistant Superintendent, Palatine Elementary Schools  
1951 - 1952 Education Officer, Fifth Army  
1950 - 1951 Principal, Palatine Elementary Schools  
1948 - 1949 Superintendent/Principal, Mount Olive Elementary Schools  
1945 - 1946 Instructor, C. E., Wharton (England) Technical School

MILITARY SERVICE

1951 - 1952 Education Officer, Captain, Fifth Army  
1946 Utilities Officer, Captain, Western Base Section, SIAEF  
1945 Instructor, C. E. Wharton (England) Technical School  
1944 Instructor, First Lieutenant, Advanced Engineer Section,  
School of Engineering, Ft. Belvoir, Virginia  
1944 Engineer Company Commander, Second Lieutenant  
1943 97th Infantry Division, Regimental Headquarters G-3, (NCO)  
1942 Signal Corps, (NCO)

MEMBERSHIPS

National Emergency Management Association, President-Elect, 1981-1982  
 National Emergency Management Association, Region V Vice-President, 1979-1981  
 National Emergency Management Association 1980-  
 National Association of Directors for Disaster Preparedness 1973-1980  
 U. S. Civil Defense Council 1973-  
 Ill. Civil Defense Council (Ill. Emergency Services Management Association) 1973-  
 Board of Directors, Chicago Commons Association 1969-1975  
 Illinois Vocational Advisory Council 1974-1977  
 Illinois State Scholarship Commission 1967-1974  
 Licensed Pilot, SEL (1947)  
 Life Supervisory Teaching Certificate, State of Illinois (1953)  
 International Association of School Business Officials 1955-1970  
 Department of Elementary School Principals, Life Member  
 National Association of Secondary School Principals 1960-1973  
 Illinois State Chamber of Commerce 1951-1971  
 National Association of School Boards 1955-1965  
 Illinois Association of School Boards 1955-1965  
 Council of Educational Facilities Planners 1968-1975  
 American Association of Junior Colleges 1962

COMMITTEES

Chairman, Governmental Affairs Committee, National Emergency Management Association 1978-1981  
 Interorganizational Advisory Committee, Radiological Emergency Response Planning and Preparedness, Nuclear Regulatory Commission 1977-  
 Earthquake Study Committee, National Association of State Directors for Disaster Preparedness 1977-1978  
 Planning Committee for Disaster Preparedness, Council of State Governments 1976-1978  
 Committee on Communications, National Association of State Directors for Disaster Preparedness 1975-1977  
 State of Illinois, Atomic Energy Commission 1973-

LECTURES AND PUBLICATIONS

Lecturer, University of Illinois, School Plant Planning  
 Lecturer, Northern Illinois University, Planning and Finance  
 Lecturer, University of Illinois, Small Homes Council, "Experimentation Housing" 1959  
 Lecturer, Purdue University, Programs for Education  
 Lecturer, Illinois State University, School Planning and Design  
 Guest Staff Member, Illinois State University, School Design - The Process, 1966-1971

COMMUNITY SERVICE AND HONORS

Chairman, Palatine High School Board  
 Chairman, Founders Committee, Harper College, Palatine, Illinois 1965  
 Chairman, Northwest Junior College Organizational Committee 1961-1964  
 Chairman, Chicago-based Case File State Annual Funding Committee 1962

EXHIBIT 2 TO TESTIMONY OF  
E. ERIE JONES

ILLINOIS PLAN FOR RADIOLOGICAL ACCIDENTS (IPRA)  
VOLUME 1

NOTICE

This copy of Volume 1 to IPRA is being provided as an accommodation for review in litigation before the NRC Atomic Safety and Licensing Board of emergency planning contentions in the operating license proceedings for Byron Station. This copy is not to be disseminated in any form or reproduced by any means as it is the property of the State of Illinois. This copy must be returned upon completion of the proceedings.

Volume 1 of IPRA is subject to ongoing review and revision. The dissemination of uncontrolled and outdated copies of this volume or portions thereof could be detrimental to the purpose for which it is intended.

This notice is served at the request of the Illinois Emergency and Disaster Agency.



1 (The document previously marked  
2 Applicant's Exhibit No. 21 for  
3 identification was received in  
4 evidence.)

5 MR. MILLER: Mr. Jones is available for cross  
6 examination.

7 CROSS EXAMINATION

8 BY MR. GREENBERG:

9 Q Good morning, Mr. Jones.

10 A Good morning.

11 Q How are you?

12 First off, I would like to have you clear up a  
13 matter that we wrestled around with a lot yesterday. You are  
14 aware, aren't you, that several local school superintendents  
15 are concerned about their school districts incurring possible  
16 liability while they are fulfilling their responsibilities  
17 under the IPRA plan?

18 You are aware of their concern?

19 A I have been advised of that.

20 Q I would like to ask you two questions that one  
21 of the superintendents asks in his affidavit, and perhaps  
22 you can help give us some answers.

23 First, if any school employees receive unacceptable  
24 doses of radiation while carrying out the instructions of the  
25 superintendent, who in turn is carrying out his duties under

1 IPRA, who is liable, do you know?

2 A That is a very legalistic and technical question.  
3 I would defer to counsel on the answer to that question.

4 Q Let me ask you a second question which is also  
5 technical, but maybe you might know this one. Who is liable  
6 for the families of emergency workers whose prompt evacuation  
7 would be hindered by the delay in availability of their  
8 worker family member?

9 MR. MILLER: I think I'm going to object to that  
10 question. There is an assumption in that question that I  
11 believe has no foundation in the record, and that is that  
12 somehow the evacuation of the families of emergency workers  
13 would be hindered because of their responsibilities.

14 MR. GREENBERG: The question is that of Mr. Maloney's  
15 who is a school superintendent and wants these questions  
16 answered. I just thought it is a legitimate concern of his.  
17 If Mr. Jones knows the answer.

18 MR. MILLER: I think the questions that school  
19 superintendents have about the precise way in which the  
20 Byron annex to IPRA is going to function are ones that can  
21 be resolved outside this hearing process. And perhaps the  
22 question to Mr. Jones is is there a mechanism by which these  
23 questions can be resolved? Let's see what the answer to that  
24 is.

25 THE WITNESS: Is that your question?

1 BY MR. GREENBERG:

2 Q Mr. Maloney has testified that they have tried,  
3 you know, to call your office, but nobody has called them  
4 back. And I thought since you were here, you might be able  
5 to answer the question.

6 A Let me make a general comment.

7 Q Sure.

8 A It pertains to that issue. If there are any  
9 legitimate concerns pertaining to the emergency planning  
10 process, I am confident they can be worked out through  
11 cooperative action. It would be our intent to so work it  
12 out.

13 JUDGE SMITH: You withdraw your earlier question?

14 MR. GREENBERG: Sure. I will withdraw the question.

15 BY MR. GREENBERG:

16 Q From yesterday's testimony it appeared that this  
17 question has arisen -- the general question of liability has  
18 arisen before under other circumstances, so I wonder why  
19 the problem has not been resolved yet. This is not the first  
20 time it has come up.

21 A It has not come up in other models or planning  
22 in other locations. It has come up here. And I say again,  
23 if it is a legitimate question, we will address it as we  
24 do every other legitimate question and resolve it. Remember,  
25 we are in a situation in planning now that is interim. We

1 are a long ways from the product.

2 We, as questions come, we address them. Our  
3 process is problem-solving, and if that is a problem, we  
4 will solve it.

5 Q I believe Mr. Smith said that it had come up in  
6 regard to training exercises.

7 A In a separate context, though.

8 Q Correct. But I wondered had that issue when it  
9 was brought up then, had that been resolved?

10 A I would have to look at Mr. Smith's testimony,  
11 but until I do look at it, I had better not respond to your  
12 question, unless you can define it better.

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1 Q But you do assure us --

2 A Twice I have assured you.

3 Q Great, so when you go back to Springfield, you  
4 can look into it and find out the answer? It would help  
5 a lot of folks sleep better.

6 A Sure.

7 Q Another concern that was raised by some of the  
8 local officials is that of the additional expenses which  
9 the implementation of the plan imposes on their organizations.  
10 I wonder, does the state provide any financial assistance to  
11 help alleviate these burdens?

12 A There is a mechanism provided to aid in the cost  
13 of exercises, yes.

14 Q What about in the -- what about in terms of the  
15 actual -- for example, they have to get -- some of the  
16 superintendents have indicated that in order to fulfill their  
17 responsibilities, they have to get better communication  
18 systems. Does the state help them to get -- you know, to  
19 buy the additional materials?

20 A What do you mean by communication systems?

21 Q For example, one of the superintendents said  
22 he is going to be the center. His employees, the bus  
23 drivers and the like are going to have to get back to him.  
24 The only means he has to do that is by using regular telephone  
25 lines. So he feels if that is not adequate, they would need



1 other radio equipment or something like that. Would that kind  
2 of equipment be -- would the state help pay for that?

3 MR. MILLER: I really do not mean to interrupt  
4 the examination of Mr. Jones, but this is subject matter that  
5 is the subject of one of Commonwealth Edison Company's  
6 commitments to the Intervenors, which is Commitment C, as  
7 follows, "demonstrate that adequate communication facilities  
8 exist to enable"--

9 MR. GREENBERG: I agree, we will withdraw the  
10 question.

11 MR. MILLER: Fine.

12 BY MR. GREENBERG (Resuming):

13 Q I will move on to another area. In your testimony  
14 you say that you had a lot of experience with volunteers  
15 involved in emergency activities, correct?

16 A That is quite right.

17 Q Ten years' worth of experience, at least. You  
18 have seen volunteers perform in disasters such as floods  
19 and tornadoes, correct?

20 A Yes, I have.

21 Q But it is true, isn't it, that a volunteer in  
22 a tornado can see and hear the storm, correct?

23 A Generally, yes, it depends on his location.

24 Q And in a flood, a volunteer can see where the  
25 water is and where the dry ground is, correct?

1 A Correct.

2 Q But you cannot see radiation, can you?

3 A No.

4 Q And you cannot hear it or smell it, can you?

5 A No.

6 Q Isn't it also true that once the tornado or  
7 flood is over and the volunteer is done for the day, he is  
8 safe, at least until the next time?

9 A That's true.

10 Q But the health problems involved with radiation --  
11 cancers, birth defects, et cetera -- may not show up for  
12 years, perhaps not even until the next generation, correct?

13 A Is that your statement.

14 Q It is a question. Isn't it true that radiation --  
15 some radiation health problems may not show up for a substan-  
16 tial amount of time?

17 A I'm not a technician. I would defer that kind  
18 of question to somebody in the medical or technical area.

19 Q As the head of Illinois' - as the head of IESDA,  
20 you have not read or looked into what happens to people  
21 that are affected by radiation?

22 A Of course. But you're asking for a very defini-  
23 tive answer.

24 Q A rather general question.

25 A If I may suggest, sir, 40-some years ago, I

1 worked with natural radioactivity and radium in a rather  
2 carefree style at the Institute of Radium, and I have sired  
3 six children, all healthy. So I am not sure that what you  
4 say is absolutely right.

5 I will certainly say there is a lot of discussion  
6 about it.

7 Q There is at least some debate.

8 A Right.

9 Q You also agree -- at least in one significant  
10 way and possibly a second, radiation accidents do differ from  
11 other kinds, correct?

12 MR. MILLER: I don't understand the antecedent  
13 of "in one significant way and possibly two"?

14 MR. GREENBERG: It varies. Mr. Jones has  
15 testified that unlike other sorts of disasters, you cannot  
16 perceive the radiation with your senses. So that is one  
17 difference between radiation accidents and a storm or some  
18 other type of accident. And he said there is at least debate  
19 on the second point.

20 BY MR. GREENBERG (Resuming):

21 Q So at least as to the first point, there is a  
22 difference, then. We have already established that.

23 A It appears that the direction you're headed is  
24 that you want a statement from me that is supportive of your  
25 position that there is a difference between the task that

1 the volunteers work in normally as emergency personnel and  
2 one they may work in in a radiological incident.

3 Q I'm not so concerned about the tasks, but the  
4 risks.

5 A Thirty percent of the incidents we respond to  
6 in this state are hazardous materials, many of which are  
7 colorless and odorless.

8 Q What are some of those?

9 A Acrylonitrile, vinyl chloride.

10 Q You cannot smell those?

11 A Perhaps you can smell those. Many you cannot.

12 They are carcinogenic, as identified by the Federal Drug  
13 Administration. So we are dealing with many things other  
14 than radiation which is odorless, colorless, hazardous, at  
15 risk. And the volunteers respond very well.

16 Q Can you give us the most recent incident involving  
17 volunteers dealing with a hazard that is colorless, odorless  
18 and tasteless? You have inferred that those happen. Can you  
19 tell us the most recent one?

20 A I would have to look at my log. I would be  
21 very happy to provide the court with the log of the entire  
22 year of 1982.

23 Q Can you think of any specific cases, even if not  
24 the most recent?

25 A Of course. Lotseca in 1982.

1 Q And that involved what?

2 A I don't remember. It was probably something in  
3 the nature of ethylene oxide. I'm not sure it was totally  
4 odorless. It certainly is colorless. It was very high  
5 risk and the volunteers responded to it with fear, but  
6 nonetheless, with courage and reality. They went in there  
7 and performed the tasks well.

8 Q That's good. As perhaps the only actual incident  
9 that we have had of radiation release was at Three Mile  
10 Island, as Director of IESDA, have you studied the Three Mile  
11 Island incident in any depth?

12 A Fairly well. Which report?

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1 Q Are you familiar with the fact that while only  
2 2500 people -- that is, pregnant people -- and young children  
3 were told to evacuate, in fact, over 140,000 people actually  
4 left?

5 A I don't know about the figures.

6 Q You are aware that many more left than were told?

7 A Yes, but figures are always suspect because of  
8 the experiences I have had in disaster response.

9 Q Everyone's figures are suspect, then? Yours  
10 as well?

11 A I remember colorless material that caused people  
12 to evacuate in a quantity of 45,000. There were three CTA  
13 buses involved, so I don't think you can quite remove that  
14 number of people. I am suspicious of any figures I hear.

15 Q Are you aware that at least two hospitals in  
16 the area were faced with --

17 JUDGE SMITH: What area?

18 MR. GREENBERG: In the vicinity of Three Mile  
19 Island.

20 BY MR. GREENBERG (Resuming):

21 Q Were faced with personnel shortages as a result  
22 of employees evacuating?

23 A I was not aware of that.

24 Q Are you familiar with the study undertaken by  
25 Slovik and Associates for Suffolk County, New York, with

1 regard to the Shoreham Nuclear Plant?

2 A No.

3 Q Besides their own safety, volunteers are concerned  
4 about their families, that they are safe as well, is that  
5 not correct?

6 A Yes.

7 Q And, in fact, how promptly and how many respond  
8 to an emergency depends, in large measure, on whether they  
9 are sure that their families are safe; correct?

10 A Say that again?

11 Q How promptly and how many volunteers respond to  
12 the call depends in large measure on whether the volunteers  
13 believe that their families will be safe.

14 A I don't accept that.

15 Q So you are telling me that volunteers would risk  
16 the lives of their families for strangers?

17 A Oh, of course not. That is a ludicrous conclu-  
18 sion. Of course not. But they are volunteers in an organi-  
19 zation. They have reasonable assurance that their families  
20 are safe because they, perhaps, are even better prepared  
21 than other people. But if your direction is to suggest that  
22 volunteers are not available, let me advise you, sir, that  
23 when we have incidents that require volunteers, one of our  
24 major problems is to assure that we have tasks for all that  
25 show up. The volunteers are outstanding in their response,

1 and quick to protect the lives and property of their  
2 neighbors and friends.

3 Q Is that the experience you found in those incidents  
4 involving the invisible menaces?

5 A Absolutely. Absolutely.

6 Q You did say, though, that the reason the volunteers  
7 would come out is that there is some reasonable assurance  
8 they have that their families will be safe.

9 A That's what I said, yes. They are much more  
10 assured themselves of their families because they are aware  
11 of the risks. They have perhaps even done some -- given some  
12 instruction to their families.

13 Q Have you determined, or your agency, how many  
14 volunteers of those supposedly who work under Byron/IPRA,  
15 do have dependent families?

16 A No.

17 Q There are various other factors which determine  
18 whether parents, children, spouses and siblings will be  
19 able to evacuate without the aid of their volunteer member,  
20 right? I'm getting at -- what I want to know is how does --  
21 does the plan -- how does it know that there will be reason-  
22 able basically assurances that these family members will be  
23 safe? And there are several -- I mean a volunteer going  
24 to work. There will be several factors, situations at  
25 home that would strengthen or diminish that notion, correct?

1 A I don't understand your question.

2 Q If a volunteer does not have reasonable assur-  
3 ance that his family is safe, then he would be less likely  
4 to respond, correct?

5 A I think I addressed that previously. I am confi-  
6 dent, based on 10 years' experience in many, many incidents,  
7 that we will have an adequate number of volunteers to fulfill  
8 the plan. The plan is predicated upon the availability of  
9 volunteers and the quantity needed.

10 Q I'm trying to find out why you believe that.

11 A I have never had an experience, never had an  
12 experience, we did not have enough volunteers.

13 Q You, of course, have never had a nuclear accident  
14 in the state where you would have to test that.

15 A I think we should all be grateful for that.

16 Q I agree. That's what we are trying to avoid.  
17 That's what these hearings are all about.

18 JUDGE SMITH: All right, gentlemen.

19 BY MR. GREENBERG (Resuming):

20 Q So I am still curious to know whether there  
21 have been any studies done to determine, say, how many  
22 volunteers are a part of broken families. So with only  
23 one adult member to aid in the evacuation, how many families  
24 are there where that volunteer would be needed to aid in  
25 the evacuation of his own family? Have they surveyed --

1           A       I have no inclination or time to make such studies.  
2 I think the studies would be non-productive.

3           Q       You don't think that a volunteer who knows he  
4 or she is the only adult member, were the only member that  
5 is able to -- you know, that their presence is necessary to  
6 evacuate their family, that that won't make any difference  
7 as to how he or she responds?

8           A       Not in the quantities that would impair the  
9 implementation of the plan.

10          Q       So I take it you think there wouldn't be any  
11 relevance to the plan to determine how many families have  
12 second vehicles to enable them to evacuate?

13          A       Absolutely. I think it is not relevant in terms  
14 of the plan's bases of design strategy. There are a certain  
15 number of volunteers that won't show up. They won't show  
16 up because they are out of town or because they have other  
17 extensive commitments, but there are plenty of volunteers  
18 at all times. This state has in the thousands of volunteers  
19 available. Five hundred plus units. The whole emergency  
20 services organization is predicated on the operation of  
21 volunteers and has functioned very well on that basis.

22          Q       You rely heavily on the training which the  
23 volunteers will be given, correct, in being confident about  
24 their performance?

25          A       Yes.



1 Q In fact, on page 6 of your testimony you say  
2 that the key to assuring effective response is training, right?

3 A Yes.

4 Q Isn't it true that you were quoted by the press  
5 last fall as saying that one test per reactor site per year  
6 was excessive?

7 A That's true, and I reinforced that belief. I'll  
8 say it again.

9 Q Why do you want to reduce that part which you  
10 have identified as being the key to your whole program?

11 A I didn't identify that as the key to the whole  
12 program.

13 Q You said it is the key.

14 A You are saying that exercises are training, and  
15 that does not follow.

16 Q That is not true?

17 A That's right. There is much training that goes  
18 on in addition to exercises. The training is highly struc-  
19 tured and often presented. It is presented particularly in  
20 advance of an exercise because we need to bring the relation-  
21 ship -- the knowledge of relationships of the volunteers with  
22 the paid employees regarding exercises, but training is  
23 ongoing at all times.

24 Last weekend, we had 68 persons in training in  
25 Springfield, of which some 60 were volunteers. So the

1 training is ongoing; it is not just in an exercise. And the  
2 reason for my statement that we should reduce the number of  
3 exercise is in no way related to training.

4 Q So you can adequately train people in the class-  
5 room without having them actually get out there?

6 A No. No. It is more than classroom. We had  
7 three, four, maybe five drills, communications drills,  
8 yesterday. That's not classroom. That's on the job.  
9 And that's daily.

10 Q Getting back to the volunteers, does your agency --  
11 is it a practice of your agency to be upfront with volunteers  
12 about the risks of whatever activity they are going to be  
13 involved in?

14 A Do you want to restate that question? It sounds  
15 like it has an implication in it.

16 Q I suppose all of the questions have some implica-  
17 tions. Does your -- is it your agency's practice to be  
18 thoroughly candid with a potential volunteer as to the risks  
19 that he or she may incur?

20 A Absolutely. As a matter of fact, sir, one of the  
21 major tasks of our volunteer organization is to develop a  
22 risk analysis as part of their planning effort. That is a  
23 benchmark of the planning process. Yes, absolutely.

24 Q Are the volunteers -- would the volunteers in  
25 a nuclea accident be told about the health problems that

1 are associated with radiation exposure?

2 A Yes.

3 Q Are you going to tell them about the possible  
4 higher risks of contracting leukemia, which result from  
5 exposure to radiation?

6 A They will be advised of the risks.

7 Q Are you going to list -- how is that expressed  
8 to them? In some sort of general thing? Are you going to  
9 get down to specifics?

10 A I believe you agreed with me that there is some  
11 debate on this issue. It is a little difficult to be -- to  
12 express when we don't know precisely. We have trouble in the  
13 range of risk as expressed by the medical profession. If  
14 you could give me some absolutes, you can be assured that  
15 that information would be provided.

16 Q Are you going to tell them about the debate?

17 A That is pretty well articulated in the media,  
18 and we make that information available to them.

19 Q When they come in -- when you say make it avail-  
20 able to them --

21 A In training.

22 Q When they walk in they are told?

23 A In training.

24 Q This is a hypothetical. Let's say Mr. Smith  
25 walks in.

1           A        You'd better use a name other than Smith or  
2 Jones, and you'd better not use Johnson in Rockford.

3           Q        Mr. Black. He says, I want to be a volunteer  
4 with Byron/IPRA. What do you tell him? Do you know -- can  
5 you tell me, what do you tell him about? To be more  
6 specific, what do you tell him about the medical risks?

7           A        First off, the person doesn't walk into the  
8 state of Illinois and say they want to be a volunteer.  
9 They make themselves available to the local units of  
10 emergency services, and in so doing, the local coordinator,  
11 whether it be in the county or city, depending on the organi-  
12 zation, is charged with the training program which is ongoing,  
13 as I indicated. And we support at the state level.

14                    But the local -- the volunteers are, in fact,  
15 part of local and county organizations, not of the state  
16 organizations.

17           Q        Do you take any responsibility for what the  
18 local person tells them? Are there guidelines at your office?

19           A        Yes. And we have, of course, regional  
20 coordinators. The state is divided into regions. The  
21 regional coordinators assist the local people in developing  
22 procedures that we call accreditation, which include training  
23 programs.

24           Q        What does a regional coordinator -- what is  
25 required of the local agencies to tell them? Do you know that?

1           A       No.

2           Q       So you really cannot be sure that they are getting  
3 the adequate information about risks they may incur while  
4 working in a radiological disaster. Correct?

5           A       The training programs -- this is a little differ-  
6 ent question than you asked previously. The training programs  
7 are delineated in course outlines, and delineated in work  
8 books and the like, which are provided by the federal govern-  
9 ment and augmented by the state agency to the local people  
10 for use in their training efforts. But I cannot tell you  
11 precisely what the instruction is.

12                    The guidance is there, the documents are there.  
13 We monitor it, much as a superintendent of schools might on an  
14 occasional basis or a principal might with his classroom.  
15 But as a former educator, I can tell you -- I will not tell  
16 you that I know precisely what is taught. I know what the  
17 course outlines and the documents are.

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1 Q Do you know if, say, the possible risk of genetic  
2 defects are those in those outlines?

3 A I cannot say specifically. I would be very happy  
4 to provide those, that information to you. I would defer  
5 that to the Department of Nuclear Safety from whom you have  
6 heard previously.

7 I do know that in Volume 1 there is specific  
8 reference to those risks. And as a matter of fact, Volume 1  
9 is available to and fundamental to the specific volumes.  
10 So, yes, the information is available. You have that informa-  
11 tion, as a matter of fact.

12 Q All right. I will look it up when we finish today.

13 Are you aware that the NRC has guidelines which  
14 recommend that volunteers should be of the age when they no  
15 longer plan on having any more children?

16 A I'm not aware of that specific guidance. Is this  
17 contained in some technical guidance?

18 Q I believe it is 0654, but --

19 MR. MILLER: May I have a specific reference, please?

20 MR. GREENBERG: NRC guideline 0654. It's the  
21 whole book.

22 BY MR. GREENBERG:

23 Q Well, then, let me ask you this. Does the state  
24 have any guidelines similar to that?

25 A I defer that to our very capable and resourceful

1 Department of Nuclear Safety people who are technically  
2 qualified to answer that.

3 JUDGE SMITH: Let's clarify what has happened now.  
4 You have withdrawn the question which makes a reference to  
5 the age of the emergency worker in NUREG-0654? I have  
6 withdrawn that?

7 MR. GREENBERG: I have withdrawn the reference to  
8 0654, yes. I have withdrawn that.

9 JUDGE SMITH: And now the question is does the  
10 State of Illinois have such a restriction?

11 MR. GREENBERG: Yes, sir.

12 BY MR. GREENBERG:

13 Q So you don't know whether there is something like  
14 that?

15 A I do not know. If you could give me something  
16 specific, we could work from there.

17 Q I cannot cite you the number. In fact, I did not  
18 know if Illinois does have such a requirement. That is what  
19 I am asking you. Do you think it ought to?

20 A I don't know what context in which you are asking  
21 the question.

22 Q You think that is not something that --

23 A That is mighty speculative. I just don't know.

24 Q Does a potential volunteer -- is he or she required  
25 to have obtained any particular educational level?

1 A You said potential volunteer.

2 Q Right.

3 A You mean a person --

4 Q Does Mr. Black have to have attained any particular  
5 educational level to be accepted as a volunteer?

6 A We need volunteers irrespective of educational  
7 level.

8 Q Must they be able to demonstrate literacy?

9 A Seven percent of the population are unable to read  
10 or write as well as a fifth grader, across the board. We  
11 may have some that have some constraints on their motivations  
12 and their capabilities and their talents. If they have  
13 that unfortunate situation, we will still use them.

14 Q Will the volunteers be given psychological tests  
15 to ascertain their performance under stress, just as police  
16 and firemen are?

17 A Absolutely not.

18 Q So really there are no -- will any credentials  
19 at all be required, or do you accept any Tom, Dick or Harry  
20 that walks in?

21 MR. MILLER: I'm going to object. Mr. Jone's  
22 testimony to date has described the selection process and  
23 the use that is made of volunteers under IPRA, and to  
24 characterize it as just allowing any Tom, Dick or Harry to  
25 come in is simply without foundation. It is also, I believe,

1 argumentative.

2 JUDGE SMITH: I think the question is faulty in  
3 that you give him two alternatives which are not necessarily  
4 the only alternatives; that is, he either demands credentials  
5 or he accepts anybody. Why don't you phrase the question so  
6 that he can answer, so he can answer it?

7 BY MR. GREENBERG:

8 Q Do you require credentials?

9 A Yes. The credentials are -- they are motivated  
10 by the interests of their fellow man, that they are residents  
11 of the community and that they will take adequate training  
12 to fit into a disciplined unit called emergency services.

13 Q How do you measure motivation?

14 A If they are volunteering, that is a pretty good  
15 measure. I haven't found a scale to measure that, as I have  
16 not found a scale to measure some of the other things in the  
17 social sciences.

18 JUDGE SMITH: Is there a concern among emergency  
19 officials of any adventurers coming out in the time of an  
20 emergency, people who are just looking for thrills or want  
21 to be where the action is? Is that a problem that faces  
22 emergency planning officials?

23 THE WITNESS: Mr. Smith, that is a concern. We  
24 are not going to allow that person to persist in that practice.

25 JUDGE SMITH: Do you have psychological profiles

B6sc5

1 or anything that people are trained to look for?

2 THE WITNESS: No. But, remember, the individuals  
3 are all members of their communities. They are known by  
4 their communities.

5 JUDGE SMITH: All right. I understand. Thank you.

6 THE WITNESS: We do not accept itinerants, I  
7 guess is what I'm saying.

8 BY MR. GREENBERG:

9 Q You said that the training that is received is  
10 intensive.

11 A I don't believe I used that word.

12 Q It is rigorous, especially -- you said that you  
13 don't -- especially with your belief that you don't need as  
14 many of these actual exercises; that that is not necessary  
15 because they get a very good -- I don't know what adjective  
16 you want to use -- complete, rigorous -- training.

17 A There is a structured training program that is  
18 in place and addressed with regularity.

19 Q It is not rigorous? You objected. How would  
20 you describe it?

21 A I don't know what "rigorous" means to you. To me  
22 it might mean something else.

23 Q Do you have to be literate to be able to go through  
24 that, those sorts of training programs?

25 A Some of it you may. But, remember, as in any case,



1 in any type of vocation or avocation, you try to put people  
2 in positions of responsibility that is within their capability,  
3 and the training programs vary depending on what specific  
4 slot that individual has in the organization.

5 Q You mentioned that you don't do psychological  
6 testing. How do you know -- how do you slot them to their  
7 level of competence?

8 A I repeat, they all are members of their own  
9 communities. They are known in their communities. There is  
10 leadership in the organization.

11 Q Would you say the people of Rockford know everybody  
12 else?

13 A I think it is likely that when Winnebago County  
14 or the City of Rockford brings volunteers in, they will have  
15 some way of assessing their talents and capabilities and  
16 personalities.

17 Q As the head of the Illinois program, do you  
18 have any notion -- can you tell me what some of those means  
19 are that the local people can assess, apart from knowledge  
20 of the people?

21 A I am not suggesting it is a highly structured  
22 program. I don't think I meant to imply that. It is informal  
23 and it is a product of leadership and supervision, much as  
24 we make informal evaluations in the vocational area. I  
25 would leave it with that.

1 Q What is the attrition rate of trainees, volunteer  
2 trainees?

3 A I think you would have to ask the local -- each  
4 local government that, and we don't ask that question.  
5 Remember, the State Emergency Services, under this act, has  
6 the responsibility of providing support, guidance and aid  
7 in training to the local governments, but it is a local  
8 government unit, so you would have to talk to the units  
9 individually.

10 Q You are still confident, though -- your state  
11 plan is still based on these people even though you don't  
12 know.

13 A Absolutely. And let me repeat in another way  
14 it is reinforced every time we have an incident, as recently  
15 as this week several times.

16 Q What happened this week?

17 A We have had volunteer groups and body searchers  
18 risking their lives in extremely serious -- under serious  
19 water conditions, volunteers.

20 Q What part of the state was this?

21 A Fayette County, Cumberland County, Minard County.  
22 There were three this week.

23 Q Let's say you get a wonderful group of people  
24 who do graduate from your training. They are all very  
25 motivated, and that is unquestioned. The fact is, isn't it,

1 that not one of them will have actually ever been in a  
2 nuclear disaster. That would be a new experience for every-  
3 body. The supervisor has never been in this or anybody  
4 else.

5 A That is a given.

6 Q So, again, it is a guess based on other experiences  
7 that they are going to do the job.

8 MR. MILLER: I'm going to object to the characteri-  
9 zation of Mr. Jones' testimony as being a guess. I believe  
10 that is a mischaracterization.

11 JUDGE SMITH: I do not know if he intended it as  
12 a question or as a comment. As a comment?

13 MR. MILLER: If it is a comment, then I object  
14 to comments on the record. The witness is here to answer  
15 questions.

16 MR. GREENBERG: I meant it as a question. I will  
17 use another word besides "guess."

18 BY MR. GREENBERG:

19 Q Again, you are hypothesizing. You are reaching  
20 this conclusion that they will perform adequately based  
21 on an analogy with non-nuclear accidents.

22 A Yes, but not entirely. Let me explain that.  
23 We are encountering new situations quite often, and the new  
24 situations have the same kinds of risk questions as any other  
25 new situation such as radiological.

1 Q What are some of these new situations?

2 A In particular, the hazardous materials, particularly  
3 those things that historically had not occurred before, such  
4 as wintertime flooding. That has not occurred in recent  
5 history.

6 Q Flooding?

7 A Don't discount that. There are more people who  
8 die from flooding --

9 Q I'm not discounting flooding --

10 Flooding is not a new phenomenon for volunteer  
11 relief workers to deal with.

12 A The point I was making is winter flooding is  
13 a new phenomenon. That is the exact point I was making.

14 Q The difference between flooding in January and  
15 flooding in March, is that much different? The water is  
16 still cold.

17 A Significantly.

18 MR. MILLER: Excuse me. I think Mr. Greenberg  
19 has a habit of either making a comment at the end of the  
20 question. I don't believe that Mr. Jones is clear as to  
21 whether it is a part of the question or simply an editorial  
22 comment. Really, it is going to make the record extremely  
23 confusing.

24 JUDGE SMITH: Yes. I am somewhat concerned.

25 Also, Mr. Jones, I would appreciate it if you would  
allow an opportunity for objections before you respond, too.

1 BY MR. GREENBERG (Resuming):

2 Q In some of the situations you have alluded to  
3 with regard to hazardous materials, have they required  
4 large-scale evacuation?

5 A Yes.

6 Q Where?

7 A In Illinois.

8 Q Where?

9 A Decatur.

10 Q How many people were evacuated?

11 A Several thousand. I don't know. This was three  
12 years ago. Certainly, at Collinsville a couple of years  
13 ago there were several hundreds.

14 Q Let's stick to Decatur. What was the substance  
15 that caused the problem?

16 A Propane explosion. It killed 10 people.

17 Q How many volunteers? Do you know? I will ask  
18 you how many volunteers were involved.

19 A Well, of those who responded from emergency  
20 services, everyone save one, because there was one person  
21 who was a paid employee, and all of the other emergency  
22 services were volunteers.

23 Q Do you know --

24 A I don't know the number.

25 Q You don't know how many? You said of those who



1 responded. You don't know how many were called?

2 A No.

3 Q What were the roles assumed by the volunteers?

4 A Rescue, support, protection, moving people.

5 Q And they did an adequate job, I presume.

6 A Absolutely.

7 Q Do you recall offhand the name of the facility?

8 A The railroad yard in Decatur.

9 Q Can you give me a year on that? I would ask  
10 you to repeat it, if you did.

11 A I can't remember. Four or five years ago. I  
12 don't know. The Illinois Central Gulf yards are rather  
13 well known. It is historically well documented.

14 Q The Byron/IPRA relies heavily on the cooperation  
15 of local organizations and officials. Correct?

16 A Correct.

17 Q What I would like to do is to run down a list  
18 of a few of the people who are, you know -- whose jobs at  
19 least are identified in the plan, and I would like to ask  
20 you about your agency's interaction with them. Is that okay?

21 MR. MILLER: I'm going to object.

22 Judge Smith, I really have not interfered with  
23 the examination, even though it has gone well beyond the  
24 scope of Mr. Jones' direct testimony. But there were  
25 witnesses presented by the Applicant with specific knowledge

1 of the Byron annex to the general IPRA, and I don't know  
2 that it is going to be productive to quiz Mr. Jones on  
3 these matters, as well.

4           There was extensive cross examination on this  
5 subject, I believe, yesterday.

6           JUDGE SMITH: You're going to give him names of  
7 local officials and ask the state Director --

8           MR. GREENBERG: I was going to list a few of the  
9 officials who are identified, and if he cannot answer the  
10 question, then he can't answer the question.

11           JUDGE SMITH: How does it relate to his direct  
12 examination, his direct testimony?

13           MR. GREENBERG: He talks about his reliance on  
14 volunteers, and I am interested in talking to him about the  
15 local -- he has told us today that the local people are  
16 the ones, you know, who find these individuals and the ones  
17 who field them and the ones who assess them.

18           JUDGE COLE: He said of the whole state.

19           JUDGE SMITH: Fine.

20           BY MR. GREENBERG (Resuming):

21           Q     Do you know if your agency has talked with  
22 David Turner, Superintendent of Schools from Mt. Morris  
23 Community?

24           A     I don't know.

25           Q     And you would know any of the others, either.

1 Okay, fine.

2 We talked earlier about two of the things which  
3 most bother local officials; the liability issue and the  
4 excess cost. Are you aware of other concerns that the  
5 local officials have?

6 MR. MILLER: Can we have a little bit -- that  
7 question is very vague.

8 BY MR. GREENBERG (Resuming):

9 Q Are you aware that local officials are concerned  
10 that they don't have the personnel to fulfill their responsi-  
11 bilities under IPRA?

12 A I am not aware of that.

13 Q You are not aware of that because -- you are the  
14 state director and you are not specifically up to date on  
15 that?

16 A I am not aware of that because I work with  
17 local people and they have been extremely cooperative across  
18 the board. They have not expressed that kind of problem,  
19 except when the exercises are held repetitively.

20 JUDGE COLE: I didn't hear the last part of your  
21 answer.

22 THE WITNESS: When the exercises are held  
23 repetitively, with too great a frequency.

24 BY MR. GREENBERG (Resuming):

25 Q But you haven't talked -- you said before you

1 don't know what the Byron local officials here think.

2 A Who?

3 Q Okay. Well, that's what I was doing. David  
4 Turner, Superintendent --

5 A I told you already, I don't know.

6 Q David Miller, Superintendent of Schools.

7 JUDGE SMITH: The difficulty with your question  
8 is that you identified a group known as local people. We  
9 don't know if you're talking about all of the local people,  
10 which I doubt, some of them, a particular subset, or what.  
11 And I don't think the witness does.

12 In any event, he has already testified that he  
13 does not know at least Mr. Turner, and we will not allow  
14 you to go through the list of names because it is unlikely  
15 that he will know them.

16 MR. GREENBERG: But he asked me to. He said  
17 who are you talking about.

18 JUDGE SMITH: You really want to know, Mr. Jones?

19 MR. GREENBERG: I just asked him before, are  
20 there local officials. He says that he has talked to local  
21 officials all over the state, and I wondered if he had talked  
22 to any in the Byron area.

23 JUDGE SMITH: I'm going back to the premise of  
24 your original question. You said, are you aware that local  
25 officials are concerned that they don't have their personnel.

1 There should have been an objection, I should have interposed  
2 right then and there because I don't know if he accepts the  
3 premise implicit in the question that all local officials  
4 are concerned, or what the nature of the question is. I don't  
5 think that he could answer it, really.

6 So, why don't you start at that point. Forget  
7 what has happened so far, and start at that point.

8 BY MR. GREENBERG (Resuming):

9 Q We have had at least four superintendents in  
10 this area, school superintendents in this area who have  
11 testified that they are concerned that they have inadequate  
12 transportation to fulfill their responsibilities under the  
13 IFRA plan. Are you aware of that?

14 A I am not aware that they have testified.

15 MR. MILLER: In addition, this is covered by a  
16 commitment.

17 MR. GREENBERG: We will withdraw that.

18 MR. SAVAGE: If I could make a comment, part of  
19 the problem is that Mr. Greenberg was not present during  
20 the formulation of the stipulation, and he has read it.

21 JUDGE SMITH: We're doing fine.

22 BY MR. GREENBERG (Resuming):

23 Q So we have established that you have not talked  
24 with any local officials.

25 MR. MILLER: I'm going to object to that. I don't



1 believe that that is the testimony at all.

2 BY MR. GREENBERG (Resuming):

3 Q You have testified that you have not spoken with  
4 any of the school superintendents who are listed in the IPRA  
5 plan as having responsibilities under the plan.

6 JUDGE SMITH: Mr. Jones himself, personally.

7 Is that the question?

8 MR. GREENBERG: That is the question. Or that  
9 his agency has spoken with these people.

10 MR. MILLER: We have two different questions.  
11 If I might just suggest, let's explore Mr. Jones' personal  
12 contacts, if that is what the cross examiner is interested in.

13 MR. GREENBERG: That is what I'm interested in.

14 THE WITNESS: You are interested -- let's see  
15 if I understand, you are interested in whether I have contacted,  
16 on a one-to-one, are you suggesting, superintendents?

17 BY MR. GREENBERG (Resuming):

18 Q No, not necessarily that you have done that.  
19 Are you aware of these superintendents' concerns about the  
20 role that they are assigned and the responsibilities that  
21 they are assigned under the IPRA plan. Whether your staff  
22 told you that. I am curious to know how much you know about  
23 this specific area, is what I'm trying to get at.

24 MR. STEVEN GOLDBERG: I'm going to object.

25 That question is vague, there is an allusion to undifferentiated

1 concerns that I think really the witness ought to have the  
2 benefit --

3 MR. GREENBERG: I'm trying to name names.

4 JUDGE SMITH: Just a moment. On the other hand,  
5 Mr. Jones I think has been very -- has exhibited a willingness  
6 to explain his position, and if he is willing to do it, I  
7 think we should not be concerned about -- I think he can  
8 take care of himself.

9 THE WITNESS: Judge Smith, I believe I now have  
10 three questions, and I would like to have one question that  
11 I can address. Even in the explanation I got a third  
12 question.

13 JUDGE SMITH: I think the question that is before  
14 you now -- that is, the better question -- is, can you  
15 comment just generally on what your involvement has been with  
16 the local planning.

17 BY MR. GREENBERG (Resuming):

18 Q That is a good starter.

19 A Okay. As it relates to the education community,  
20 I probably have had some contact with some superintendents.  
21 They were all invited to an initial meeting deliberately  
22 structured and put together for the purpose of explaining  
23 to the total community how we are going to proceed. That  
24 meeting was well attended, perhaps in excess of 100 people.  
25 It was a dinner meeting. I did not look at the roster that

1 we took but I am confident there were some of the educational  
2 community there.

3 I do recall that the regional superintendent  
4 of schools was there. In terms of other people in the educa-  
5 tional community, I am not certain of their attendance. I  
6 am certain that the staff of the State of Illinois has  
7 extended efforts to meet with the educational community  
8 because that is part of the planning process. We normally  
9 do that and we follow that process and have followed it in  
10 all the other models that we have developed, and done it as  
11 we have upgraded the plans.

12 As relates to other officials, decision makers  
13 in the community, I have personally contacted many of them,  
14 and that is part of the planning process as well.

15 Q Of the people you met at that meeting --

16 A The initial meeting?

17 Q The meeting you just described. Did any of  
18 them voice concern about whether they had the resources to  
19 fulfill their responsibilities under the IPRA plan?

20 A Absolutely not. I can report that without  
21 exception, those I spoke with were enthusiastically --  
22 enthusiastically received the information and looked forward  
23 to the planning process.

24 MR. GREENBERG: What I want to do -- Judge,  
25 maybe you can help me. Basically, we have testimony of four

1 or five school superintendents that have indicated they do  
2 not believe they can fulfill their responsibilities.

3 MR. STEVEN GOLDBERG: I object. I'm not sure  
4 that is a proper characterization of the testimony.

5 MR. MILLER: I object, also.

6 MR. STEVEN GOLDBERG: Further, it has not even  
7 be offered as testimony. The witness ought to be asked  
8 whether he either is aware of or shares a specific concern  
9 for which we can have some documentary or evidentiary  
10 reference. I just do not think that to ask the witness,  
11 are you aware of resource concerns, has really been very fair  
12 to the witness.

13 JUDGE SMITH: Let's have Mr. Greenberg finish  
14 his request to the Board and see where we are. If he has  
15 mischaracterized -- Mr. Greenberg, would you finish your  
16 request, if you still have a request?

17 MR. GREENBERG: I am being told that some of this  
18 is under stipulation, so I will mosey along to something else.

19 BY MR. GREENBERG (Resuming):

20 A A large part of our conversation this morning,  
21 we have disagreed as to the wisdom of relying on volunteers  
22 in the course of nuclear accidents. Correct?

23 MR. MILLER: I am not going to permit characteri-  
24 zation of an examination by an attorney to be called a  
25 conversation as to which there is a disagreement. Mr.

1 Greenberg's questions are not evidence. I believe Mr. --

2 MR. GREENBERG: One of the issues that we have  
3 covered in this cross examination this morning is whether  
4 volunteers will adequately perform under a nuclear accident.

5 BY MR. GREENBERG (Resuming):

6 Q Correct?

7 A Yes. I assume that's correct.

8 JUDGE SMITH: We were also present.

9 MR. GREENBERG: We were all present. Yes, we  
10 can agree on something.

11 BY MR. GREENBERG (Resuming):

12 Q The important thing, though, is what the volun-  
13 teers themselves think about their participation in a  
14 nuclear disaster. Correct? If you think they will do it and  
15 they don't.

16 A You see, I have no doubt in my mind, so I  
17 don't agree with that, with your statement. I have no doubt  
18 that they will participate in a nuclear incident, should it  
19 occur.

20 Q Has your agency contacted the potential volunteers  
21 personally to find out -- have they contacted them personally?

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1           A       Counselor, that is not role. Our role is to work  
2 with the local governments who have duly constituted emergency  
3 services units. It is not our role to deal with individuals  
4 in those units of emergency services in the counties and  
5 the cities. So the answer is no, I have not personally con-  
6 tacted them, to be very literal in my reply.

7           Q       Have the local officials represented to you that  
8 they have asked their people specifically whether they  
9 would participate in the nuclear disaster?

10          A       We have not raised the issue and said are your  
11 people going to participate in any kind of an accident. We  
12 presume with one hundred percent experience positive that  
13 when there is an incident and there is need for these people  
14 to work on behalf of their fellow man, they will be there.  
15 They have been there.

16                   MR. GREENBERG: No more questions.

17                   Thank you, Mr. Jones.

18                   THE WITNESS: Thank you.

19                   JUDGE SMITH: Mr. Goldberg.

20                   MR. STEVEN GOLDBERG: I do not have an examination  
21 plan, but I do have one or two followup questions, if I might.

22                   BY MR. STEVEN GOLDBERG:

23           Q       Do you recall Mr. Greenberg's questions about  
24 the TMI accident?

25          A       I believe that the question related to whether I

B8sc2

1 had studied it.

2 Q And the emergency response to that accident.

3 A Yes.

4 Q Are you aware or can you differentiate the level  
5 of onsite and offsite emergency planning that was in existence  
6 at the time of the TMI accident in March of 1979 and the  
7 level of onsite and offsite emergency planning that exists  
8 in Illinois surrounding the Byron Station?

9 A I can do that for the State of Illinois. I presume  
10 you do not want me to do so as compared with the Pennsylvania  
11 organization.

12 Q My question was somewhat predicated on whether  
13 you had some idea of the level of planning that was in place  
14 in March of 1979 in Pennsylvania and that which is in place  
15 in 1983 in Illinois, if you know.

16 A Yes. I cannot quantify it in absolute terms, but  
17 I can tell you we are a quantum distance beyond where  
18 Pennsylvania was at the time occurrence. Illinois is far,  
19 far beyond the Pennsylvania situation.

20 Q You were also questioned about the training  
21 provided for emergency workers. Is that training provided  
22 by the Illinois Department of Nuclear Safety?

23 A It is provided by a combination of the Illinois  
24 Department of Nuclear Safety. They must come in with the  
25 technical aspects of it. Emergency services personnel bring

1 training to the people as it relates to the overall operational  
2 aspects of the plan.

3 Q You were also asked a question or asked to comment  
4 on the fact that if there were a hypothetical radiological  
5 emergency at Byron that that may be the first such radiological  
6 emergency that volunteers may be called upon to assist in.

7 Do you recall that?

8 A Yes.

9 Q And you have also testified about some other  
10 chemical accidents. Is it fair to presume that in those cases  
11 that was also the first such accident that volunteers --

12 JUDGE SMITH: To shortcut with respect to the  
13 chemical accidents, are you prepared to presume it was the  
14 first such accident that volunteers had encountered?

15 THE WITNESS: Yes.

16 BY MR. STEVEN GOLDBERG:

17 Q Have emergency workers ever responded to a  
18 transportation accident involving radioactive materials in  
19 the State of Illinois?

20 A I cannot recall one.

21 MR. STEVEN GOLDBERG: Thank you.

22 BOARD EXAMINATION

23 BY JUDGE COLE:

24 Q In your testimony you indicated that there have  
25 been nine exercises associated with nuclear power plants in

1 the state. And in each of those instances, each of those  
2 exercises, FEMA found the Illinois state and local governments  
3 capable of adequately protecting the public. Did you partici-  
4 pate in any of those exercises, sir?

5 A Yes, sir. Every one of them.

6 Q What was your role in the exercise, sir?

7 A I functioned as the director of the appropriate  
8 laws of the State of Illinois, but also served as the Governor  
9 in the exercise scenario.

10 Q Is it fair to say that many changes have taken  
11 place since the first exercise?

12 A It certainly is fair to say.

13 Q Have you observed any differences in the conduct  
14 and relative success of these exercises as we progress from  
15 exercise 1 through exercise 9?

16 A Each one is an improvement over the previous, yes.  
17 I have detected considerable improvement.

18 Q All right, sir.

19 I guess you anticipated my next question. How  
20 would you currently rate or evaluate the Illinois plan for  
21 radiological accidents as compared to the earlier versions?

22 A We believe our plan, as well as our exercises,  
23 are significantly better than the initial ones.

24 JUDGE COLE: All right, sir. Thank you.

25

1 BY JUDGE SMITH:

2 Q I recall your testimony that you are -- your agency  
3 is housed in the Office of the Governor.

4 A Yes, sir.

5 Q Does that imply that there is a resource reason  
6 for that?

7 A It is a legislative reason. We are a separate  
8 agency in the State of Illinois, and I am appointed by the  
9 Governor and confirmed by the Senate. The directors of all  
10 such agencies are identified as part of the Office of the  
11 Governor.

12 Q You report to the Governor then, directly to the  
13 Governor?

14 A Yes, sir. Directly to the Governor.

15 Q I made an inference there that perhaps is not  
16 true, but I'm still interested in your authority to utilize  
17 the resources of other state agencies.

18 A It is unquestioned, both by law and by executive  
19 order of the Governor.

20 JUDGE SMITH: Thank you.

21 MR. ALLEN GOLDBERG: I would like to ask some  
22 questions on redirect based on what Mr. Goldberg brought  
23 up.

24 JUDGE SMITH: We have been allowing additional  
25 cross based upon Board questions. It is a tossup.



1 MR. MILLER: Judge Smith, I really object to move  
2 than one counsel for Intervenors.

3 JUDGE SMITH: It is a good thing you weren't  
4 here yesterday.

5 (Laughter.)

6 JUDGE SMITH: You would have been very nervous.

7 MR. MILLER: I'm sure I would have been, but  
8 yesterday -- I was here the day before and Monday, and in those  
9 cases it was Mr. Holmbeck, who is not a lawyer, being assisted  
10 in some instances by Mr. Savage, who is. Here we have two  
11 attorneys.

12 JUDGE SMITH: You might want to consult with  
13 Mr. Bielawski.

14 MR. BIELAWSKI: Mr. Smith and Mr. Ed were to be  
15 put up separately, and Mr. Copeland and I had prepared  
16 separately. We put them up as a panel and shared the  
17 responsibility.

18 JUDGE SMITH: We are digressing here.

19 MR. STEVEN GOLDBERG: There is a more fundamental  
20 problem. I have not performed redirect. All I did was  
21 perform cross.

22 JUDGE SMITH: It doesn't matter. If you have  
23 developed the information on any form of examination which  
24 affects that party's interest, they will have an opportunity  
25 to address it one way or the other. We have tried to organize

1 examination through one source. However, for expediency,  
2 proceed.

3 CROSS EXAMINATION ON BOARD EXAMINATION

4 BY MR. ALLEN GOLDBERG:

5 Q The Three Mile Island incident was mentioned  
6 briefly just this moment. We are concerned here about  
7 whether or not you believe any of the volunteers would panic  
8 under a situation where there is a nuclear disaster at the  
9 Byron plant, and you have testified you don't think that  
10 would happen.

11 A That is correct.

12 Q Did you study the Three Mile Island incident to  
13 see if any of the volunteers in that plant panicked when  
14 they were called upon to act in a radioactive situation?

15 A I have read the Kemeny Report. I read the report  
16 of the President's Commission. I saw no evidence in either  
17 of those of panic. I would also suggest that I testified  
18 there is a significant difference in Illinois today as  
19 compared with the way the plan was in place and exercised  
20 or not exercised at Three Mile Island at the time.

21 Q I got the impression that the significant difference  
22 that was brought out by His Honor was that when he asked you  
23 that question, that there is a greater amount of volunteers  
24 that we have in this state, is that correct?

25 A Greater --

1 Q Amount. Number of volunteers are greater than  
2 existed in Pennsylvania. Is that a fair statement?

3 A I have no way of assessing that.

4 Q I gather by your answer, then, you found no  
5 evidence that any of the volunteers of Pennsylvania panicked.  
6 Is that your testimony?

7 A That is correct.

8 Q Mr. Greenberg brought out earlier that the media  
9 or the officials in that area asked that approximately 2,500  
10 people -- pregnant women and other folks -- be asked to leave  
11 the area when that disaster occurred, and that in fact 50,000  
12 people flooded out of that area at that time. Are you aware  
13 of that?

14 MR. MILLER: Excuse me. I'm going to object.  
15 First of all, that is the precise question that Mr. Greenberg  
16 asked in his initial cross examination, so this is hardly  
17 supplementary cross on the basis of Board questions or any-  
18 thing that Mr. Goldberg or the Staff has asked. So I object.  
19 I simply am repeating it. It has been asked and answered,  
20 in any event.

21 JUDGE SMITH: Moreover, he answered that he was  
22 not aware of any of those figures.

23 BY MR. ALLEN GOLDBERG:

24 Q When you examined the Three Mile Island incident,  
25 did you examine how the volunteers in that program were trained?

1 A I did not.

2 Q You were not aware whether those volunteers were  
3 given any sort of stress testing?

4 A I have no idea.

5 Q In all of the incidents that you have been involved  
6 in over the years have you ever had a volunteer panic under  
7 a situation like this?

8 A Absolutely not.

9 Q Never?

10 A Never.

11 MR. ALLEN GOLDBERG: I don't have any further  
12 questions.

13 JUDGE SMITH: Mr. Miller.

14 REDIRECT EXAMINATION

15 BY MR. MILLER:

16 Q I would like to pick up on a few things, Mr. Jones.  
17 What arrangements, if any, does the State of  
18 Illinois make with respect to insurance when exercises of  
19 emergency plans are held?

20 A Are you talking of -- what kind of insurance?

21 Q Liability insurance for the participants. Do you  
22 know of any arrangements?

23 A You are talking about exercises of nuclear stations.

24 Q Yes, sir.

25 A Any of our personnel who are part of an

B8sc10

1 organization are covered under the Emergency Services Act  
2 as it relates to liability.

3 Q Do you know whether or not any policies of  
4 insurance are purchased for --

5 A I believe the State of Illinois is self-insured.

6 Q I am going to hand you a copy of -- I understand,  
7 Director Jones, that this is the full exhibit to the testimony,  
8 IPRA Volume 1. I would like you to turn, sir, if you would,  
9 to Appendix A to the introduction.

10 A Okay.

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1 Q I think it is page 9 entitled, "Health Effects  
2 of Radiation."

3 A Okay.

4 JUDGE SMITH: What document are we looking at?

5 MR. MILLER: I'm looking at what has been received  
6 in evidence as Applicant's Exhibit 21 and it is Volume I of  
7 IPRA Illinois Plan for Radiological Accidents.

8 JUDGE SMITH: How would one go about finding the  
9 particular page?

10 MR. MILLER: It is Appendix A to the Introduction.  
11 It is marked Roman I(1), and then page 9 at the very bottom.

12 JUDGE SMITH: It beings, "The State..."

13 MR. MILLER: It is entitled Appendix A.

14 THE WITNESS: Okay.

15 JUDGE SMITH: Go ahead.

16 BY MR. MILLER (Resuming):

17 Q Thank you. First of all, Mr. Jones, can you tell  
18 us which of the state agencies, if any, was responsible for  
19 this part of IPRA?

20 A The Department of Nuclear Safety.

21 Q And this appendix is found, is it not, in all  
22 copies of Volume I of IPRA that have been distributed?

23 A Yes.

24 Q What use, if any, to your knowledge is made of  
25 Volume I of IPRA in terms of training volunteer workers?

1 MR. SAVAGE: Objection. Isn't training of  
2 volunteer workers a subject of commitment? Mr. Bielawski,  
3 is that correct, do you think? You and I probably have the  
4 best idea of what was in the commitment and what wasn't.  
5 Is this the subject of a commitment?

6 MR. MILLER: I don't believe so. In any event,  
7 cross examination is cross examination by Mr. Greenberg with  
8 respect to what, if anything, is told to emergency workers  
9 with respect to radiological hazards.

10 MR. SAVAGE: I don't believe he raised the issue  
11 of the adequacy of the training, which I believe is the  
12 subject of a commitment. If you are going into whether the  
13 training to be given will be adequate or not, I believe that  
14 is a commitment and it should not be allowed.

15 JUDGE SMITH: The sense of Mr. Greenberg's  
16 cross examination, as I infer from today and yesterday, is  
17 that emergency workers are suddenly going to find out, not  
18 having been told before, that there are risks and they will  
19 not respond. And if this is the direction you're going, Mr.  
20 Miller, then you certainly have the right to cross examination.

21 THE WITNESS: This information is provided to--  
22 in training programs provided to those people who are partici-  
23 pants in the exercise of the plan.

24 BY MR. MILLER (Resuming):

25 Q Mr. Jones, you were asked about your personal

1 contacts with certain local emergency planning officials,  
2 and there was reference to a dinner meeting that you  
3 participated in. Do you recall, sir, when that dinner meeting  
4 took place, approximately?

5 A I can only estimate it. It was in the last of  
6 the year, within the last year.

7 Q Do you recall whether it was in the summer or  
8 the winter?

9 A Summer, I believe.

10 Q Is it likely it was in the summer of 1982?

11 A I have to now say I just don't remember precisely  
12 when.

13 Q How would you characterize the state of emergency  
14 planning for Byron Station at the time that this dinner  
15 meeting was held?

16 A Emergency planning in general was in very good  
17 shape because of the location. It has been greatly enhanced  
18 by virtue of the work that has been involved with the local  
19 officials in the area.

20 Q Was this the initial contact that you had with  
21 certain local officials, with respect to the Byron emergency  
22 planning?

23 A In a mass meeting, this was the initial contact.  
24 We had prior contact with some individuals in the county.

25 Q Was it or was it not your intent to have further

1 meetings both with groups of local officials or individuals?

2 A It was not only our intent, but the principal  
3 objective of that meeting was to advise those in attendance  
4 of what our perc chart procedure would be to make those  
5 contacts.

6 Q What is that?

7 A A timeframe determination of what you're going  
8 to do in a certain timeframe to make schedules.

9 Q Is that a schedule that extends past today's  
10 date?

11 A Yes, and it is of record, Mr. Counselor.

12 Q Have you personally had any contact with the  
13 Director of Emergency Services for Ogle County?

14 A Many times.

15 Q In connection with the emergency planning for  
16 Byron Nuclear Station?

17 A Yes, sir, many times.

18 Q What is his role in the overall emergency planning  
19 for Byron Nuclear Station?

20 A It is a very important role because if I may  
21 use the phrase, the emergency planning zone, for Byron is  
22 largely possessive of integrity. Most of it is within the  
23 County of Ogle.

24 MR. MILLER: May I have just a moment? I think  
25 I am probably finished.

1 (Pause.)

2 BY MR. MILLER (Resuming):

3 Q Mr. Jones, in your prepared testimony you refer  
4 to an NRC document, NUREG-0654. Is that correct?

5 A Yes.

6 Q What function does that document serve in the  
7 overall planning for emergency planning in Illinois?

8 A It is probably the most important of several  
9 guidance documents that we follow in developing the plan  
10 for a nuclear power station.

11 Q Do you know whether or not that document was  
12 first prepared before or after the accident at Three Mile  
13 Island?

14 A Well, there is a predecessor document to Three  
15 Mile Island. I cannot remember the number -- lll perhaps.  
16 So there was a document in place, but the actual number,  
17 0654, followed Three Mile Island. But the content was in  
18 the main in place and was under review at that time.

19 MR. MILLER: I have no further questions.

20 JUDGE SMITH: Are there any additional questions?

21 MR. ALLEN GOLDBERG: Yes.

22 RE CROSS EXAMINATION

23 BY MR. ALLEN GOLDBERG:

24 Q Based on what Mr. Miller questioned you about,  
25 I would ask you to refer to the document you talked about



1 on page 9. The title of that document being, "Health  
2 Effects of Radiation."

3 A Yes.

4 Q You have indicated upon his questioning that  
5 each of the volunteers locally would be given this chapter  
6 to read. Is that correct?

7 A No, I did not say that.

8 Q By the way, for reference for the judges, it is  
9 a chapter that starts on page 9 and it ends on page 22.  
10 Is that correct?

11 JUDGE CALLIHAN: Page 9 of what, sir?

12 THE WITNESS: Volume I of IPRA.

13 JUDGE CALLIHAN: Exhibit 21.

14 MR. ALLEN GOLDBERG: Page 1, Volume 1 of IPRA.

15 JUDGE CALLIHAN: Applicant's 21.

16 JUDGE SMITH: Yes.

17 BY MR. ALLEN GOLDBERG (Resuming):

18 Q Who is going to explain to the volunteers the  
19 contents that this chapter has?

20 A The Department of Nuclear Safety.

21 Q Now, that department, breaking that down into  
22 a more human quantity, consists of what -- individuals who  
23 will actually sit down and explain to the men or women who  
24 volunteer what is in this chapter.

25 A It will be done in a structured training course

1 presented by health physicists qualified to make such  
2 presentations.

3 Q Health physicists. Is that a medical doctor?

4 A No.

5 Q The health physicists will be employed by the  
6 state of Illinois?

7 A Yes, by DNS. This testimony has already been  
8 presented.

9 Q The health physicist will teach groups of volun-  
10 teers at once or will teach them individually?

11 A There is no tutorial effort. These are groups.

12 Q Will the volunteers -- and I direct your atten-  
13 tion to page 9 of this chapter.

14 A Yes.

15 Q Will they be told by the health physicists that  
16 harmful levels of radiation exposure cannot be detected by  
17 the human senses?

18 A I would defer that to the Department of Nuclear  
19 Safety. My personal believe is they will be so told.

20 Q And you have indicated upon questioning by Mr.  
21 Miller that, in fact, the contents of this chapter will be  
22 explained to each and every one of the volunteers. Is  
23 that correct?

24 A That is correct.

25 Q So, in effect, you have said that the Department

1 of Nuclear Safety will conduct this type of explanation.

2 A That is correct.

3 JUDGE SMITH: Don't override his answers. Keep  
4 time separation.

5 MR. ALLEN GOLDBERG: I'm sorry.

6 BY MR. ALLEN GOLDBERG (Resuming):

7 Q Am I doing that to you, sir?

8 A Yes.

9 Q I will go slowly.

10 A I will let you know if you do.

11 Q Will these individuals, then, be told that  
12 harmful levels of radiation exposure cannot be detected by  
13 the human senses?

14 MR. MILLER: That question has been asked and  
15 answered, Judge Smith. It is the first sentence of the  
16 appendix. Mr. Jones has testified that he is not directly  
17 responsible for it. He expressed what his personal belief  
18 is with respect to the training. I don't know --

19 MR. ALLEN GOLDBERG: May I explain the relevance?

20 BY MR. ALLEN GOLDBERG (Resuming):

21 Q Go ahead, Mr. Jones.

22 MR. MILLER: There is an objection pending.

23 JUDGE SMITH: It seems to me that is the same  
24 question you asked him several questions ago.

25 MR. ALLEN GOLDBERG: The relevancy is this, Judge.

1 Mr. Jones has said that the volunteers that he can provide  
2 would not -- or, will be provided by from the community will  
3 not panic or have any problems and will be able to respond  
4 to the crisis.

5 JUDGE SMITH: Pardon we understand. The  
6 objection is that the question has been asked and answered.

7 MR. ALLEN GOLDBERG: All right. The answer, as I  
8 understood it, was that he said another department would  
9 take charge of that explanation. What I would like to do is  
10 get into his understanding of what each of the volunteers  
11 will be made aware of, because his opinion is based on that.  
12 That sort of information. His opinion is based on what  
13 these volunteers will know, and that is what I'm questioning  
14 him about.

15 MR. MILLER: If Mr. Goldberg wishes to persist  
16 in this, then perhaps we ought to recall Mr. Ed who testified  
17 yesterday. It is the Department of Nuclear Safety, as Mr.  
18 Jones identified, that is responsible for this training. And  
19 he could give a definitive answer, I think.

20 JUDGE SMITH: Let's see what he is able to get.  
21 It is correct, there were people here yesterday who would  
22 have been ideal witnesses for this subject matter. You did  
23 raise it, Mr. Miller?

24 MR. MILLER: Yes, I did.

25 JUDGE SMITH: Let's see what he is able to  
explain.

1 BY MR. ALLEN GOLDBERG (Resuming):

2 Q My line of questioning can be specific to this.  
3 It is your opinion that there would be no problems with the  
4 volunteers based on your past experience, responding in the  
5 event of a nuclear disaster in this area. Is that correct?

6 A That's correct.

7 Q And would your opinion in any way change if you  
8 knew that each of those volunteers would be told that harmful  
9 levels of radiation exposure cannot be detected by the human  
10 senses? Would your opinion change in any way?

11 A Absolutely not. I would add that they are being  
12 told that.

13 Q Are they also being told that this radiation  
14 would and could be ingested into crops, water and milk?  
15 Are they being told that?

16 A Yes.

17 Q Would your opinion change in any way by the  
18 fact that they have that knowledge?

19 A You'd better explain.

20 Q Would your opinion regarding the volunteers'  
21 response to a crisis change in any way?

22 A Let me see if I understand you. I have said  
23 that they have that they have that information, they are  
24 given that information, and I have stated my opinion.

25 Q Would your opinion stay the same if the volunteers



1 were told that there are genetic effects -- I'm calling your  
2 attention to page 10, if you would like to read along with  
3 me, and your counsel -- finally, that there are genetic  
4 defects that do not manifest themselves in the irradiated  
5 individual but appear in their descendents. Would your  
6 opinion change in any way regarding the response of these  
7 volunteers if they had that knowledge?

8 I will rephrase. You agree that they do have  
9 that knowledge?

10 A That's correct.

11 Q And you still maintain that the volunteers  
12 would do their job, as all the volunteers that you have seen  
13 in the past have done?

14 A I persist in my comments made repeatedly that  
15 I have no question about their response.

16 JUDGE SMITH: Are you going to proceed through  
17 this entire appendix in that order and pick up every one of  
18 these items and ask that question of Mr. Jones?

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1 MR. ALLEN GOLDBERG: If you would like me not to.

2 JUDGE SMITH: I would like you not to.

3 MR. MILLER: I was going to object anyway.

4 JUDGE SMITH: I think he has made his position  
5 quite clear. You have made a representative selection. I  
6 think that is adequate for the record. Are there any in  
7 particular that you would like to make?

8 MR. ALLEN GOLDBERG: There is only one other  
9 question I have.

10 BY MR. ALLEN GOLDBERG:

11 Q Mr. Jones, in all of the ten years you have been  
12 with his department, has there ever been a case of a volunteer  
13 not performing up to snuff or adequately?

14 A Mr. Counselor, I cannot answer that yes or no. I  
15 am confident that there may be some where the performance  
16 was less than desired, but I am also confident that as in  
17 any good organization, that was either corrected or the  
18 person was guided out of service.

19 JUDGE SMITH: Just from the point of view of  
20 productivity, your question is not a very important question.  
21 What are you talking about, one volunteer in all of his  
22 experience? Let's just move on.

23 MR. ALLEN GOLDBERG: I have no further questions.

24 JUDGE SMITH: Are there any further questions?

25

1 BY MR. STEVEN GOLDBERG:

2 Q Intervenor counsel asked you to comment on a number  
3 of statements drawn from the IPRA Volume 1 appendix regarding  
4 radiation risks, and I believe you have testified that in  
5 your experience volunteers have responded to other emergencies  
6 involving hazardous materials, is that correct?

7 A That is correct.

8 Q Does the training that your department or the  
9 Department of Nuclear Safety provide also instruct those  
10 emergency volunteers on the risks of other hazardous  
11 materials?

12 A Yes, but to a lesser degree.

13 Q And, in fact, have you had any problem enlisting  
14 volunteer response to those emergencies involving those  
15 hazards?

16 A Absolutely none.

17 MR. STEVEN GOLDBERG: I have no further questions.

18 JUDGE SMITH: All right.

19 Director, we appreciate very much your coming  
20 here. Your appearance has been very helpful to the Board  
21 and to the record.

22 THE WITNESS: Thank you very much, gentlemen. It  
23 is a pleasure.

24 JUDGE SMITH: Let's take ten minutes. A real ten  
25 minutes this time.

1 (Recess.)

2 JUDGE SMITH: On the record.

3 Gentlemen, may I administer the oath, please?

4 Whereupon,

5 MONTE PHILLIPS

6 AND

7 GORDON WENGER

8 were called as witnesses by counsel for the Staff, and  
9 having been duly sworn, were examined and testified as  
10 follows:

11 DIRECT EXAMINATION

12 BY MR. STEVEN GOLDBERG:

13 Q Beginning with you, Mr. Phillips, do you have  
14 before you a document entitled "Testimony of Monte P. Phillips  
15 Regarding Consolidated DAARE/SAFE and Rockford League of  
16 Women Voters Emergency Planning Contentions 2, Subpart (c),  
17 (e) and (k), 3 and 8," consisting of a one-page summary,  
18 11 pages of written questions and an attached written statement  
19 of your professional qualifications?

20 A (Witness Phillips) I do.

21 Q Do you have any changes you wish to make to the  
22 document?

23 A No.

24 Q Are its contents true and correct?

25 A Yes.

1 Q Do you adopt it as your correct testimony and  
2 statement of qualifications in this proceeding?

3 A I do.

4 MR. STEVEN GOLDBERG: Judge, I would like to move  
5 that the described testimony and accompany qualifications  
6 statements be received in evidence and bound into the  
7 transcript as if read.

8 JUDGE SMITH: Any objections?

9 MR. BIELAWSKI: No objection from Applicant.

10 JUDGE SMITH: It is received.

11 (The prepared testimony of Monte Phillips follows:)

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allows  
p. 5509

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the matter of	)	
	)	
COMMONWEALTH EDISON COMPANY	)	Docket Nos. 50-454
	)	50-455
(Byron Station, Units 1 and 2)	)	

TESTIMONY OF MONTE P. PHILLIPS  
REGARDING CONSOLIDATED DAARE/SAFE AND ROCKFORD LEAGUE OF WOMEN VOTERS  
EMERGENCY PLANNING CONTENTIONS 2 (Subparts c, e, and k), 3, and 8

PHILLIPS SUMMARY

This testimony addresses the emergency planning issues raised in Consolidated DAARE/SAFE and Rockford League of Women Voters emergency planning contentions

2 (Subparts c, e, and k), 3, and 8. It makes the following principle points:

1. The Applicant's onsite emergency plan complies, with some exceptions, with the emergency planning requirements of 10 CFR 50.47(b) and 10 CFR Part 50, Appendix E.
2. The purpose of evacuation time estimates is to provide decision makers with information on which to base a protective action choice between sheltering and evacuation. These estimates have been submitted by the Applicant and reviewed. The review indicated that the major considerations required of an evacuation time estimate were addressed.
3. Planning Standard 50.47(b) (12) relates to provisions for emergency workers responding during the course of their emergency functions. There are no particular preplanning requirements for members of the general public. Arrangements to handle members of the general public can be made on an ad hoc basis during the course of an accident.
4. Applicant has made provisions, supported by letters of agreement, with medical and ambulance support organizations which satisfy the requirements of 10 CFR 50.47(b) (12).
5. Applicant does provide the basis for the choice of protective actions in their emergency plan, specifically in Tables 6.3-1 through 6.3-3 and Section 6.3 of the GSEP. The means for implementing the basis for choice between sheltering and evacuation are specified in Applicant and Illinois Department of Nuclear Safety emergency plan implementing procedures.
6. Sheltering as a protective action consists of doing the best with what you have; e.g., closing doors and windows, going inside, and turning off ventilation. There is no requirement that special shelters be constructed.
7. Determining the "expected local protection afforded in residential units or other shelters" does not mean that a house to house or building to building canvas or survey must be conducted.
8. Both the Applicant and State have chosen to utilize EPA-520/1-78-001B guidance for determining the protection afforded by sheltering.
9. There are no requirements to provide radioprotective drugs to members of the public.

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

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REGARDING CONSOLIDATED DAARE/SAFE AND ROCKFORD LEAGUE OF WOMEN VOTERS  
EMERGENCY PLANNING CONTENTIONS 2 (Subparts c, e, and k), 3, and 8

Q1. Please state your name and affiliation.

A1. My name is Monte P. Phillips. I am an Emergency Preparedness Analyst with the Emergency Preparedness Section, Emergency Preparedness and Radiological Safety Branch, Division of Radiological and Materials Safety Programs, NRC Region III. A copy of my professional qualifications is attached.

Q2. What is the purpose of your testimony?

A2. The purpose of this testimony is to address the Staff position on the Consolidated Emergency Planning Contentions 2 (Subparts c, e, and k), 3, and 8 regarding emergency preparedness.

Q3. Do you adopt the Staff Safety Evaluation Report (SER) section on emergency planning as part of your testimony?

A3. Yes. I have independently reviewed the Byron Annex. This in conjunction with the generic portion of the Generating Stations Emergency Plan (GSEP) was used in the preparation of my SER input for emergency preparedness. In June 1982, both the generic portion and Byron Annex were again reviewed after both of these portions of the GSEP had been revised to correct most of

the open items (nos. 1, 2, 3, 9, 10, and 11) discussed in Appendix D of the February 1982 Staff SER. This review is documented in section 13.3 of Supplement 2 to the SER.

Q4. Could you please summarize the SER conclusion regarding the Byron emergency plan.

A4. Yes. Appendix D of the SER concluded that the generic GSEP and Byron Annex comply with the Commission's emergency planning onsite requirements in 10 CFR 50.47(b) and 10 CFR Part 50, Appendix E with certain exceptions. A number of these exceptions or open items have been satisfactorily resolved as documented in SER Supplement 2. Although not documented in the supplement, subsequent commitments from the Applicant have also resolved the remaining open items.

Q5. Consolidated Emergency Planning Contention 2 (subparts c, e, and k) state that in violation of 10 CFR 50.47(b)(10), Commonwealth Edison's "Evacuation Time Estimates for the Plume Exposure Pathway Emergency Planning Zone of the Byron Nuclear Generating Station" does not conform to NUREG-0654, Appendix 4 and will not provide accurate or useful guidelines for the choice of protective actions during an emergency because the study: does not address the relative significance of alternative assumptions; does not consider the impact of peak populations, including behavioral aspects; and does not use site weather characteristics as presented in the FSAR. With respect to this contention, why are time estimates for evacuation required to be submitted by the Applicant?

A5. There are two principal reasons for making evacuation time estimates. First, during the process of making the estimates, one identifies potential bottle-

neck or congestion areas where queuing or backup could occur; second, and the major reason, these estimates provide decision makers with information on which to base a protective action choice between sheltering and evacuation during an emergency.

Q6. Could you please elaborate on these evacuation time estimates.

A6. Yes. 10 CFR Part 50, Appendix E, Section IV requires that the Applicant shall also provide an analysis of the time required to evacuate and for taking other protective actions for various sectors and distances within the plume exposure pathway EPZ for transient and permanent populations. Appendix 4 of NUREG-0654/FEMA-REP-1, Revision 1, provides guidance on what information should be provided in the evacuation time estimates. Two conditions - normal and adverse - are considered in the analysis. The adverse weather frequency used in the analysis should be severe enough to define the sensitivity of the analysis to the selected events, such as snow, rain, fog, or ice. The evacuation time estimates presented by the Applicant for the general population within the Byron Station plume exposure pathway EPZ have been developed for eight combinations of conditions as follows: (1) summer season, daytime, normal weather; (2) summer season, daytime, adverse weather; (3) summer season, nighttime, normal weather; (4) summer season, nighttime, adverse weather; (5) winter season, daytime, normal weather; (6) winter season, daytime, adverse weather; (7) winter season, nighttime, normal weather; and (8) winter season, nighttime, adverse weather. In addition, to address the weekend events, additional analysis was undertaken. These weekend events include the Autumn on Parade and large weekend events at the Byron Dragway and Motosport Speedway. The results of the Byron Evacuation Time Estimates indicated that for the eighty baseline evacuation scenarios no queuing or backup on the evacuation road network occurred.



Q7. What is the status of the NRC review of these evacuation time estimates?

A7. In answering that question let me provide a little history on the subject.

The Applicant submitted the original evacuation time estimates for Byron by letter dated August 29, 1980; however, the Byron Annex was not submitted until October 20, 1981. These original evacuation time estimates were then forwarded to the NRC's contractor for review. On March 11, 1982, the NRC requested that the Applicant provide additional information regarding the evacuation time estimates to allow us to complete our review. The Applicant's response to this request was the December 15, 1982 submittal of the current redone evacuation time estimates. This submittal was not received until after the completion of Supplement 2 of the SER. The December 15, 1982 submittal was forwarded to our contractor for review, and in mid-February I received a telephone call from the contractor stating that this submittal appeared to be in accordance with the guidance provided in Appendix 4 to NUREG-0654/FEMA-REP-1, Revision 1. I have not yet received a written evaluation from the contractor.

Q8. Who performed the review of the evacuation time estimates and how is it conducted?

A8. The review was performed by Mr. Thomas Urbanik II of the Texas Transportation Institute of the Texas A & M University System. The evaluation technique is described in NUREG/CR-1856, An Analysis of Evacuation Time Estimates Around 52 Nuclear Power Plants, and NUREG/CR-1745, Analysis of Techniques for Estimating Evacuation Times for Emergency Planning Zones. The evaluation used a subjective scale requiring professional engineering judgement.

Q9. Did you also perform a review of these evacuation time estimates for adequacy?

A9. Yes. I performed a general review to determine that the major considerations required of an evacuation time estimate were addressed. These considerations

include: (a) an accounting for permanent, transient, and special facility populations; (b) an indication of the traffic analysis method and the method of arriving at road capacities; (c) a consideration of a range of evacuation scenarios; (d) consideration of confirmation of evacuation; provisions for normal and adverse weather; and (e) an indication that the estimates had been reviewed by State and local officials. This review was to ensure that these subjects were addressed and was not meant to be a determination of the adequacy of the estimates. That review is conducted by our contractor as I mentioned earlier in response to the previous question. Questions concerning why the estimates were deemed to be adequate would have to be addressed to him.

Q10. Consolidated Emergency Planning Contention 3 states that in violation of 10 CFR 50.47(b)(12), the emergency planning for the EPZ of the Byron Station does not sufficiently address the fact that there are inadequate medical facilities to provide the required bed space for an evacuation; that there is an insufficient number of medical and para-medical personnel to render medical assistance during an evacuation; that there are insufficient procedures for the screening, treatment, and isolation of persons sustaining radiological injuries; and that there is an insufficient number of materials, supplies, equipment and vehicles to provide for the transportation of injured persons during a radiological disaster. Does the Staff have a position regarding this contention?

A10. Yes. Planning Standard 50.47(b)(12) relates to provisions for emergency workers responding during the course of their emergency functions. There are no special planning requirements for members of the general public. Arrangements to handle contaminated injured individuals who are members of the general public can be made on an ad hoc basis during the course of an event. The Commission has endorsed this policy in a decision involving San Onofre

offsite emergency planning issues. This decision was made on March 31, 1983. This planning standard contemplates no particular preplanning for contaminated individuals who may be injured from the general public. The measures taken to provide medical facilities for injured contaminated workers in the plant would of course provide some capability to treat an injured individual who was contaminated and a member of the general public. We have specified no other capabilities other than the capability over about 12 hours to monitor all residents and transients in the plume exposure pathway EPZ arriving at relocation centers for contamination. This provision is addressed in Planning Standard 50.47(b)(10) and the guidance in Criterion II.J.12 in NUREG-0654/FEMA-REP-1, Revision 1. This position is consistent with the Staff's position in NUREG-0396, Planning Basis for the Development of State and Local Government Radiological Emergency Response Plans in Support of Light Water Nuclear Power Plants, December 1978, which was endorsed by the Commission in October 1979 (44 FR 6113). In particular, NUREG-0396 describes the concept of Emergency Planning Zones and the planning basis for them. Relevant to this issue, the Task Force which developed NUREG-0396 stated in that document that they did not recommend that massive emergency preparedness programs be established around all nuclear power plants. The following examples are given to further clarify the Task Force guidance on EPZs: (1) no special radiological medical provisions for the general public; (2) no special local decontamination provisions for the general public (e.g., blankets, showers, food, changes of clothing); (3) no stockpiles of anti-contamination equipment for the general public; and (4) no special decontamination equipment for property and equipment.

The requirements of 10 CFR 50.47(b)(12) are addressed by the criteria of Planning Standard L in NUREG-0654/FEMA-REP-1(at 69). A perspective on these criteria is given by section H of the Introduction of NUREG-0654 which makes

clear that, although a licensee has the primary responsibility for onsite emergency preparedness, "it is a necessary part of the facility emergency planning to make advance arrangements with State and local organizations for special emergency assistance such as ambulance, medical, hospital, fire, and police services." (NUREG-0654 at 25).

Q11. Has the Applicant made provisions that satisfy the requirements of 50.47(b)(12)?

A11. Yes. Arrangements have been made and letters of agreement executed between the Applicant and the following organizations: (1) Byron Fire and Rescue (ambulance support); (2) Rockford Memorial Hospital (medical support); (3) Radiation Management Corporation (medical and health physics support); and (4) Northwestern Memorial Hospital (medical). In addition, because of the specialized nature of the diagnosis and treatment of radiation injuries, the Applicant's Corporate Medical Office maintains a roster of physicians especially competent in this area of medicine and available for the care of persons with these special problems. Byron Station also provides for onsite first aid capability. Radiation protection personnel and selective supervisors are trained and qualified to administer first aid. At least one of these individuals is available on shift at all times. Additional information is provided in the SER on page D-17.

Q12. About how many people are we talking about, that is hundreds, tens; could you give us a feel for the number of injuries involving contamination that this hospital or ambulance service could expect during an accident?

A12. That is a very difficult question to answer because it is extremely accident specific. Depending on the type of accident we see anything in the range from no injuries to a half dozen or more. Since the primary concern is really more from a health standpoint and not a radiation exposure standpoint, you're looking more at medical isolation and decontamination after which the patient



care process would be essentially the same as if he had not been involved in a radiological emergency. Medical cases resulting solely from radiation exposure require essentially the same medical prophylaxis as would be used for someone with a highly contagious disease, namely reverse isolation. There really is no quantification on a minimum number of bed spaces or ambulances that a facility must have access to. It's a judgement decision usually based on the fact that one has a hospital with a back-up facility. In this case the back-up facility would be Northwestern Memorial and the primary hospital is Rockford Memorial.

Q13. Consolidated Emergency Planning Contention 8 states that in violation of 10 CFR 50.47(b)(10), emergency plans are incapable of offering sufficient guidance for the choice of protective actions during an emergency since applicant and state planners have yet to adequately determine the local protection afforded (in dose reduction) by various protective measures including evacuation, sheltering, and radioprotective prophylaxis. Does the Staff have a position regarding this contention?

A13. Yes. It is incorrect. The basis for the choice of protective actions is outlined in the Applicant's GSEP in Tables 6.3-1 through 6.3-3 and in section 6.3 of the GSEP. NRC guidance on the basis for choice of protective actions is provided in NUREG-0654, Revision 1 at Criteria II.J.7 and II.J.10.m. Table 6.3-1 of the GSEP outlines a system for choice of protective actions based on weather conditions, projected offsite dose rates with no dose reduction, and potential offsite doses based on the amount of material available for release in containment. Using this table, evacuation is always the preferred choice if the lower limit of the Protective Action Guides established in EPA-520/1-75-001 are exceeded. However, evacuation is not confirmed unless weather conditions permit and an evacuation time analysis confirms it as the preferred



choice. If evacuation cannot be confirmed because of extremely severe weather or because the evacuation time estimates indicate that people would be placed into the plume, then the recommended protective action may be sheltering. The basis for this choice would be determined by performing a calculation on which of these two alternatives would yield the lower dose. The Applicant has established a procedure for making this recommendation. This procedure is ED-24, "Determining the Recommended Offsite Protective Action Response Option." The Illinois Department of Nuclear Safety has established a similar procedure - 4-SOP-2, "Determination of Evacuation vs Sheltering From Initial Dose Projections." Although these procedures were reviewed and found acceptable for other CECo nuclear stations in Illinois, an implementation inspection for Byron has not yet been conducted. This implementation inspection will be conducted to ensure that all of the procedures necessary to implement the Applicant's GSEP have been adequately prepared to support operations at Byron.

Let me go back for a second and describe the protective action guidance given in NUREG-0654, FEMA-REP-1, Revision 1. This guidance is provided on pages 1-16 and 1-17 of Appendix 1. As noted on page 1-16, when a General Emergency is declared, a minimum protective action choice of sheltering two miles in radius and five miles downwind will be made. This is consistent with the Applicant's Table 6.3-1. In addition, the EPA's Protective Action Guides (PAGs) define a range of from 1-5 Rem whole body and from 5-25 Rem thyroid at which evacuation should be conducted. PAGs are a measure of dose savings, and are not to be confused with total dose received. The applicant has incorporated this guidance into Table 6.3-1 of the GSEP using the lower number given for both ranges. Page 1-17 of the NUREG also gives guidance on the choice of protective actions based solely on plant conditions. In this case, Applicant currently only provides a recommendation based on the material available for release corresponding to examples 4.b and 4.c on page 1-17 of the NUREG.

From reading the testimony of some of the other witnesses, there is apparently some misunderstanding as to what is meant by the phrase "shelter" as used in the phrase in Criterion II.J.10.m "expected local protection afforded in residential units or other shelter." Essentially, sheltering is a protective action consisting of doing the best you can with what you have. We are not talking about ensuring that everyone has a basement, or lives in a fallout shelter. What we are talking about is closing the doors and windows, going inside, turning off the ventilation system (or for most houses the furnace fan), and staying away from any outside openings if possible. Having a basement would be ideal, but it certainly isn't a requirement for licensing that all homes have basements and be made of brick. Also, this criterion does not mean that a house to house canvas or survey must be conducted to determine how many have basements, how many are made of brick, how many are office buildings, etc. What it does entail is an approximate determination for the vicinity of the plant of the average shielding factor. Guidance for determining this value is presented in three documents referenced on page 64 of NUREG-0654. Both the Applicant and the Illinois Department of Nuclear Safety have chosen to use EPA-520/1-78-001B, "Protective Action Evaluation Part II, Evacuation and Sheltering as Protective Actions Against Nuclear Accidents Involving Gaseous Releases." The determination of the average shielding factor may be done by estimating the percentage of various building types and multiplying by the appropriate shielding factor to determine an average, or by using the guidance documents listed on page 64 of the NUREG. For example, Table 5 of SAND 77-1725, "Public Protection Strategies for Potential Nuclear Reactor Accidents: Sheltering Concepts With Existing Public and Private Structures," defines a weekly average shielding factor for both cloud and surface deposited radioactive material for seven geographical areas of the country, including the Midwest and Great Lakes areas. These factors would then be incorporated, along with the evacuation time estimates, into the two procedures I mentioned earlier in the answer to this question to determine the

best choice of protective actions. One must remember that this procedure would only be used if a release were imminent and evacuation could not easily be accomplished prior to the release. Otherwise, evacuation would be the preferred protective action taken.

Q14. What about protection afforded by radioprotective prophylaxis?

A14. I'm not quite sure what is meant by the term as it relates to this question. If we are referring here to the use of Potassium Iodide (KI) by members of the general public, I would have to refer that question to the State officials. NRC guidance on this issue is essentially that stockpiles of KI for use by the general public are not warranted. Similarly, FEMA guidance is that it is up to each State to make this determination. Regardless of what the determination is, there is no requirement to provide KI to the public, although it is available through drug stores. If this question refers to ad hoc actions for respiratory protection such as breathing through a handkerchief, a dose calculation is not necessary. If people are going to be exposed to particulate matter because of a large release prior to being evacuated because of a particular accident sequence, any form of ad hoc respiratory protection is better than no action, and the idea is to reduce the dose. The determination of what material may have resulted in contamination is addressed in my response to question 10.

MONTE P. PHILLIPS

Organization: Emergency Preparedness Section,  
Emergency Preparedness and Radiological Safety Branch,  
Division of Radiological and Materials Safety Programs,  
Region III

Title: Emergency Preparedness Analyst

Grade: GG-14

Birth Date: October 1, 1949

Education: B.S. with Distinction in Physics, University of Washington, 1971.  
Post-graduate work in Radiological Sciences at University  
of Washington, 1971 - 1973.

Experience:

1982 - Present Emergency Preparedness Analyst - Develops, evaluates, and coordinates certain aspects of the emergency preparedness licensing program. Reviews and evaluates nuclear power reactor emergency plans. Participates in and observes and evaluates emergency preparedness exercises. Recommends standards and criteria for emergency preparedness at nuclear facilities and participates in the development and preparation of related criteria, standards, and guides. Participates in actual incident response situations. (NRC)

1980 - 1982 Radiation Specialist - Inspected all types of Commission licensees authorized to possess, use, and process nuclear materials. Observed, evaluated, and issued notices and reports as to the status of compliance with requirements of the Commission and the safety of licensee operations. Performed all types of investigations which involved material licensed or subject to license by the Commission. Inspected licensees with respect to their emergency planning and environmental monitoring programs and performed confirmatory measurements. (NRC)

1975 - 1980 Health Physicist, Radioactivity Control Branch - Performed environmental sample collection and analyses, monitored personnel for possible internal exposure, and audited all Branch functions at Mare Island Naval Shipyard. (U.S. Navy)

1973 - 1975 Health Physicist, Dosimetry Branch - Processed and evaluated exposure data on personnel including readout/developing of TLDs/Film Badges at Mare Island Naval Shipyard. (U. S. Navy)



1 BY MR. STEVEN GOLDBERG:

2 Q Do you have the testimony, Mr. Wenger, of Gordon  
3 Wenger on League/DAARE/SAFE consolidated planning Contentions  
4 3, 8 and 13, consisting of a one-page summary, eight pages  
5 of written questions and answers, a two-page written statement  
6 of your professional qualifications?

7 A (Witness Wenger) That is correct.

8 Q Do you have any changes you wish to make to the  
9 document?

10 A Yes, I do. The document has been corrected pre-  
11 viously. I believe all copies distributed have been corrected,  
12 but there is an update to that on page 6.

13 JUDGE SMITH: Has the transcript copy been  
14 corrected?

15 MR. STEVEN GOLDBERG: Yes. It is merely a deletion  
16 of reference to Q.8 and renumbering of Q.9 to be Q.8.

17 JUDGE SMITH: Go ahead.

18 WITNESS WENGER: Page 6, question 8 at the top  
19 is struck. On page 7 what is written is -- Q.10 originally  
20 is now Q.8.

21 JUDGE COLE: The question and answer, right?

22 MR. STEVEN GOLDBERG: I'm sorry.

23 On the top of page 6 -- maybe I can do this because  
24 it is really administerial.

25 JUDGE SMITH: Is it already in the record?



1 MR. STEVEN GOLDBERG: It is already reflected in  
2 the record.

3 JUDGE SMITH: Off the record.

4 (Discussion off the record.)

5 JUDGE SMITH: Back on the record.

6 BY MR. STEVEN GOLDBERG:

7 Q With the correction are the contents true and  
8 correct?

9 A (Witness Wenger) They are.

10 Q Do you adopt that as a statement of your testimony  
11 and professional qualifications for purposes of this proceed-  
12 ing?

13 A I do.

14 MR. STEVEN GOLDBERG: Judge, I would like to move  
15 that the described testimony and accompanying professional  
16 qualifications be received in evidence and bound into the  
17 transcript as if read.

18 JUDGE SMITH: If there are no objections, the  
19 testimony is received.

20 (The prepared testimony of Gordon Wenger follows:)

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6/10/5  
12.5511

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of )  
COMMONWEALTH EDISON COMPANY )  
(Byron Station, Units 1 and 2) )

Docket Nos. 50-454  
50-455

TESTIMONY OF GORDON WENGER ON LEAGUE AND DAARE/SAFE CONSOLIDATED  
EMERGENCY PLANNING CONTENTIONS 3,8,10 AND 13

## WENGER SUMMARY

This testimony addresses certain offsite emergency planning issues regarding Consolidated DAARE/SAFE and Rockford League of Women Voters Emergency Planning Contentions 3, 8, 10 (Subparts a, b, and c), and 13.

1. Arrangements between the licensee and Rockford Memorial Hospital do exist to provide for contaminated injured. There is no regulatory requirement for medical care for contaminated injured members of the general public.
2. It is believed there are ample materials, supplies, equipment, and vehicles to provide for injured resulting from a nuclear accident.
3. The Illinois Department of Nuclear Safety utilizing field data assess the accident and recommends to the Governor the protective actions which should be implemented in both the ten mile plume pathway and the fifty mile ingestion exposure pathway, Emergency Planning Zone (EPZ).
4. Not being provided the recent version of the Byron Plan, I cannot assess that the emergency plan relies too heavily upon volunteer personnel. However, through educational instruction and training it is believed a cadre of response personnel can be suitably prepared and depended upon to respond to the needs of the community when required to do so.
5. It is believed there has not been sufficient time allowed the State and local governments in which to prepare the necessary documents and related activities to afford the desired level of communications between planning officials, and primary and support response organizations.

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of )  
 )  
COMMONWEALTH EDISON COMPANY )  
(Byron Station, Units 1 and 2) )

Docket Nos. 50-454  
50-455

TESTIMONY OF GORDON L. WENGER  
REGARDING CONSOLIDATED DAARE/SAFE AND ROCKFORD LEAGUE OF WOMEN VOTERS  
EMERGENCY PLANNING CONTENTIONS 3, 8, 10 (SUBPARTS A, B, AND C) AND 13.

Q.1. Please state your name and affiliation.

A. My name is Gordon L. Wenger. I am a Community Planner with the Technological Hazards Branch, Federal Emergency Management Agency, Region V. My professional qualifications are attached.

Q.2. What is the purpose of your testimony?

A. The purpose of my testimony is to address the Consolidated Emergency Planning Contentions 3, 8, 10 (subparts a, b, and c) and 13 regarding emergency planning relative to the Byron Nuclear Power Station.

Q.3. Consolidated Emergency Planning Contention 3 states that "in violation of 10 CFR Section 50.47 (b) (12), emergency planning for the Byron Station Emergency Planning Zone (EPZ) does not sufficiently address the fact that there are inadequate medical facilities to provide the equipment and trained personnel necessary to care for contaminated injured persons; that there are insufficient procedures for the screening, treatment, and isolation of persons sustaining radiological injuries; and that there is an insufficient number of materials, supplies, equipment, and vehicles to provide for the transportation of injured persons during a radiological disaster."

Do you have a position on this assertion?

4/8/83

A. Yes. The planning standard cited relates to provisions for emergency workers responding during the course of their emergency functions. If during an emergency at the station, emergency workers are injured, the licensee is to have made provisions for their transport and care. The licensee has an arrangement with the Byron Rescue Ambulance Service to transport contaminated injured to Rockford Memorial Hospital. I visited the hospital and met with Mr. Terry White of the administrative staff. We discussed the arrangements they have with the licensee. We toured the existing emergency reception and treatment area. I interviewed the head nurse who briefed me on their emergency program. I was told they currently have the facilities and equipment to receive, survey, decontaminate and treat contaminated injured and radiologically injured persons.

Mr. White and I also toured the new construction site where more extensive facilities are being built to accommodate a greater number of emergency contaminated injured. The head nurse and Mr. White told me of intensified radiological emergency treatment training for physicians and nurses which is scheduled for June of this year. I also visited Swedish-American Hospital in Rockford to see what facilities they have to receive and treat contaminated injured persons. They have the necessary facilities and equipment to receive, survey, decontaminate, and treat persons with injuries resulting from the power station or any other radiological accident. The Swedish-American Hospital has done this planning and preparation on their own. They do not have an agreement with the licensee.

It should be noted that there is no regulatory requirement for medical care for contaminated injured members of the general public. The



likelihood of the public, in the 10-mile plume pathway of the Emergency Planning Zone, sustaining both injuries and receiving contamination is remote. Personal injuries to the general public would result only from carelessness and accidents in moving from the area to be evacuated. Contamination can be eliminated by taking early protective actions.

Q.4. What is your position regarding the availability of materials, supplies, equipment and vehicles to provide for the transport of injured persons during a radiological disaster?

A. I visited two of three major hospitals in Rockford and two nursing homes in the area of Byron. Also, I am familiar with the resources of the Illinois National Guard. I believe that there are ample materials, supplies, equipment and vehicles not only to provide for the transport of injured persons but to receive, process and treat them. When a nuclear power station accident occurs, the materiel and facilities of that area are not the only resources available. The resources of the State stand ready just as they are in anticipation of a flood, tornado, or any natural or man-caused disaster. Mr. White of Rockford Memorial Hospital responded when I asked if that hospital could take in several residents of nursing facilities which may have to evacuate those facilities. He said that they could put new admittances in wards and hallways for short stays. Much the same response was given me to the same question when asked at the Swedish-American Hospital.

As an example, Neighbors Nursing Home at Byron assured me that they could be self-sustaining regarding food, medicine, and supplies, for about a week. If they were to evacuate which it was indicated they

could with minimal problems, that they could take every needed supply and equipment with them. Regarding additional transport equipment, I toured the Illinois National Guard Depot at North Riverside to survey the availability of ambulances and supplies. At that depot there are 34 field ambulances which can be designated to transport the confined and medically disabled persons needing special transport. These vehicles could transport other persons in an evacuation. Ambulances and troop transport trucks are available from other Illinois National Guard locations in the State which are closer to Byron.

Q. 5. Consolidated Emergency Planning Contention 8 states that "in violation of 10 CFR 50.47 (b) (10), emergency plans are incapable of offering sufficient guidance for the choice of protective actions during an emergency since applicant and state planners have yet to adequately determine the local protection afforded (in dose reduction) by various protective measures including evacuation, sheltering, and radioactive prophylaxis."

Do you have a position on this assertion?

A. Yes. In that this contention addresses State planners I do believe I can respond to part of the contention. However, the Nuclear Regulatory Commission witness can testify on the overall contention. The responsibility for radiological accident assessment and the recommendations therefrom is with the Illinois Department of Nuclear Safety (IDNS). Provisions for Protective Actions are in the State General Plan, Volume I, Illinois Plan for Radiological Accidents, Chapter 5, beginning on page 55. The IDNS, based on their analysis of an accident, recommends to the Governor the Protective Actions which should be implemented both in the ten mile plume pathway and the fifty mile ingestion exposure pathway Emergency Planning Zone (EPZ).

The State General Plan lists seven specific protective actions which have been defined by the U. S. Environmental Protection Agency for use during a nuclear accident.

Protective actions are mandatory for implementation. Two Protective Actions which have an immediate impact on the public are "shelter-in-place" and "evacuation." In both cases the Illinois Department of Nuclear Safety, uses analytical data to determine the appropriate protective actions for the public to take.

- Q. 6. Could you comment on the assertion pertaining to the use of radioactive prophylaxis?
- A. Yes. Regarding the use of radiological prophylaxis, the State has taken the position that they will issue potassium iodide tablets to emergency workers only. They believe that there are other protective actions which can be implemented well in advance to protect the public health.
- Q.7. Consolidated Emergency Planning Contention 10 states that "the emergency planning relies too heavily upon volunteer personnel to effect an evacuation. The emergency plans fail to indicate the number of volunteer personnel who are necessary or available to perform the responsibilities assigned to them. Furthermore, the plans do not:
- (a) assess the availability of volunteers during hours in which many are employed outside the EPZ;
  - (b) take into consideration inevitable personal conflicts in the responses of volunteers who have families in the EPZ; and
  - (c) give consideration to the possibility that some volunteers who might perform well in non-radiological disasters might refuse to participate in a radiological disaster at the Byron Station."

Q. 8. Do you have a position on this assertion:

A. Yes. I have not been provided the recent revision of the Byron Plan. Therefore, I cannot assess that the emergency planning relies too heavily upon volunteer personnel.

My familiarity with the emergency response capability in the immediate area of the Nuclear Power Station is that volunteers, as such for response to emergencies, exists with the Byron Fire Department.

Other emergency responders in the area are employees who are expected to perform their jobs for which they are employed.

The Federal Agency of which I am employed and its predecessors have dealt in emergency planning for over twenty-five years. Experience indicates that in crisis situations of all scales, hurricanes, tornadoes, floods, toxic spills or releases that volunteers show up and do the job.

That is the purpose of the planning which takes place for every fixed nuclear power facility. Guidance provided in NUREG 0654/FEMA REP-1 Section II Parts N & O requires that preparatory measures of planning, training, testing, drilling, and exercising are to be ongoing periodically and annually. Therefore, it is believed that emergency responders, whether paid or volunteer, do not confuse the priorities of family, community, or job. It is believed that they will perform every bit as well in a radiological emergency as they do in a non-radiological emergency primarily because of conditioning through training.

The steps which are currently being taken in respect to planning and training makes a better informed emergency response cadre and public. Once the plans have been developed and exercised, the emergency responders will have a comprehensive knowledge of their roles and the actions of other responsible persons and therefore alleviate the anxiety brought on by lack of understanding.



In meeting with the Superintendent of the Byron Schools, the matter of school bus drivers was discussed. Many of the regular drivers work outside the designated EPZ at their primary job.

If the need for drivers occurs and the drivers feel they cannot enter the area, there are other qualified personnel within the school system who could fill in to get the buses rolling.

- Q. 9. Consolidated Emergency Planning Contention 13 states that "in violation of 10 CFR 50.47 (b) (1), the emergency plans, specific tasks, and responsibilities have been formulated without sufficient communication between planning officials and primary and support response organizations so as to enable said organizations to fulfill their assigned roles. "

Do you have a position on this assertion?

- A. Yes. It appears to me from my experience in radiological emergency planning and knowing the approach the State Emergency Services and Disaster Agency has taken in the preparation and planning for the other nuclear power stations in the State (Dresden, LaSalle, Quad Cities, and Zion), that prior to exercising the off-site emergency capabilities in the Byron EPZ that there will be a significant amount of planning, training, tests, drills, and exercising which will actually enhance the communities' emergency response capabilities. The NRC rule states that a full power operating license cannot be issued until all of the safety requirements have been adequately satisfied.

I believe there has not been sufficient time allowed the State and local governments in which to prepare the necessary documents and related activities to afford the desired level of communications



between planning officials and primary and support response organizations.

The ESDA is to publish and distribute the first week of April, Revision 1 of the Byron IPRA Volume VI. I have been informed each State and local organization with an emergency responsibility will receive a copy for comment. Planning sessions and meetings are to begin in mid-April to involve each of these organizations. Once this instructional and comment phase is completed, the Byron IPRA Volume VI will undergo Revision 2 and be published about the first of June. That revision will be the plan that the Federal evaluators will review and comment upon.

This is the same basic procedure which the ESDA and the DNS have used in the development of planning for the other sites in Illinois.

Professional Qualifications

Gordon L. Wenger

Formal Education

Bachelor's Degree Western Michigan University Kalamazoo, Michigan	Education
Major	Geography - Geology
Minor	Environmental science
Graduate studies Western Michigan University Kalamazoo, Michigan	Industrial Management Supervision
University of California Los Angeles Westwood, California	
California State University Fullerton	
California State University Los Angeles	

Experience and Background

Nuclear Preparedness School

U.S. Navy  
Guantanamo Bay, Cuba, 1955

Radiological Defense Training

RD I	1974	}	Staff College, Battle Creek, Michigan
RDT II	1974		
RDT III	1974		

The three phases of Radiological Defense Training involved the study of radiological effects from nuclear weapons and peacetime application of radiological sources. Phase I dealt with historical background studies and experiments and historical research. Phase II placed the participant in a position of planner-assessor for radiological response to weapons effects. Phase III was a hands-on experience using a radiological source. Participants became familiar with the use of detection equipment and its application to actual radiological material detection.

Civil Preparedness

Phase I	1973	)	
Phase II	1973	)	
Phase III	1974	)	Staff College, Battle Creek, Michigan
Phase IV	1975	)	

Each phase of Civil Preparedness graduates through the levels of organization of emergency response at all government levels and planning for emergency response to all natural and man-made disasters. A great deal of role-playing provides the participant with experience as near to realistic as simulation allows.

My direct involvement in disaster response is the following:

- Mississippi River Flood - 1973      Disaster Assistance Center Manager  
Quincy, Illinois
- Lake Erie Flooding                - 1974      Disaster Assistance Center Manager  
Port Clinton, Ohio
- Xenia Tornado                      - 1974      Disaster Assistance Center Manager  
Xenia, Ohio
- Blizzard of Ohio                    - 1976      Federal-Regional State Liaison

Employed by U.S. Government

- Defense Civil Preparedness Agency as Regional Field Specialist, 1972-1979
- Federal Emergency Management Agency as Regional Field Specialist, 1979-1982
- Federal Emergency Management Agency as Community Planner, 1982
- During the ten-year period, as stated above, I served as Federal-State Liaison Officer for Federal programs in the States of Illinois, Indiana, Michigan, Minnesota, Ohio and Wisconsin
- In the time period of January 1980-February 1981, I was detailed to serve as Executive Secretary of the FEMA Region V Regional Advisory Committee
- In February 1981, I was appointed to the position of Chairman, Regional Advisory Committee
- I have directed the activities relevant to the Radiological Emergency Preparedness (REP) Program in FEMA Region V. I have coordinated the counsel and advice of the Regional Advisory Committee to the State and local jurisdictions in the Region.

1 MR. STEVEN GOLDBERG: I tender the witnesses for  
2 cross examination.

3 JUDGE SMITH: You may proceed.

4 CROSS EXAMINATION

5 BY MR. HOLMBECK:

6 Q Gentlemen, I will be addressing most of my questions  
7 to Mr. Wenger.

8 Mr. Phillips, if I do address a question to Mr.  
9 Wenger and you feel you can offer something to it, please  
10 allow him to finish and then offer it.

11 A (Witness Phillips) I will do.

12 Q A few questions for both of you first. Have you  
13 both read IPRA Volume 1?

14 A I have not read all of IPRA Volume 1, no.

15 A (Witness Wenger) I am familiar with it.

16 Q Have you both read IPRA Byron Preliminary Revision  
17 0?

18 A (Witness Phillips) I have.

19 A (Witness Wenger) I have read over a copy of it.

20 Q Are you familiar with it?

21 A Not extensively.

22 JUDGE SMITH: From time to time refer to the exhibit  
23 numbers.

24 MR. HOLMBECK: I don't know them, Your Honor.

25 WITNESS PHILLIPS: I know IPRA Volume 1 is Exhibit

1 21, but I forget what Volume 6 is.

2 MR. BIELAWSKI: Nineteen.

3 BY MR. HOLMBECK:

4 Q Have either of you ever prepared an emergency  
5 response plan before?

6 A (Witness Phillips) I have. You mean the develop-  
7 ment of an actual plan? I have developed parts of one,  
8 but not the entire plan, no.

9 Q Mr. Wenger, what kind of an emergency was your  
10 plan for or was it a general emergency response plan?

11 A (Witness Wenger) It had to do with response on  
12 the part of one of my predecessor agencies responding to  
13 nuclear attack.

14 Q What parallels would you draw between that plan  
15 and planning for an accident at the Byron nuclear power  
16 plant?

17 A There is a need to organize responding people.  
18 There are many other parallels, but it is a response effort.

19 Q Can you make an evaluation in either one of those  
20 plans of the availability of emergency workers?

21 A What plan?

22 Q Either.

23 A The plan of which my agency developed?

24 Q Yes.

25 A Either one of those plans, we were addressing



1 the one plan I participated in, which was nuclear attack.  
2 You want me to compare it to what?

3 Q The Byron plan.

4 A Well, just generally, there is a need to set up  
5 a framework of operation, a framework of response. I cannot  
6 respond a great deal to the Byron plan. I should make note  
7 here that in the procedure that takes place in the development  
8 of plans by state and local governments, there is a period  
9 in time in which the plans are submitted officially to  
10 my agency for review. That official transmission and request  
11 from the state director, State of Illinois, for the Byron  
12 plan has not been formally or officially transmitted to my  
13 regional agency.

14 Q Gentlemen, in each of your respective testimonies  
15 you have addressed medical facilities and ambulance resources.

16 Mr. Wenger, in your answer to Question 3 you have  
17 stated that the Licensee has an arrangement with the Byron  
18 Rescue Ambulance Service to transport contaminated, injured  
19 persons to Rockford Memorial Hospital, is that correct?

20 A Yes.

21 Q Have you read the letter of agreement between  
22 the Byron Fire Protection District and the Applicant?

23 A I am familiar with the letter which is a part  
24 of that Byron plan.

25 Q Have you read it, sir?

1 A (Witness Phillips) Yes, I have.

2 Q When did each of you read that letter?

3 A I read it before I wrote the Supplement 2 to the  
4 SER which was published in February of '83. I believe that  
5 was written in December of '82, so I looked at it around  
6 that time.

7 Q Mr. Wenger?

8 A (Witness Wenger) I would think about the first  
9 part of March.

10 Q Just to clear one thing up, Mr. Wenger, in your  
11 testimony you refer to the Licensee. Are you saying the  
12 holder of a license to construct nuclear power plants or  
13 a license to operate one?

14 A (Witness Phillips) Maybe I could comment on that  
15 real quick. Part of the problem with the way the hearing  
16 process goes technically, they are an applicant for Byron.  
17 We get into the jargon habit of referring to people who  
18 operate nuclear power plants as licensees; even though they  
19 in fact do not have a license to operate a nuclear power  
20 plant, technically you would be saying the applicant.

21 Q Let's return to a letter between the Byron Fire  
22 Protection District and Rockford Memorial. That letter  
23 provided assurance to both of you that services of transporting  
24 contaminated, injured persons would be provided by the  
25 Byron Ambulance Service.

1           A        Since I am the one that reviews the letter of  
2 agreement for adequacy, I may have been a little in error  
3 on the date because I reviewed it prior to going back to a  
4 meeting to deliver the supplement to the supervisor that I  
5 have in Washington, D.C.

6           As far as I am concerned, it provides what I look  
7 for in a letter of agreement, basically an agreement that  
8 the party will respond to the Applicant's site to provide  
9 whatever services it is that they normally provide. In  
10 the case of this particular letter of agreement, it says  
11 that they will provide ambulance services and fire protection.

12          Q        Is it more useful in a letter of agreement to  
13 define in some detail anyway the actual services which will  
14 be performed?

15          A        It can or it cannot be useful. It depends on  
16 the agreement that is actually reached between the two  
17 parties. You can have a letter of agreement, for example,  
18 that says that we agree to perform what it says in our plans;  
19 we agree to do what we normally do. That would be -- that  
20 would meet the regulatory requirements.

21                As far as whether it is beneficial to make a  
22 specific contract that outlines every possible aspect, for  
23 example, who is responsible for decontaminating vehicles,  
24 who is going to provide radiation medical technicians, radi-  
25 ation chemical technicians to perform the monitoring. That

1 is sort of over and above what is actually required. It  
2 probably would be useful.

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1 Q Mr. Wenger, in your answer to question 3 on  
2 pages 2 and top of 3, you stated that you visited Rockford  
3 Memorial Hospital and discussed arrangements between that  
4 facility and the Applicant.

5 A (Witness Wenger) That is correct.

6 Q Have you read the letter of agreement with Rockford  
7 Memorial Hospital?

8 A I have not.

9 Q In the last sentence of the first paragraph,  
10 you state that you were told that they currently have the  
11 facilities and equipment to receive, survey, decontaminate  
12 and treat contaminated, injured and radiologically injured  
13 persons. You were told that by the head nurse?

14 A That is correct.

15 Q Did you make any kind of an independent assess-  
16 ment of the equipment referred to?

17 A That I did not. That is out of my field of  
18 expertise.

19 A (Witness Phillips) Let me comment on that. As  
20 part of our inspection program we do what is called emergency  
21 preparedness appraisal. It has not yet been conducted for  
22 Byron. It will be conducted upon receipt of all of the  
23 procedures, and we go out and do that appraisal. Yes, we  
24 go out and do that appraisal. Yes, we look at the hospital,  
25 we do look at the equipment. We also verify the training of



1 the individuals who are going to be performing the actual  
2 decontaminations. The same thing with the fire protection  
3 district, as far as the ambulance services, what their role  
4 is, are they aware of their role and how would they respond.

5           Again, that appraisal has not been conducted  
6 yet. I would envision it will probably be done sometime  
7 between mid-June and early August. We don't want to conduct  
8 that appraisal until everything is complete.

9           And I might also add that if any findings in  
10 that appraisal come up that indicate that things are  
11 identified in the emergency plan that will be there, in fact,  
12 are not there, where procedural inadequacies exist so that  
13 you cannot perform this function specified in the plan, we  
14 would put a hold on the license.

15           Q       Mr. Phillips, why are you offering at this time  
16 an affirmative response to whether the Applicant has made  
17 provisions -- I'm referring to question 11, sir. The  
18 question reads, "Has the Applicant made provisions that  
19 satisfy the requirements of 50.47(b)(12)?" It refers to  
20 medical and public health.

21           A       The details of 50.47(b)(12) basically deals  
22 with the Applicant making arrangements with a particular  
23 hospital and a backup facility. In this case, the hospital  
24 would be Rockford Memorial, the backup would be Northwestern  
25 Memorial. A letter of agreement has been executed with an

1 ambulance service to provide transport for contaminated  
2 individuals. That has been specified in the plan. I think  
3 the first aid agreement does also specify that they have to  
4 have first aid capabilities, and that is also identified  
5 in the plan.

6           What we are testifying to at this time is  
7 whether or not the plan meets the requirements of 50.47(b),  
8 all subparts and Appendix E. In other words, it is a plan  
9 review.

10           Q       Isn't adequacy an important factor in Section L  
11 of NUREG-0654, which puts forth the evaluation criteria  
12 for this regulation?

13           A       If you are referring to the adequacy of the  
14 letter of agreement -- which is what I am referring to --  
15 yes.

16           Q       I am referring to the adequacy of the specific  
17 areas of competence that NUREG-0654 mentions.

18           MR. STEVEN GOLDBERG: Judge, I would like Mr.  
19 Holmbeck to direct the witness to a specific provision and  
20 planning standard L to which he is questioning him on, if  
21 he has such provision in mind.

22           MR. HOLMBECK: Allow me to read evaluation  
23 criterion number 1. On page 69 of NUREG-0654. Under the  
24 planning standard, arrangements are made for medical services  
25 for contaminated, injured individuals. "Each organization

1 shall arrange for local and backup hospital and medical  
2 services having the capability for evaluation of radiation  
3 exposure and uptake, including assurance that persons  
4 providing these services are adequately prepared to handle  
5 contaminated individuals."

6 BY MR. HOLMBECK (Resuming):

7 Q Sir, I am asking you, having the capability for  
8 the evaluation of radiation exposure and uptake and including  
9 assurance that persons providing these services are adequately  
10 trained, isn't that determination of adequacy part of this  
11 evaluation criteria?

12 A (Witness Phillips) That's why I said we separate  
13 the implementation program from the plan review. Let me  
14 go over the plan review one more time.

15 What we are reviewing is to verify that medical  
16 services and back-up hospital and medical arrangements have  
17 been made. That a training program has been established,  
18 that a drill is going to be conducted on a specified basis.  
19 I forget which planning standard it is; I think it is O, that the  
20 drills will be conducted annually.

21 In the particular case of this licensee and  
22 this facility, I am also very familiar with the RMC drills  
23 that have been conducted because I have observed them. I  
24 am also very familiar with the contents of the kits that  
25 they normally include in all of the hospitals that they train

1 in their training program.

2           However, I want to make it clear that the actual  
3 implementation review, which is exactly what you are talking  
4 about, is a separate function. Okay? And that implementa-  
5 tion review has not yet been conducted. It is one thing to  
6 put in a plan that we are going to train these people to  
7 do this, this, this and this, and that these people understand  
8 how they're going to do this, this, this and this. And that  
9 these people are going to have this equipment, and specify  
10 all the equipment. The plan review says -- it is basically  
11 similar to a safety evaluation report that is written on  
12 any other section of the FSAR.

13           To take a piping system, we will build it with  
14 a particular type of pipe, and that pipe is going to be  
15 so thick, and that pipe will be welded in with certain  
16 procedures. The actual review to determine if that has been  
17 physically been done has not been done yet, although the  
18 plan review indicates that the plan is adequate and that  
19 is strictly what we are saying in the SER. Okay? That does  
20 not mean that we have done a review to determine whether  
21 these people have, in fact, attained a level of knowledge  
22 that we are looking for.

23           I might point out that that is what we are really  
24 looking at; is a level of knowledge. We are not even looking  
25 at the training program per se, except from the standpoint of

1 the course material. It is one thing to teach somebody  
2 something; it is another thing for a person to understand  
3 what he has been taught. What we are looking at is how well  
4 he understands what he has been taught.

5 MR. STEVEN GOLDBERG: I want to say something.  
6 When you used the initials RMC in your answer, Mr. Phillips --

7 WITNESS PHILLIPS: Radiation Management Corporation.

8 BY MR. HOLMBECK (Resuming):

9 Q So you are not testifying that the requirements  
10 of 50.47(b)(12) have been met.

11 A (Witness Phillips) No, I am testifying that  
12 the requirements of 50.47(b)(12) as they relate to the  
13 plan -- this is a document, a planning standard. What is  
14 in the plan, has the plan been written. Okay?

15 Q Thank you, sir. Mr. Wenger, I would like to ask  
16 you at this time why you have offered information regarding  
17 the adequacy of the Rockford Memorial Hospital facility.

18 A (Witness Wenger) I was given testimony statements  
19 that I reviewed to become familiar with the procedures, and  
20 it indicated that hospitals were not prepared, and I believe  
21 responding to those testimonies that were written, I myself  
22 wanted to investigate for my own assurance so that as docu-  
23 ments do come forth to us for review, and they are imple-  
24 mented in an exercise that I have a broader understanding,  
25 a more comprehensive position.



1 Q Why have you offered this into evidence at  
2 this time?

3 A It is something that I did.

4 MR. STEVEN GOLDBERG: Judge, it is directly  
5 pertinent to Contention 3. It is responsive to Contention 3.

6 MR. HOLMBECK: Mr. Wenger has explained that he  
7 has no expertise in evaluating the equipment and training  
8 here. Therefore, I see no reason for offering into  
9 evidence a statement of his days' visit to Rockford Memorial  
10 Hospital.

11 JUDGE SMITH: He did it. It's a fact. He does  
12 not have to be an expert to tell what he did.

13 MR. STEVEN GOLDBERG: Moreover, Judge, the  
14 regulatory requirement in subpart (b)(12) of 50.47 talks  
15 about arrangements. Mr. Wenger wanted to assure himself that  
16 proper arrangements were made. He does not have to be a  
17 physician to testify that arrangements have been made.

18 JUDGE SMITH: What is the posture of his view?

19 MR. HOLMBECK: I would like to ask Mr. Wenger  
20 if he is offering this as an expert opinion.

21 JUDGE SMITH: Okay.

22 MR. STEVEN GOLDBERG: Expert opinion on what?

23 MR. HOLMBECK: The adequacy of medical facilities  
24 to respond to an emergency with injured and contaminated  
25 individuals.

1 MR. STEVEN GOLDBERG: Can you cite which portion  
2 of the testimony you are questioning Mr. Wenger about?

3 MR. HOLMBECK: His answer to question 3 which  
4 was on page 2 and the top of page 3. I am referring more  
5 specifically, to -- from the middle of the first paragraph  
6 where he begins discussing his tour of the facility to --  
7 well, at least through the first two sentences of the  
8 second paragraph.

9 MR. STEVEN GOLDBERG: It is strictly a narrative  
10 of his visit, and his conversation. I don't see any opinion  
11 offered there about at all.

12 JUDGE SMITH: I don't see any, either.

13 MR. HOLMBERG: He would like to offer into  
14 evidence the opinion of an administrator at Rockford Memorial  
15 Hospital, and I realize that some of this was an opinion of  
16 the head nurse. But I believe much of it is referring to  
17 Mr. White. I don't know that Mr. White necessarily has any  
18 expertise in the area, and I don't know that the information  
19 which you provided, or the assurances that he provided are  
20 necessarily important here.

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1 MR. STEVEN GOLDBERG: I don't know if they are  
2 important or not. All he is doing is describing his visita-  
3 tion and ascertaining that arrangements were made. The in-  
4 formation contained in this question has basically been  
5 corroborated by other witnesses about the arrangements and  
6 level of preparedness at Rockford Memorial.

7 JUDGE SMITH: There is no motion in force. You  
8 are just talking.

9 MR. STEVEN GOLDBERG: Right.

10 MR. HOLMBECK: I believe I asked for the basis  
11 of my question.

12 JUDGE SMITH: You asked if he was offering this  
13 as an opinion evidence, and we notice there are no opinions  
14 expressed.

15 Also, I think there is an evidentiary point here  
16 that is eluding you, and that is, this is an inspection, as  
17 I understand the testimony, made in the course of Mr. Wenger's  
18 employment pursuant to regulations of his agency. It is the  
19 normal way in which he gathers such information, and it has  
20 a presumption of regularity for that basis.

21 Is that correct, Mr. Wenger? This is the normal  
22 approach that you and your colleagues in this field gather  
23 information?

24 WITNESS WENGER: Yes, largely it is.

25 JUDGE SMITH: And it is traditional that you rely

1 upon this information.

2 WITNESS WENGER: May I respond in this manner?  
3 Once again, I would like to indicate that we have not been  
4 transmitted officially the document for review. As I indi-  
5 cated in a question asked of me, I have seen the Byron  
6 site-specific document. I have read through it.

7 When this exercise takes place in August there  
8 is a very strong possibility that I will be the exercise  
9 director for offsite preparedness. Every bit of information  
10 I can glean prior to submission of this plan or through the  
11 entire review process will be beneficial for me to help make  
12 determinations when I head up this exercise team that comes  
13 into the area.

14 Therefore, it was felt necessary to come out here  
15 to look at some of these facilities and gain information  
16 through interviews with people just as much as I believe  
17 what Mr. Holmbeck did when he made his interviews.

18 MR. STEVEN GOLDBERG: Let me follow up.

19 Judge Smith was asking you whether in the normal  
20 course of your review responsibilities with FEMA this is the  
21 manner in which you obtained information pertinent to your  
22 review of offsite planning.

23 WITNESS WENGER: Not necessarily normal, no.

24 MR. STEVEN GOLDBERG: I realize you are at what  
25 you might call a pre-review stage because you have not been

1 officially transmitted the plan, but is there anything  
2 peculiar about the manner in which you would conduct a  
3 review of resources extant in the emergency planning zone  
4 from what you would otherwise perform if the plan had been  
5 officially before the agency?

6 WITNESS WENGER: Not at all. Nothing peculiar, no.

7 MR. STEVEN GOLDBERG: In fact, it is consistent  
8 with the way you do arrive at information to factor into  
9 your review determinations, isn't it?

10 WITNESS WENGER: That is correct.

11 MR. HOLMBECK: I would like to move to strike  
12 some portions of this testimony as hearsay.

13 JUDGE SMITH: Have you been consulting with counsel  
14 on this? How about you handling this?

15 MR. SAVAGE: Okay. Fine. As I understand it,  
16 he is not qualified as an expert with respect to this  
17 answer. This is just as a narrator.

18 JUDGE SMITH: That is irrelevant.

19 MR. SAVAGE: Because it is normal procedure?

20 JUDGE SMITH: He has not expressed an opinion  
21 in the --

22 MR. SAVAGE: But he is reciting what other people  
23 told him and using those statements as proof that what he  
24 was told is true.

25 JUDGE SMITH: That is the point of our voir dire



1 of him on this point. Let's start again on this.

2 VOIR DIRE

3 BY JUDGE SMITH:

4 Q Mr. Wenger, do you and your peers at FEMA rely  
5 upon inspections such as the inspection you made at Rockford  
6 Memorial Hospital in performing your duties?

7 A (Witness Wenger) It can be a part of our pro-  
8 cedures.

9 Q But is it customarily a part of your procedures  
10 or is it the first time it comes up?

11 A It is customary.

12 Q It is customary. How about other people at FEMA?  
13 Do they do that, too?

14 A Yes, sir, they do.

15 Q This is the procedure by which your agency  
16 arrives at some of its decisions?

17 A That is correct.

18 Q And you customarily rely upon oral statements  
19 that the people make to you at hospitals?

20 A We rely on those and weigh them, yes.

21 JUDGE SMITH: I think you have the evidentiary  
22 groundwork to make your argument.

23 MR. SAVAGE: I am a little concerned that he  
24 hesitated when he was asked whether it is customary and  
25 whether those are the customary things that he relies on.

1 JUDGE SMITH: He was not there for recreation.  
2 He was there in the course of his employment, I am sure.

3 MR. SAVAGE: I know he was not there for recreation.  
4 I know he was there in the course of his employment.

5 JUDGE SMITH: One further question.

6 BY JUDGE SMITH:

7 Q Did you go there solely for the purpose of testi-  
8 fying, or was it part of your inspection?

9 A (Witness Wenger) It was for the purpose of my  
10 testifying.

11 Q Solely for the purpose of testifying, for no other  
12 reason?

13 A Yes, sir.

14 Q You would not have done that were it not for the  
15 fact that you have to testify. Now, this is an important  
16 answer. Let's say that there was no hearing. Would you ever  
17 have made that inspection?

18 A Not prior to an actual exercise.

19 MR. SAVAGE: So it's not customary.

20 MR. STEVEN GOLDBERG: He said not prior to an  
21 exercise. Would you have made it following an exercise?

22 WITNESS WENGER: We would make it during an  
23 exercise.

24 MR. STEVEN GOLDBERG: When he would make it, the  
25 timing seems to be that we have a coincidence of this hearing,

1 this witness, and a contention that has been advanced, and  
2 it happens to have accelerated perhaps his --

3 JUDGE SMITH: Don't tell him. Let's ask him that.

4 BY JUDGE SMITH:

5 Q Did you make the inspection before the hearing so  
6 that it would be available at the hearing, but you would  
7 have made the inspection in any event?

8 A (Witness Wenger) Yes, sir, that is correct.

9 Q You would have made the inspection in any event;  
10 even if there had been no hearing, sooner or later you would  
11 have made the inspection, is that correct?

12 A (Witness Wenger) Yes, sir.

13 MR. SAVAGE: But he testified that this particular  
14 trip that he is telling you about that he gathered information  
15 on was made particularly for the purposes of the hearing.

16 JUDGE SMITH: It has all of the elements of relia-  
17 bility for hearsay evidence, to accept hearsay evidence.

18 MR. STEVEN GOLDBERG: The information is corroborated  
19 by other witnesses who have testified. It certainly is  
20 additive of whatever inherent reliability it has by virtue  
21 of the fact that it was performed in the course of his profes-  
22 sional responsibilities. The timing seems to be irrelevant.

23 JUDGE SMITH: It is reliable testimony.

24 MR. SAVAGE: Thank you, Your Honor.

25 MR. HOLMBECK: Your Honor, I would like to pursue

1 a brief line of questioning to look at perhaps the weight  
2 that should be given to the testimony.

3 JUDGE SMITH: Proceed.

4 CROSS EXAMINATION -- Resumed

5 BY MR. HOLMBECK:

6 Q Mr. Wenger, I would refer you to your answer to  
7 Question 9 which begins on page 7 and runs on to page 8.

8 JUDGE COLE: Which is now Question 8.

9 MR. HOLMBECK: Okay.

10 BY MR. HOLMBECK:

11 Q Sir, it is my understanding by reading your  
12 testimony that you have spoken with people at Rockford  
13 Memorial Hospital, the Byron Fire Protection District, the  
14 nursing home in Byron, which I believe is called the  
15 Neighbors Nursing Home, and the Byron superintendent of  
16 schools.

17 That is not necessarily a comprehensive list, but  
18 I believe that is included.

19 A (Witness Wenger) What you have stated is not  
20 correct. I do not believe I said I talked to anyone with  
21 the Byron Fire Protection District.

22 Q I believe the Byron Fire Protection District has  
23 a contract with the plant, and you sent --

24 A That you did, but I have not talked with him. You  
25 asked me if I had reviewed a letter, and I had responded I

1 am familiar with that. I had looked at that letter.

2 Q Let me refer you to your answer to I believe it  
3 is Question 7 now on page 6. The question is related to the  
4 availability of volunteers, and you have stated in the  
5 second paragraph of your answer, "My familiarity with the  
6 emergency response capability in the immediate area of the  
7 nuclear power station is that of volunteers, as such, for  
8 response to emergencies existing with the Byron Fire  
9 Department."

10 Does that mean -- I took that to mean, sir, that  
11 you had actually visited the Byron Fire Department. Am I  
12 incorrect?

13 A That could be misleading, but I did not intend  
14 to imply that I had visited there.

15 Q For what reason have you stated that you have  
16 some familiarity with the Byron Fire Department?

17 A Such as for response to emergencies existing  
18 with the Byron Fire Department, I know there is disagreement  
19 between the utility and the station -- I'm sorry -- the  
20 Byron Fire Department to respond to emergencies, this is  
21 true.

22 In nuclear power plants and communities nearby  
23 I am aware that these do exist. It is documentation which  
24 must be made with the Nuclear Regulatory Commission. We  
25 work very closely with them.



1 Q You have never met anybody from the Byron Fire  
2 Department, is that correct?

3 A That is correct.

4 Q I will drop that from my earlier question and  
5 restate my question again. I believe you have stated in  
6 your testimony that you have spoken with persons at Rockford  
7 Memorial Hospital, the neighborhood nursing home in Byron  
8 and the Byron superintendent of schools. Is that correct?

9 A Those are correct, and I would like to include  
10 in with the Rockford Memorial Hospital, the Swedish American  
11 Hospital.

12 Q I believe one other nursing home.

13 A That is correct.

14 Q Now let's go back to question 8 and your  
15 answer to that question. You stated in the second paragraph  
16 of that answer, in response to a question about adequate  
17 communications between planning officials and primary support  
18 response organizations, you stated, "I believe there has not  
19 been sufficient time allowed the state and local governments  
20 in which to prepare the necessary documents and related  
21 activities to afford the desired level of communications  
22 between planning officials and primary and support response  
23 organizations."

24 Have I read that correctly, sir?

25 A I did not follow it line for line, but that sounds

1 very much like what is written, what I said.

2 Q So the question was in answer to a quote from  
3 the Intervenors' contention, and so, are you saying that  
4 assigned responsibilities are simply not articulated to  
5 a sufficient degree where the Intervenors could make a judg-  
6 ment about the adequacy of communications?

7 A I don't feel -- let me put it a different way.  
8 The proceedings taking place now relevant to off-site  
9 emergency preparedness, I honestly feel have come about too  
10 soon; that the planning procedure was just embarked upon with  
11 valid reason, and that the activity that is taking place now  
12 that has been testified to by people from the state -- this  
13 planning activity is reaching a peak of momentum at this  
14 time.

15 I witnessed the beginning of this procedure of  
16 planning. I have worked closely with the state of Illinois  
17 in the past years and I know their approach to planning.  
18 There was a meeting held on July 20th at Indian Village  
19 Restaurant, which Mr. Jones' testimony referred to. Officials  
20 were present. That week I was in the area and I visited a  
21 lot of locations -- or I should say several locations --  
22 because I knew of some of the original contentions. I wanted  
23 to see for myself if this was the case. I wanted to talk to  
24 people. Many people were not knowledgeable about what  
25 planning was going on because it was at the very beginning.

1           Since that time, I have been watching this very  
2 closely, as I would normally, and I can see a tremendous  
3 amount of work going into it, and I don't necessarily feel  
4 that there is -- just because of the proceedings that are  
5 going on here in this period of time -- that there is any  
6 extra effort going into it. It is their normal procedure,  
7 and that is why I have stated that officially, there has  
8 not been a plan transmitted to my agency. That plan is  
9 forthcoming.

10           Let me go just a bit further, if I may. When  
11 that plan comes to us officially, transmitted by Mr. Jones,  
12 Director of ESDA, he will ask us for a review. That review  
13 is not conducted only by me, but that is conducted by what  
14 is known as a regional assistance committee which is composed  
15 of representation of seven federal agencies.

16           Q       Excuse me, sir, is that their regional advisory  
17 committee?

18           A       It is currently known as assistance committee.

19           Q       Okay, thank you. I'm sorry.

20           A       There is input from experts. They are technical  
21 experts. We will come to a consolidated position on the  
22 quality of that plan, and as we see it, as a planning document,  
23 and we will even look at it, to some degree, as to its  
24 feasibility of implementation.

25                   We form our questions and transmit them, then,

1 to Mr. Jones. This is not only to the Byron site-specific  
2 plan, but it will also be the Illinois Volume I, state  
3 generic plan. Where you see every time that there is a plan  
4 developed for an NTOL near-term operating license or, for  
5 example, the other stations under construction in Illinois,  
6 Braidwood and Clinton, those site-specific plans I'm  
7 referring to off site, which would be the county plan, they  
8 must dovetail into the state plan.

9           So those comments that we make will be given to  
10 the state. The state will have time to make those corrections  
11 to those plans, and then we are at the period of time of an  
12 exercise when they can implement the plans and they can be  
13 tested.

14           So what I am saying is that the proceedings  
15 taking place, to me personally and to my colleagues, we feel  
16 that a lot of what has been raised is premature. It has not  
17 been commented on by us and it will not be officially commented  
18 on until we are served with this official document.

19           Q       So with regard to the persons with whom you  
20 spoke with at Rockford Memorial Hospital, the nursing home  
21 in Byron, the Byron superintendent of schools, I believe  
22 the White Pines Manor Nursing Home and Swedish American  
23 Hospital, -- let me X out the Swedish American Hospital  
24 since they are not part of the plan. These people have  
25 not had sufficient information about their assigned

1 responsibilities so as to draw conclusions about the  
2 adequacy of the plan as it relates to them.

3 MR. STEVEN GOLDBERG: The question is a little  
4 vague. Is he asking for Mr. Wenger's opinion upon whether  
5 individuals with whom he spoke have been given sufficient  
6 information to form an opinion about the adequacy of the  
7 plan? Is he asking Mr. Wenger to testify on what he feels  
8 these individuals' opinion is? I'm just not sure what the  
9 question is.

10 BY MR. HOLMBECK (Resuming):

11 Q Mr. Wenger, you stated that this hearing is  
12 going on too soon. Is that correct?

13 MR. STEVEN GOLDBERG: If I may, I think the  
14 nature of Mr. Wenger's testimony is that he feels that the  
15 hearing has preceded or is coinciding with the state planning  
16 effort, and that all of the necessary planning preparations  
17 and communications would be taken in due course. They may  
18 or may not have been achieved.

19 JUDGE SMITH: We heard his testimony. I think  
20 we know what the sense of it is. He is not commenting on  
21 "too soon" in absolute terms, but "too soon" for the  
22 purpose of explaining what the plans are going to be like.

23 BY MR. HOLMBECK (Resuming):

24 Q Is that correct, sir?

25 A (Witness Wenger) Consistent with what the Judge



1 says, that is correct.

2 Q Sir, if it's too soon for these people to have --  
3 for the planning that affects these organizations and indi-  
4 viduals to whom you have spoken, if it is too soon for them  
5 to have drawn some conclusions as to the adequacy of the  
6 plan, then why are you presenting the conclusions which  
7 they have given you here? Aren't those conclusions based  
8 on a lack of training and experience because we are not  
9 to that exercise time when you usually do your review?

10 MR. BIELAWSKI: Your Honor, I would object to  
11 that for two reasons. One, I think Mr. Holmbeck is arguing  
12 with the witness. The second is I think the question presumes --  
13 is inconsistent with the Commission's regulations predictive  
14 findings on emergency planning issues in licensing proceedings.  
15 I think that is why Mr. Wenger is here; to try to assist  
16 the Board to make that predictive finding.

17 MR. STEVEN GOLDBERG: I have a more fundamental  
18 objection. The question is predicated on the assumption  
19 that there is some testimony given by Mr. Wenger that  
20 purports to represent the opinions of anyone else on the  
21 adequacy of the Byron emergency plan. And I would just like  
22 to see that reference, if one is available.

23 MR. HOLMBECK: I believe I can refer you to any  
24 number of examples.

25 MR. STEVEN GOLDBERG: I think your question

1 should be context-specific.

2 JUDGE SMITH: Are you still talking about his  
3 tour of Rockford Memorial Hospital?

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1 MR. HOLMBECK: Rockford Memorial Hospital --

2 JUDGE SMITH: Let's take that. What is there  
3 about his testimony on Rockford Memorial Hospital that  
4 relates to your point now? He went there. He talked to the  
5 people. He saw what they were doing. He reported it. There  
6 it is. We can see it.

7 What's wrong with that?

8 MR. HOLMBECK: Okay, sir. The last sentence  
9 reads, "I was told they currently have the facilities and  
10 equipment to receive, survey, decontaminate and treat  
11 injured and radiologically contaminated persons."

12 That may or may not be the case.

13 JUDGE SMITH: I think that is reliable testimony.  
14 We have already ruled that it is reliable.

15 MR. HOLMBECK: The second sentence in the next  
16 paragraph, "The head nurse and Mr. White told me of intensi-  
17 fied radiological emergency treatment training for physicians  
18 and nurses which is scheduled for June of this year."

19 If these two individuals -- and I assume that  
20 the head nurse and the administrator have not yet had this  
21 training -- how do they know that it is intensified radiological  
22 emergency treatment training?

23 JUDGE SMITH: I'm sorry. I just don't follow your  
24 point at all.

25 MR. STEVEN GOLDBERG: Judge, we have had other

1 testimony about the training that's going to be given.

2 JUDGE SMITH: Even if it hasn't, what is there  
3 about the statement?

4 MR. STEVEN GOLDBERG: This has all been corroborated  
5 by other witnesses and other documentary exhibits.

6 WITNESS WENGER: If I may make a comment, I am  
7 attempting to be helpful in the planning process, and I  
8 felt that offering this testimony is helpful to bring out  
9 these points.

10 JUDGE SMITH: Don't you want him to tell you these  
11 things?

12 MR. HOLMBECK: Yes. I would like to know if he  
13 has identified any inadequacies in the plan.

14 JUDGE SMITH: Are you going on to a new line of  
15 questioning? You have to take a choice. Don't you want  
16 this man to tell you what he is telling you in this testimony?  
17 What is your litigative position? Do you want to know that  
18 he found out that they are going to have an intensified  
19 training program in June? Don't you want to know that? If  
20 you don't want to know it, explain to us what your position is.

21 MR. HOLMBECK: Your Honor, that particular piece  
22 of information has been offered by a number of witnesses,  
23 along with much of this other material. I have personally  
24 spoken to some of these same people, and they have perhaps  
25 told me some of the same things. I don't know that I really

1 find some use in this, in him telling me this.

2 JUDGE SMITH: Does it hurt you?

3 MR. HOLMBECK: Does it help me?

4 JUDGE SMITH: That is for you to decide. You are  
5 the one -- you are making the litigation. You are going to  
6 be making findings, and I also think that you probably want  
7 to know, too. I don't understand simply what is your  
8 complaint. Do you think that he is lying, is that it?

9 MR. HOLMBECK: I believe Mr. Wenger has stated  
10 that their review usually takes place primarily just before,  
11 during and after the exercise.

12 Now, at this time I believe he has indicated that  
13 these people don't necessarily have all of the information,  
14 and that is part of the reason why the Intervenors have the  
15 information that they have in their affidavits.

16 Now, if that is the case, why is he offering us  
17 the conclusions of, you know, why is he offering this long  
18 before he can actually draw conclusions based on something?

19 JUDGE SMITH: Because it is the information he  
20 has now. As I understand it, he has given us the information  
21 that he has now.

22 Is that correct? You have given us the information  
23 that you have now?

24 WITNESS WENGER: That is correct.

25 JUDGE SMITH: All of the relevant information that



1 you have now.

2 WITNESS WENGER: Yes, sir.

3 JUDGE SMITH: Should he do anything less than that  
4 in his position?

5 BY MR. HOLMBECK:

6 Q Mr. Wenger, is this information less likely to  
7 give you reliable -- is your investigation up to this point  
8 less likely to give you reliable and useful data and opinions  
9 on which -- than your later investigation just prior, during  
10 and after the exercise?

11 A (Witness Wenger) My visitation to this part of  
12 Illinois, to the Byron area, I can see that it will strengthen  
13 my knowledge, my ability to judge the plan.

14 Q Okay, sir. I believe what you have said, that  
15 it will enhance your understanding, sir, but do you feel  
16 that this information which you have offered will give us  
17 insight as to -- will it give us insight into the adequacy  
18 of the final plan?

19 MR. STEVEN GOLDBERG: Judge, I am going to object.  
20 I think we have really been over the same ground. The Inter-  
21 venor chose to introduce certain matters in controversy.  
22 Now, quite apart from anything else that Mr. Wenger was doing  
23 at the time, he does have a role to play in the review of  
24 offsite emergency planning, and he was enlisted to provide  
25 his testimony, and he is certainly prepared to answer questions

1 about how his testimony was derived. And I think we are  
2 really getting into very unproductive areas.

3 JUDGE SMITH: It is your time. I think that the  
4 Board itself can look at the testimony, and we can see that  
5 perhaps the testimony might have been better if he had said  
6 I toured the Rockford Memorial Hospital, and I saw the  
7 completed modifications; and I toured Rockford Hospital,  
8 and I reviewed the training session that they had in June.  
9 Sure, that would have been better.

10 But now we are having the hearing here today,  
11 so I think you have made your point.

12 MR. HOLMBECK: Okay, sir. I have tried to frame  
13 my questions to give us some idea of the weight that should  
14 be given to the information. I will move on.

15 BY MR. HOLMBECK:

16 Q Can I assume then, gentlemen, that neither of you  
17 intends to testify as to the adequacy of medical facilities  
18 or the adequacy of any particular training programs or  
19 equipment which is presently in place for medical response  
20 to an accident at Byron?

21 A (Witness Phillips) I can testify as to what the  
22 plan says the arrangements are. That is what the plan  
23 standard also says, arrangements are made. Whether or not  
24 in fact they are sufficient as far as the training program,  
25 that is something we look at after that training program has

1    been conducted.

2                    Again, yes, we do look at the training program,  
3    but even the best training program does not necessarily mean  
4    that the individual who is going to perform the function is  
5    aware of what he is doing. That is part of the implementation  
6    inspection, and that is part of the reason why that implementa-  
7    tion inspection is not conducted until after basically every-  
8    thing in emergency preparedness, at least from the onsite  
9    standpoint, is in place.

10                   One more comment. Again, you asked about my  
11    answer to Question 11 in my testimony. Again, that answer  
12    is strictly addressed to arrangements.

13            Q        Thank you.

14            A        But as far as actually going out and saying do  
15    they have five kits, do the kits in fact contain soap and  
16    water, do the kits in fact contain radiation monitoring  
17    instruments that can detect beta levels, that type of  
18    material is actually looked at during the appraisal. The  
19    fact that they say they're going to have emergency kits  
20    to do that sort of thing is what I'm looking at from the  
21    arrangement standpoint.

22            Q        Thank you.

23            A        We are going to do it.

24            Q        Mr. Wenger, I would like to go to your response  
25    to Question No. 7 regarding volunteers.

1 JUDGE SMITH: Would this be a good place to break  
2 for lunch? Are you changing the direction or are you almost  
3 completed?

4 MR. HOLMBECK: Your Honor, if neither of the gentle-  
5 men can testify as to the adequacy of many of the arrangements  
6 that have been made, my number of questions is significantly  
7 reduced.

8 WITNESS PHILLIPS: I disagree with your statement.  
9 I have testified as to the adequacy of arrangements.

10 MR. HOLMBECK: I'm sorry. Except for the fact  
11 that things have been arranged for.

12 MR. STEVEN GOLDBERG: I do not want that summary  
13 to stand as a characterization of their testimony.

14 JUDGE SMITH: It won't.

15 MR. STEVEN GOLDBERG: I think you ought to proceed  
16 with whatever questions you have.

17 JUDGE SMITH: It is his summary, not anybody  
18 else's. Let's break for lunch now, and you can organize  
19 your plan and see what you're going to do. We will break  
20 until 1:20.

21 (Whereupon, at 12:05 p.m., the hearing was recessed  
22 for lunch, to be reconvened at 1:20 p.m., the same day.)  
23  
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AFTERNOON SESSION

(1:15 p.m.)

1  
2  
3 JUDGE SMITH: On the record. During the lunch  
4 break we had a conversation with Mr. Savage concerning some  
5 changes in their presentation which renews the possibility  
6 that we might be able to finish emergency planning litigation  
7 this week, if everything falls all right. Would you state  
8 what you have in mind, Mr. Savage?

9 MR. SAVAGE: I had in mind to finish the NRC  
10 witnesses probably within a half hour to 45 minutes, and  
11 then to put on three of our witnesses that are voluntary  
12 witnesses. One is Mr. Thomas Bause. We had revised versions  
13 of his affidavit. The revisions in the affidavit are the  
14 revisions agreed to by Mr. Bielawski and myself. What we did  
15 was go through the affidavits and stuck out redundant material  
16 or material relevant to issues under a commitment, and I  
17 believe we have a stipulation about a purported opinion from  
18 an expert in the affidavit.

19 As I understood it, if we made those changes then  
20 Applicant would have little or no questions about it. I  
21 never reached that understanding with Mr. Goldberg, but I  
22 believe he is amenable to it. And we have scheduled to  
23 show up here at about 1:00 o'clock Mr. Turner and Mr. Maloney,  
24 who are two of the school superintendents who came up in  
25 a discussion with Mr. Smith and Mr. Ed yesterday. They are



1 in a meeting, believe it or not, with ESDA this morning and  
2 I do not see them here yet. So if they are late -- I don't  
3 know. They said they would be here.

4 MR. BIELAWSKI: I am informed that Mr. Turner  
5 was not at that meeting.

6 MR. SAVAGE: We talked to them this morning.

7 MR. HOLMBECK: That would be David Miller who  
8 is not at the meeting, he is out of town. David Turner was  
9 certainly there.

10 MR. SAVAGE: We would not intend to call Ms.  
11 Lee Walters, the ER physician at Rockford Memorial Hospital --  
12 Mr. Walters, and to would leave for resolution tomorrow the  
13 admissibility of the ambulance surveys. And that would be  
14 done through a panel of witnesses on our part, which would  
15 be Mr. Cowan through whom the results of the survey are  
16 introduced; Mr. Murphy who designed the survey and can speak  
17 to the reliability of the questions; and Mr. Holmbeck, who  
18 made minor changes in it and distributed it with a cover  
19 letter and did some follow-up on it.

20 JUDGE SMITH: That would be the only business  
21 left for tomorrow?

22 MR. BIELAWSKI: There is one other point. Mr.  
23 Holmbeck does raise a question with the surveys, but he  
24 also addresses a number of other points on which I will have  
25 some cross examination.

1 My plan now is it won't be extensive cross  
2 examination. I do have some questions for him.

3 JUDGE SMITH: I was concerned somewhat about  
4 Mr. Murphy coming and not being able to testify, but under  
5 this plan --

6 MR. BIELAWSKI: I think it is doable.

7 JUDGE SMITH: Let's keep an open mind, then.  
8 I don't think we have to decide this moment. We will keep  
9 an open mind.

10 MR. SAVAGE: That's fine, as long as everyone  
11 understands what is going on.

12 Whereupon,

13 MONTE PHILLIPS and

14 GORDON WENGER,

15 the witnesses on the stand at the time of recess, resumed  
16 the stand and, having been previously duly sworn, were  
17 examined and testified further as follows:

18 JUDGE SMITH: Would you proceed, Mr. Holmbeck.

19 MR. STEVEN GOLDBERG: Before we proceed with  
20 cross examination, I would just like to introduce Mr. Spence  
21 Perry, the Assistant General Counsel for FEMA, seated to  
22 my right.

23 JUDGE SMITH: Proceed.  
24  
25

1 CROSS EXAMINATION -- (Resumed)

2 BY MR. HOLMBECK:

3 Q Mr. Wenger, I would ask you to turn to your  
4 response to question 6 in your affidavit. Question 6 refers  
5 to -- the question is, "Could you comment on the assertion  
6 pertaining to the use of radioactive prophylaxis?" I  
7 believe you copied directly from our Intervenors' contentions.  
8 However, there was a typo there and it should have been  
9 radioprotective. I assume, however, that your answer remains  
10 the same.

11 A (Witness Wenger) That is correct.

12 Q Are you familiar with Illinois State policy  
13 on the distribution of potassium iodide?

14 A Yes, I am.

15 Q And you stated here that it is to be distributed  
16 to emergency workers only.

17 A That is correct.

18 Q So you are aware of no other groups to whom it  
19 would be distributed?

20 A We have on file a statement as to the position  
21 of the state of Illinois as to the use of this drug, and it  
22 is stated that it is to be used for emergency workers and  
23 not distributed to the general public.

24 Q Is it to be distributed to other groups of  
25 people who perhaps, for some reason, could not be evacuated in

1 a timely manner?

2 A That is a decision to be made by the state. I  
3 imagine as the system would be changing and they evaluate the  
4 situation, they could make their own assessment and call  
5 for administering it to other bodies of people.

6 Q Okay, sir. Do you have a copy of the affidavit  
7 of David Ed before you?

8 A No, I don't.

9 Q The testimony of David Ed before you?

10 A I do now.

11 (Counsel handing document to witness.)

12 Q Would you refer to exhibit Attachment 1?

13 A (Witness Phillips) Our copy has no attachment.

14 A (Witness Wenger) I do not have Attachment 1.

15 Q Sir, I would refer you to the middle of the  
16 second paragraph on page 2 of that attachment. The middle of  
17 the second paragraph describes the use of potassium iodide  
18 in the state of Illinois. What does that say, sir?

19 A (Witness Wenger) You wish for me to read it?

20 Q Yes, sir. Since I have given you my own copy.

21 A The area you are referring to, I believe, starts,  
22 "Certain groups within the general population are easily  
23 identified as being difficult, if not impossible, to evacuate  
24 and/or shelter. They're hospital patients and workers,  
25 prison inmates and guards, nursing home occupants, emergency

1 workers such as police, fire and rescue squads, et cetera."

2 Q Okay, sir, under what title is that portion  
3 you just read? What is the section of that called?

4 A At the top of the page it indicates Administration  
5 of Potassium Iodide, ki.

6 Q Okay, sir. Based on that, would you say that  
7 you have a misunderstanding of the state's policy of the  
8 use of potassium iodide?

9 A No. I believe I stated that the state has taken  
10 the position for emergency workers and not to the general  
11 population and general public. But I said they can make  
12 their own assessment if it necessitates giving to other  
13 groups. Decisions, I believe, by the -- through advisement  
14 by the State Department of Health has some indication in  
15 that, and certainly the Illinois Department of Nuclear  
16 Safety makes recommendations.

17 Q Sir, in your visits to nursing homes, which you  
18 referred to in your answer to question 4, did you ever mention  
19 the use of potassium iodide for those facilities?

20 A I do not recall bringing that up in conversation,  
21 no.

22 Q Is your understanding that potassium iodide will  
23 be distributed to nursing homes in the area around the Byron  
24 plant?

25 A At this period of time, it is not my under-



1 standing that they will do such. Once again, I have not have  
2 a plan to judge that on. The Byron site-specific plan.

3 Q In your conversations with state planners of  
4 Illinois, have you ever discussed the topic of distributing  
5 potassium iodide to special facilities which cannot evacuate?

6 A In the broad spectrum of my working relationship  
7 with the state of Illinois and discussion of these matters,  
8 potassium iodide has been discussed but I cannot recall any  
9 particular instance when we have discussed the matter of  
10 administering it to people confined, such as in nursing homes.

11 Q Okay, sir. I would like to turn to your answer  
12 to question 7, which begins on page 6. You are responding  
13 to a question, "Do you have a position on this assertion?"  
14 And the assertion was regarding the availability of volunteers  
15 during an emergency at Byron.

16 Sir, you stated that you have not been provided  
17 with the most recent revision of the Byron plan. "Therefore,  
18 I cannot assess that the emergency plan relies too heavily  
19 on volunteer personnel." Sir, if you were provided with  
20 a copy of the plan, what would you look for to make this  
21 determination?

22 MR. STEVEN GOLDBERG: Can we qualify here? I  
23 think the witness indicates that he had seen Revision 0 to  
24 the site-specific plan but had not seen the present version --  
25 I am not sure whether it has been dispatched or not -- of

1 Revision 1 that has been alluded to by other state witnesses.

2 BY MR. HOLMBECK (Resuming)

3 Q When you refer to "recent revision" in your  
4 testimony are you referring to preliminary Revision 0 of Byron?

5 A (Witness Wenger) No, I am not. In my testimony,  
6 it indicates that the state was in the process of making  
7 Revision 1, putting it together, and that they expected by  
8 this time to have that revision completed and have some  
9 distribution of it. That is what I was waiting for, even  
10 though that, once again, is not the official document which  
11 I will be provided with to review.

12 What I was referring to here was I don't have  
13 that most recent revision.

14 Q When did you look at Revision 0?

15 A It came to my attention in January, I believe,  
16 of this year, 1982.

17 MR. STEVEN GOLDBERG: Would that be January 1983?

18 WITNESS WENGER: I stand corrected.

19 BY MR. HOLMBECK (Resuming):

20 Q Is there a list of resource summaries in  
21 Revision 0?

22 A (Witness Wenger) Yes.

23 Q And aren't there sections about personnel where  
24 they describe whether the personnel are part time or volunteer?

25 A Yes.

1           Q        Would that have assisted you in assessing if  
2 the plan is already reliant upon volunteer personnel?

3           A        Let me explain. On receiving that copy and  
4 looking through it in my conversations with the state  
5 planners, it was indicated to me that that was a preliminary  
6 plan and it was a starting ground, it was a boilerplate plan.  
7 We had to have some point from which to work, and, therefore,  
8 there were things included in there which they knew definitely  
9 would need changing. But from a planning standpoint, that  
10 was where they began. I did look through it. There are  
11 a lot of things that I had questions on, but in indicating  
12 some of those questions they assured me that through the  
13 process they are currently going through, those changes would  
14 be made, it would be updated and that really, at that point  
15 in time for me to review it was premature.

16                    Now, to go beyond, I have assessed on my own in  
17 my responsibilities of my position but somewhat unofficially,  
18 looking at some of these figures, drawing them together,  
19 because I certainly will look at them when the revised  
20 document -- I would presume probably Revision 3, maybe even  
21 Revision 4, when that is provided me. And it does state in  
22 there about volunteers in Volume 6, Chapter 2, page 286.  
23 It lists volunteers by counties and as to their response  
24 organizations, and I come up with a total of 424 volunteers.

25                    Now, I have a question I would like to ask, a

1 clarification in my mind. I sat in on some of the testimony  
2 this week. I need your definition of a volunteer.

3 Q There have been a number of definitions of  
4 volunteer thrown around in the hearing. I would be interested  
5 to know what yours is, since I believe you probably have more  
6 experience in working with emergency personnel.

7 A Well, there are volunteers who receive no monetary  
8 compensation for the service they give, and there are volun-  
9 teers who are called volunteers who are paid on a piecework  
10 basis, and then there are volunteers that they may work  
11 8 hours a week or a figure equating out to a normal day  
12 time period, maybe just for three days a week, but the  
13 remainder of the time they still come to work and they are  
14 not paid that way. There is no black or white in my mind  
15 as to a volunteer -- a shading of grey. It could be all  
16 the way from the Sierra Madre rescue team in California  
17 that gets paid a dollar a year, their volunteers, all the  
18 way to spark jumpers in California I am familiar with that  
19 are paid very well for going in and fighting fires and  
20 rescuing people. There is quite a gamut to consider.

21 Q Would you consider, say, ambulance service  
22 workers who get paid on call, who get paid when they are  
23 actually providing the service, would you consider that a  
24 volunteer? That sum is about \$5.00.

25 A They would respond to an event of some nature

1 and be paid during that period of time? Well, I guess what  
2 we are discussing here today in the broad spectrum -- and  
3 you asked me my definition of volunteer, which I just gave  
4 to you -- essentially, I think they could be considered  
5 volunteers.

6 Q We have discussed the next sentence down earlier  
7 on regarding your familiarity with emergency response capa-  
8 bility in the immediate area of the Byron plant. You referred  
9 to the Byron Fire Department, I believe you stated earlier  
10 that you had not actually talked to anyone in the Byron Fire  
11 Department.

12 A I have not spoken to anyone in the Byron Fire  
13 Department.

14 Q Have you spoken to any volunteers in the area?

15 A That is possible, from the definition I afforded  
16 you. I could not differentiate -- you see, once again, I  
17 am at a loss as to what your interpretation of a volunteer is,  
18 what your definition is. There is a very good chance that  
19 I have spoken to volunteers. I do not assess people, when  
20 I speak to them, whether they are volunteer or full-time,  
21 paid.

22 Q Sir, in the next sentence you say, "And other  
23 emergency responders in the area are employees who are expected  
24 to perform their jobs for which they are employed." To  
25 whom are you referring, all other emergency workers?



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A Can you cite specifically where you picked that up?

Q That is the second sentence in the second paragraph.

1           A       That is based on my conversation with a prominent  
2 member of the community. One of the superintendents, in my  
3 discussion with him regarding movement of school buses,  
4 moving people, and the indication is that people who drive  
5 school buses for that school district are employed. Therefore,  
6 I don't really consider them as being volunteers.

7           Q       Are they employed to drive in emergency situations?

8           A       My understanding is that they are employed to  
9 move the student population to and from the school, which  
10 I would have to presume encompasses emergency situations, be-  
11 cause it was indicated to me that if they received notice  
12 that there is a tornado warning, that they will immediately  
13 dispatch the buses and start that process, if it is feasible  
14 to move school people, school children or students from  
15 the area.

16          Q       Are they employed to drive a bus when it may  
17 endanger their lives, the hazard at hand?

18          A       Under your previous question I would say so. If  
19 there is a potential tornado on the ground, and their mission,  
20 their responsibility, and there is time by chance to get  
21 those children home safely, that they themselves would be  
22 employed during a hazardous process, which they -- the indi-  
23 cations are they are knowledgeable of.

24          Q       Sir, let me be very direct. Are bus drivers  
25 employed to drive school children during a radiological

1 emergency? Does that fall under the scope of their employ-  
2 ment?

3 A Once again -- well, let me just refer to the fact,  
4 as I have before, about the planning document, and then pur-  
5 sue it from that point by indicating to you that I had con-  
6 versations with a superintendent of one of the school  
7 districts, and we discussed this very point. And based on  
8 his response to me, his comments were that they are employed  
9 to perform a function, and if an incident or an accident was  
10 to occur at the power plant and they were told that they  
11 had to move students from the area, evacuate them, that  
12 he feels that his bus drivers would respond. And he said  
13 himself that if it was a situation where someone could not  
14 make it to the school to do that, he has other staff members  
15 who drive buses. He cited instances or the situations of  
16 athletic directors, people who take school youngsters to  
17 events, they would provide that service. And he said he  
18 himself would man a bus and drive it if the need came about.

19 Q Okay, sir. The superintendent of what school  
20 district was that?

21 A The superintendent of the Byron School District.

22 Q Sir, was he recognizing then the possibility that  
23 some bus drivers will not be available?

24 A This was discussed. Bus drivers being employed  
25 are responsible for the morning run and the afternoon run, or

1 whatever their assignment is. One of these events taking  
2 place at the power station, it would have to be presumed  
3 that it takes place sometime during the normal school  
4 day. He indicated that they have ever intent of getting those  
5 people to the school to carry that mission out.

6 Now, they do have plans in place to make that  
7 same kind of evacuation under extreme weather conditions --  
8 not only tornado, but I presume even the onset of a winter  
9 storm. He has plans to move people, and I would suspect  
10 then if there is a tornado on the ground or a suspected  
11 tornado, a warning or a watch, whatever the case may be, that  
12 he has provisions to still evacuate the school.

13 Q Okay, sir. What were the reasons that led him  
14 to believe that some bus drivers would not be available?

15 A That was also discussed. In the instances I have  
16 cited I see road conditions -- maybe the snow had begun,  
17 and they would have problems getting from their place of  
18 employment, which he said the drivers are at different  
19 locations. I don't recall if he said some worked in Rockford,  
20 but he spoke of being -- of working out of the ten-mile  
21 EPZ, the problem of them returning to the school, or the  
22 fact that the school buses are housed at the intermediate  
23 school. I don't remember the term you use in Illinois. The  
24 intermediate school, the junior high school, so to speak.  
25 There are 12 buses housed there.

1           When they make the run in the morning and they  
2 return, they return the bus to that location and then those  
3 people go to their place of regular employment, and when the  
4 run is to be made later in the day, they return there to  
5 pick up the bus.

6           So his indication was there may be some cases where  
7 people could not make it back, and that is what led to the  
8 discussion well, what would you do in a case like that, and  
9 he said we have people in the school who could drive a bus;  
10 in fact, I will drive a bus if that is necessary.

11          Q       Do you know if all of the schools have such  
12 arrangements, all of those, the three schools in the Byron  
13 School District?

14          A       All of the school districts?

15          Q       All of the school districts in the ten-mile EPZ.

16          A       I cannot attest to that, no. I do know, because  
17 one of the previous contentions prior to the change in  
18 contentions had to do with school buses and such. We do  
19 find it necessary at a point in time and planning, usually  
20 when the plan is written, to check out those buses to see  
21 if they exist. And a colleague and I toured the area, went  
22 to the school districts, made counts of buses, and matched  
23 them up with the preliminary plan.

24          Q       Did the superintendent of the Byron School  
25 District have any other reasons for believing -- besides



1 employment out of the area and weather conditions -- did  
2 they have any other reasons for believing that some bus  
3 drivers would not be available?

4 A He stated to me that, once again, the scenario  
5 of an event at the power plant which would necessitate the  
6 evacuation of school children, that the people that drive the  
7 buses are dedicated employees who have a responsibility, and  
8 he would expect them to carry that out. He said he could  
9 not demand of them that they come back in to get a bus to  
10 do this evacuation if it was an event. But he says he has  
11 every reason to believe that they would show up. And once  
12 again, I would state that is where he said he has people  
13 in the school, employees of the school who could do this, and  
14 he himself would do it.

15 Q So he did anticipate some personal conflicts for  
16 the people, but he thought they would still show up for duty.

17 MR. STEVEN GOLDBERG: Your Honor --

18 BY MR. HOLMBECK:

19 Q Is that correct?

20 MR. BIELAWSKI: I think Mr. Holmbeck just mis-  
21 characterized the witness' testimony. It is not what I heard  
22 the witness say.

23 MR. HOLMBECK:

24 Q Mr. Wenger --

25 JUDGE SMITH: I think that is a fair summary of the

1 exchange. Let's let the witness comment.

2 WITNESS WENGER: The question again, please.

3 BY MR. HOLMBECK:

4 Q So he indicated that he thought there would be  
5 some personal conflicts for the bus drivers, but he thought  
6 that would be overridden by their desire to drive during an  
7 emergency?

8 A (Witness Wenger) He as the superintendent of the  
9 school district is largely the employer of these people,  
10 and he would expect them to perform their duties in a  
11 responsible manner. I never suggested to him the possibility  
12 of somebody refusing to carry out a responsibility of coming  
13 into the area.

14 But he did say to me that should this arise that  
15 someone could refuse to come in, as they could at any place  
16 of employment. But he gave me the feeling that that was  
17 of concern, that that was not detrimental to his plan, because  
18 he had a plan in his back pocket to take care of that.

19 He is concerned about the students if an event  
20 should happen. But let me go one step further, which I think  
21 is significant. We did ask the question what about sheltering  
22 in place, and he said we can handle that. He said we have  
23 a below-grade area that we can house students in. And in  
24 the type of work that I have been in previously -- nuclear  
25 attack work -- we are always looking for the best sheltering

1 possible.

2 He has assured me that they have a below-grade  
3 basement that can house the entire student body in those three  
4 schools and the staffs -- not with luxury, but he said with  
5 some degree of comfort for a period of time. And to me that  
6 is very good, and I think the school has been very progressive  
7 in their thinking.

8 I think the original thinking behind it was for  
9 the tornadoes experienced, but it works in beautifully with  
10 a program of this type.

11 Q Do you know if that is the case at the other four  
12 school districts and their facilities?

13 A To house in a sub-level area?

14 Q Yes, sir.

15 A I do not know of the schools, but the nursing  
16 homes, specific locations I visited, it is very interesting  
17 to find out they could do this. And let me clarify that.

18 At Byron nursing home -- I know that was indicated  
19 because that is in close proximity to the school facilities  
20 at Byron School District -- they can house the entire patient  
21 population and the staffs there, and they have food supplies  
22 and, surprising to me, they have medical supplies for their  
23 patients that they could make it last, it was indicated to  
24 me, for a period of six to seven days.

25 Q Do you anticipate sheltering people in place for

1 that long?

2 A Do I anticipate that?

3 Q Is that a possibility?

4 A (Witness Phillips) You could say that you could  
5 not pass the roads for six or seven days. No, I would not  
6 anticipate that.

7 A (Witness Wenger) I would like to take out another  
8 point. I think it was brought up to some degree, but I would  
9 like to make it clear that in all of my training and prepara-  
10 tion for this position that I hold, positions I have held,  
11 it is indicated to me, and I believe it, that if you are  
12 speaking of evacuation, you are not going to evacuate the entire  
13 ten-mile emergency planning zone. You are going to evacuate  
14 by sectors. And the position in the State of Illinois as it  
15 is, and the other states of which I work with is that --  
16 this is downwind from the plant. If that sector is to be  
17 evacuated to any degree -- let's say out to the two-mile,  
18 the five-mile, or ten miles, generally they also give indi-  
19 cation to the sectors, let's say to the right or left of  
20 the adjoining sectors. They become involved, too. It depends  
21 on the plume.

22 When I brought this up -- the reason I brought it  
23 up is if there was some condition where they could not  
24 evacuate immediately for some reason, they could be housed.  
25 But once again, in the conversation with the people at the

1 nursing home, the Neighbors Nursing Home, it is very interesting  
2 that they can take care of themselves largely, plus they  
3 can transport themselves, too. They have sufficient transporta-  
4 tion to carry that out. This was impressive to me, because  
5 these were earlier contentions, and it concerned me. I think  
6 they were very good to bring up, so I looked into them closely  
7 and personally. It gave me a great deal of satisfaction to  
8 find out these things.

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1 Q Did you look into the same things at any other  
2 nursing homes?

3 A There was a time consideration. I tried my  
4 best to make it around the area. I visited another nursing  
5 home and asked similar questions and got, in some cases,  
6 different answers.

7 Q I'm sorry, sir, I didn't catch the last part of  
8 your answer.

9 A Your question to me was did I visit other nursing  
10 homes, I believe, and I said yes. There were time constraints  
11 I was working under to cover this area. I had visited, I  
12 believe, two other nursing homes and I found that the answers  
13 to the same questions differed depending on the geographic  
14 location.

15 Q What were the other two nursing homes you visited?

16 A I don't know that the names of those are in my  
17 testimony. I think one was White Pines. Yes, White Pines.

18 Q And the other one?

19 A Give me a moment, please.

20 MR. BIELAWSKI: I would like to know to which  
21 contention this cross examination is addressed.

22 MR. HOLMBECK: Contention 8. We are still  
23 talking about sheltering, I believe.

24 JUDGE SMITH: What?

25 MR. HOLMBECK: I think we are still talking about

1 sheltering.

2 WITNESS WENGER: I went to Neighbors and, I  
3 believe, White Pines were the only two nursing homes I got  
4 into. I picked one that was in very close proximity to the  
5 plant and another that was a different distance from it.

6 BY MR. HOLMBECK (Resuming):

7 Q Okay, sir. Do you have any knowledge of the  
8 adequacy of different sheltering areas? What criteria you  
9 judge a shelter by?

10 A I am not a sheltering specialist, but in NUREG-  
11 0654, sheltering can be most anything, can be within any  
12 structure or vessel, practically. An automobile could be  
13 considered a shelter. A living structure like a place of  
14 employment. This room is a shelter. It is an area to  
15 protect you from the outside elements.

16 Q With regard to an accident at the Byron Nuclear  
17 Power Plant or any nuclear power plant, are you aware of  
18 the criteria by which a shelter is judged to be adequate or  
19 inadequate, or something in between?

20 JUDGE SMITH: Would you point out in his testimony  
21 where he takes up sheltering?

22 MR. HOLMBECK: He has brought it up -- sure,  
23 Your Honor. He is to address Contention 8. I thought it  
24 was a fair topic.

25 MR. STEVEN GOLDBERG: He indicates in answer to

17-sy3

1 question 5 how the state arrives at a sheltering choice, and  
2 I think we ought to focus on that testimony.

3 MR. BIEWLASKI: Excuse me your Honor. Is Mr.  
4 Holmbeck inquiring into sheltering capabilities for nursing  
5 home facilities? When I asked this question he was asking  
6 the witness as to whether he visited other nursing homes.  
7 I asked him what contention his testimony was addressed to,  
8 what the cross examination was addressed to, and he stated  
9 Contention 8, which deals, I believe, with sheltering.  
10 Sheltering or protective actions; alternative protective  
11 action to evacuation is in Contention M, which reads, "Dem-  
12 onstrate that IPRA includes adequate provisions for alternate  
13 protective actions in the event of evacuation of home bound  
14 and nursing home patients is infeasible."

15 MR. HOLMBECK: I withdraw any portion of my  
16 earlier question that had to do specifically with the adequacy  
17 of sheltering nursing homes. That was an accurate description  
18 of the commitment.

19 BY MR. HOLMBECK:

20 Q Mr. Wenger, do you believe it is important to  
21 assess the sheltering capabilities of buildings, structures  
22 within the 10-mile EPZ of a nuclear power plant?

23 A (Witness Wenger) You are referring to Contention 8?

24 Q Yes, sir.

25 A I would like to respond about what I placed in  
my testimony. The NRC witnesses can address that overall

1 contention. Sheltering is not a specialty of mine. As I  
2 indicated, the term "sheltering" can be a variety of things,  
3 but as to its composition and its ability to shield or  
4 protect one, I do not have that field of knowledge.

5 A (Witness Phillips) You are addressing my  
6 testimony. Question 13 and Answer 13, pages 8, 9, 10 and  
7 part of 11. The requirements for determining the guidance  
8 for local protection -- involved in local protection. You  
9 do not need to go out and do a house-by-house or building-  
10 by-building canvas. You are looking for a general sheltering  
11 factor. You can just choose the minimum factor, for example,  
12 which is approximately .9 for a wood frame house, and use  
13 that to make a decision, which is what we are discussing  
14 here. The actual protective action decision making choice.  
15 Do we shelter or do we evacuate.

16 Q I just have one question on that. There is a  
17 .9 reduction factor for a wood frame house?

18 A Right, without a basement. You will find that  
19 in EPA 520 -- EPA520/1-78-001A. Those documents are also  
20 referenced on page 64 of Board Exhibit 3 which is NUREG-0654.  
21 It discusses three reports which can be considered in  
22 determining protection afforded.

23 In number 3 of that report which is two parts,  
24 Part 1 and Part 2, Part 2 gives the methodology for making  
25 the calculation. Part 1 actually identifies the actual

1 sheltering factors by different buildings.

2 Q Mr. Wenger, I have a couple more questions on  
3 your answer to question 7 on page 6. I was referring, before  
4 we got on a slightly different subject, to the second  
5 sentence in the second paragraph there stating, "Other  
6 emergency responders in the area or employees who are  
7 expected to perform the jobs for which they are employed..."  
8 Sir, if an ambulance service was going to be directing  
9 traffic, would that sentence I just read hold true?

10 MR. MILLER: May we have the question repeated,  
11 please?

12 BY MR. HOLMBECK (Resuming):

13 Q I read the sentence there and asked if an  
14 ambulance service was to be directing traffic, would they,  
15 in fact, be performing their jobs for which they are employed?

16 MR. BIELAWSKI: Objection. I do not believe  
17 there's a foundation for that assumption.

18 MR. HOLMBECK: It is a hypothetical question.

19 JUDGE SMITH: Would you point again to the  
20 statement in the testimony that the question is based on?

21 WITNESS PHILLIPS: It's on page 6, "Other  
22 emergency responders..."

23 JUDGE SMITH: I don't understand the relevance.

24 MR. HOLMBECK: I will withdraw the question.

25 I just have a couple more here.



1 BY MR. HOLMBECK (Resuming):

2 Q In that same question, the last paragraph on  
3 the page there, it begins: "The steps..." It reads, "The  
4 steps which are currently being taken with respect to planning  
5 and training make a better informed emergency response cadre  
6 and public."

7 Sir, have you read any training manuals used in  
8 the state of Illinois?

9 A (Witness Wenger) Relevant to fixed nuclear power  
10 sites?

11 Q Yes, sir.

12 A No.

13 Q Have you attended any meetings, training meetings,  
14 for any emergency response groups around the Byron nuclear  
15 power plant?

16 A As a student in the class, no. I have been  
17 present when they have been conducted.

18 Q When was that, sir?

19 A Well, the one that comes foremost to my mind  
20 most recently was July 20th, 1982.

21 Q That was in the Byron area?

22 A That was at Indian Village restaurant.

23 Q You consider that a training meeting, sir?

24 A I certainly do.

25 Q What was discussed there, briefly?

1           A       Material presented was largely by Mr. Jones,  
2 State Director of ESDA, and Mr. Dave Smith, and they gave.  
3 it was a public officials meeting. They made presentations  
4 with graphics, oral presentations on the role of ESDA, the  
5 relationship of the planning, and they brought in some of  
6 the other federal agencies, how they fit into it. It was  
7 informative, a very educational session. There were questions  
8 raised and informational material given. Presentations made,  
9 indication of other training sessions and other contacts that  
10 would be made, follow-up activities, all focused toward  
11 development of the Byron site-specific plan.

12           Q       Was there any training involved there with  
13 regards to any particular response organization?

14           A       No.

15           Q       Is this sentence which I read earlier, are you  
16 saying there that training will make volunteers more willing  
17 to be available during an emergency? Is that the gist of  
18 what you were getting at there?

19           A       Along those lines, yes.

20           Q       If you have not read any of the training manuals  
21 and you have not attended any meetings which were designed  
22 for specific response organizations, how can you say this  
23 with respect to the Byron plant?

24           A       I base it on my 11 years of experience in this  
25 federal region, which I am a part of, working with the six

1 Great Lakes states, one of those being Illinois, working  
2 with these people very closely, knowing their manner of  
3 approach, knowing the quality of work they have done for  
4 the LaSalle, Dresden, Quad Cities and Zion nuclear power  
5 stations. And I do see the steps which are currently being  
6 taken. I speak by telephone with Mr. Jones, with Mr.  
7 Dave Smith, with Mr. Dave Weize. Mr. Weize is Deputy to  
8 Mr. Jones, and we confer frequently on the status of  
9 planning, things that are going on. I meet with these people  
10 on exercises which I take part in, one which will be next  
11 month. Even here at this meeting time, I conferred with him  
12 on planning that is moving forward on Quad Cities' exercise.

13 They tell me of the training. On one of my visits  
14 in this area last month I met with Mr. Smith at the regional  
15 office in Dixon. We had discussed a lot of these matters.  
16 He had shown me their plans, their projections, their bar  
17 graphs, their charts, what they plan to do. So my statement  
18 there is in respect to the planning and training that is  
19 currently underway, and how thoroughly we feel they do it.  
20 They're going at it in this manner and the more they do, the  
21 better informed these emergency responders are, and the  
22 public. Those who receive this information, training, et  
23 cetera.

24 Q Sir, if you have never read a training manual  
25 and you have never attended a meeting intended to train a

1 specific emergency response organization, how can you draw  
2 the conclusion that the information there is of such quality  
3 that the volunteers will be more inclined to respond to  
4 radiological emergencies? That's what I'm getting at.

5       A       When you prepare for an emergency, there are  
6 some basics, there are basics for all emergencies. When  
7 you get to the specifics, they do vary. I do respect that  
8 a nuclear power plant event will be different from a tornado  
9 or hurricane or flood. By the same token, a nuclear attack  
10 scenario would be different than a nuclear power plant  
11 scenario.

12               I talked with Mr. Glenn Miller, who is County  
13 Commissioner of Lake County, which the Zion plant is located  
14 in. He told me in a public meeting before others that the  
15 type of training that his people were given, and as a result  
16 of the initial exercise held at the Zion plant and the most  
17 recent exercise held at the Zion plant, two exercises, that  
18 his people are in a far better position today to respond to  
19 a nuclear power plant incident than they were before, and  
20 that the spin-off or the benefits from these exercises has  
21 strengthened their capability in other areas of emergencies.

22               So the type of training that is given is basic  
23 to a point in time. The training manuals -- I guess I  
24 should say you get to a point where there are other things  
25 called into being. So once again, I am not technically oriented

1 into some of these fields, and I think that is where NRC  
2 and FEMA complement one another in their responsibilities.

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1           The training to a point, and I can say from the  
2 standpoint of the Illinois ESDA, is pretty much what we  
3 look at. When you get into the Illinois Department of Nuclear  
4 Safety, I think that gets just a little bit more beyond FEMA.  
5 It gets into the Nuclear Regulatory Commission, and it  
6 gets into this regional advisory or assistance committee.  
7 We have experts on that which look at this type of training,  
8 what has been provided.

9           Q       But, sir, you have no personal knowledge of the  
10 content of the training which is given to specific emergency  
11 response organizations in the Byron area, is that correct?

12          A       You asked if I had seen the manuals, and I said  
13 no. And I guess in that respect to your question, no; I  
14 would indicate no specific knowledge of that.

15           MR. BIELAWSKI: I know it is after the fact. I  
16 would indicate there is no foundation for believing. Mr.  
17 Holmbeck has not established a foundation that there are in  
18 fact the IESDA training manuals to which he has been  
19 referring.

20           JUDGE SMITH: Is the state of the testimony now,  
21 as he has testified, is that he has not directly observed  
22 the training materials, but his knowledge is derivative  
23 knowledge based upon his understanding of training at other  
24 places and his understanding of the qualifications of the  
25 Illinois officials? Is that basically what has happened?

1 BY MR. HOLMBECK:

2 Q Mr. Wenger, have you testified, sir, that you  
3 have attended training sessions for specific response organi-  
4 zations or read training manuals or materials around some  
5 other Illinois nuclear power plant?

6 A (Witness Wenger) Yes.

7 JUDGE SMITH: And you have seen the results of  
8 training at other nuclear power plants?

9 WITNESS WENGER: I observed the results as to  
10 their exercises that they conduct for us.

11 JUDGE SMITH: That is the basis of your statement.

12 WITNESS WENGER: In fact, those exercises many  
13 times the state wishes to utilize the exercise as a training  
14 vehicle, too. It is specifically stated to us in documentation  
15 that during the exercise they wished to train additional  
16 people and have that ongoing with the exercise. I have  
17 observed that firsthand, even into some of the technical  
18 areas, to look at some of the procedures and listen to the  
19 colleagues which share this responsibility with me; because  
20 ultimately I may end up making a presentation of information  
21 and material to the critiquing body.

22 BY MR. HOLMBECK:

23 Q You stated earlier that an accident at a nuclear  
24 power plant is not like a tornado, or I believe you gave one  
25 other example. Could you please explain why? What is

1 different about it?

2           A       The release of material, whether it is into the  
3 atmosphere or into a liquid body, a man-made material would  
4 be -- would make it different from a tornado, hurricane or  
5 flood.

6           Q       I just have one more question for you, and it is  
7 on the next sentence. The sentence reads, right on the  
8 same page right after the sentence we have just been discuss-  
9 ing, "Once the plans have been developed and exercised, the  
10 emergency responders will have a comprehensive knowledge of  
11 their roles and the actions of other responsible persons,  
12 and therefore alleviate the anxiety brought on by a lack of  
13 understanding."

14                   Now, since this plan, the Byron Revision 0, has  
15 not been exercised, how is it that you can conclude that a  
16 comprehensive knowledge of their roles in the actions of  
17 other -- how can you conclude that a comprehensive knowledge  
18 of their roles will exist?

19           A       You may have a point there. You would have to  
20 measure that, I am sure. You would have to test prior to  
21 and following. I based that statement on what I have seen  
22 in my experience in about 28 nuclear power plant exercises  
23 which I have been in attendance to, observing those people  
24 that are playing those responding positions. I have seen  
25 the same people repeat these exercises, some nuclear power

1 stations. To this time I have seen three exercises. I  
2 certainly see growth. I see a lot of progress being made  
3 in planning. I see where they have incorporated into their  
4 plans and into their exercises what we found as deficiencies  
5 in previous exercises, and in their documents they have  
6 incorporated those.

7           You talk with these people following an exercise,  
8 and they will indicate to you that the much better feeling  
9 they have in their area of responsibility because of what  
10 they are dealing with. They are gaining knowledge on it.  
11 They feel better prepared. The exercises prove that.

12           Q       Sir, in the sentence I have referred to, when  
13 you say plans, what plans do you mean? Are you referring to  
14 the Byron plan?

15           A       In this case I am, yes.

16           Q       Sir, the plans have not been developed completely,  
17 and they have not been exercised. Now, you are making a  
18 conclusion here about what things will be like, what people  
19 will be like, what skills they will have based on a statement --  
20 it is a forward-looking statement. And I am wondering, sir,  
21 how you can draw that conclusion if they have not been  
22 developed and they have not been exercised?

23           MR. STEVEN GOLDBERG: That very question has  
24 been asked and answered. He has given the basis for the  
25 question as his experience in observing a number of exercises

1 in the state.

2 JUDGE SMITH: How does this question differ from  
3 the previous question, Mr. Holmbeck? I think it is almost  
4 identical, as I recall it.

5 MR. HOLMBECK: My concern was -- and I based this  
6 on his response to the first question -- was that I was asking  
7 a generic question. Well, I wasn't. I was asking about the  
8 Byron plant specifically. I thought I would draw his  
9 attention to that, and then have him answer the question.

10 JUDGE SMITH: So the same question, except this  
11 time it is the Byron plant.

12 MR. STEVEN GOLDBERG: I think it was the very  
13 question, and I think he answered that the basis for his  
14 position on Byron is his observation of past exercises  
15 involving other Illinois facilities.

16 JUDGE SMITH: Let's find out. He indicated that  
17 was the intent of his answer.

18 WITNESS WENGER: Yes.

19 JUDGE SMITH: All right.

20 So he inferred your earlier question to be a  
21 reference to Byron.

22 MR. HOLMBECK: I have no further questions.

23 MR. SAVAGE: With counsel's indulgence and  
24 the Board's permission, I would like to ask Mr. Wenger just  
25 a few questions that will go to the weight that should be



1 given to his testimony on page 2 in response to Question No.  
2 3. It may be that these questions have been asked before  
3 during voir dire. If they have, I apologize, and tell me  
4 and I will stop. I would like to ask them.

5 JUDGE SMITH: Go ahead.

6 BY MR. SAVAGE:

7 Q When you visited Rockford Memorial Hospital, I  
8 believe you testified that you were sent there in order to  
9 gather -- make your critique in order to provide a basis  
10 for your testimony, is that correct?

11 A (Witness Wenger) I was not sent there.

12 Q You were asked to go there, excuse me.

13 A I was not asked to go there.

14 Q Clarify for me, then, how did you get there?

15 A At the assignment of being the expert witness to  
16 these proceedings I put together my own plan and made my  
17 own decision to visit there.

18 Q When you went there, did you perform as thorough  
19 an analysis of their facilities as you would perform when  
20 you were doing the FEMA evaluation?

21 MR. STEVEN GOLDBERG: I object. This ground was  
22 really laboriously covered before our luncheon recess -- the  
23 motivation of the visit, the context in which the visit  
24 took place, the relationship to his overall responsibilities  
25 with the agency. We really are reploting the same ground.

1 MR. SAVAGE: Let me try one more, and if it seems  
2 to similar, I will stop.

3 BY MR. SAVAGE:

4 Q Did you have as many staff with you to get -- do  
5 you take staff with you when you do a FEMA report in order  
6 to gather information?

7 A (Witness Wenger) When I do a FEMA report, did  
8 you say?

9 Q When you go to evaluate a medical emergency facility  
10 in order to issue your analysis for FEMA.

11 A During an exercise I believe is what you are  
12 referring to. For an exercise that is taking place, the  
13 Byron Station, and there is to be individuals transported  
14 from the Applicant's location to Rockford Memorial Hospital,  
15 and they are going to go through the simulation, do I take  
16 a staff of people with me to make an assessment?

17 Q Yes.

18 A No.

19 MR. SAVAGE: I think they would end up being the  
20 same questions. I will not ask them.

21 JUDGE SMITH: Mr. Bielawski.

22 MR. BIELAWSKI: I just have a few questions for  
23 Mr. Phillips.

24 BY MR. BIELAWSKI:

25 Q Mr. Phillips, when you review an emergency plan

1 for a nuclear facility, you also review ambulance services,  
2 their capabilities?

3 A (Witness Phillips) We review what is in the  
4 Applicant's plan involving what the ambulance service is  
5 going to do. We look at the hospital facility from the  
6 standpoint of what is in the plan as far as what that  
7 hospital facility is going to do, the fact that -- I'm on  
8 page 6-23 from I guess it is License -- John Golden Exhibit  
9 1 which is the generic GSEP, which starts right off,  
10 "Arrangements are confirmed in writing are maintained by  
11 a qualified hospital in the vicinity of each nuclear generating  
12 station.

13 JUDGE SMITH: Too fast, Mr. Phillips.

14 WITNESS PHILLIPS: I do have that tendency. And  
15 on 4-4, Byron annex, it identifies the Byron fire and rescue  
16 services for fire and ambulance service, and the Rockford  
17 Memorial Hospital for the supporting medical facility for  
18 Byron Nuclear Power Station.

19 In that review, for example, we will determine  
20 that the hospital in fact is a hospital. It is qualified to  
21 take patients. From that standpoint, yes.

22 BY MR. BIELAWSKI:

23 Q Based on your experience in reviewing ambulance  
24 services, is it your experience that ambulance services are  
25 generally requested to provide decontamination of injured,

1 contaminated people?

2 A Are you saying the ambulance drivers themselves do  
3 the decontamination?

4 Q Yes.

5 A Absolutely not. That is another point -- you  
6 brought up a point that I would like to make, and that is  
7 getting into our implementation review, that we in fact do  
8 go out and talk to these people on what training they have  
9 had and what -- they are aware of their responsibilities. We  
10 evaluate an ambulance service as being acceptable or not. It  
11 is can they provide transport.

12 The plan specifies who is going to provide monitor-  
13 ing and decontamination.

14 Q Do ambulance drivers or ambulance services provide  
15 treatment for -- treatment of individuals exposed to ionizing  
16 radiation?

17 A Absolutely not. As a matter of fact, the amount  
18 of times you have to provide such treatment is -- if you're  
19 talking about just an injury due to ionizing radiation  
20 exposure, supportive treatment can begin as late as 20 days  
21 after the actual exposure. That is on page 9-3 of Appendix  
22 6 to WASH-1400.

23 MR. BIELAWSKI: I have no further questions.

24 Thank you very much.

25

1 BY MR. SAVAGE:

2 Q When an ambulance picks up a contaminated person,  
3 do they have to stabilize them?

4 A (Witness Phillips) Contaminated, injured?

5 Q Contaminated, injured.

6 A As far as medical treatment, yes.

7 Q So they do provide some treatment.

8 A That wasn't the question that he asked. The ques-  
9 tion was whether or not they provided decontamination or  
10 they provided treatment for radiological injury.

11 Q In the process of providing treatment for the  
12 physical injury, don't they have to take into account and  
13 deal with the contamination?

14 A It depends on the nature of the injury.

15 Q What kind of injury?

16 A For example, if we're talking about a life-  
17 threatening injury for the individual, for example, who has  
18 had a massive heart attack and he may have some levels of  
19 skin contamination on his skin that are minor, for example --  
20 most contamination is low level -- the first priority would  
21 be, for example, to administer CPR, and that would probably  
22 be done by the station first aid staff.

23 Q Suppose the contamination were on the face and  
24 the neck?

25 A What do you mean?



1           Q       What would they do to administer CPR then?  Would  
2 they wash down the face and the neck?

3           A       That has nothing to do with administering CPR.  
4 Pardon me.  I'm talking about -- I was just thinking of  
5 cardio.  I was not thinking about the pulmonary part.  My  
6 apologies.

7                    In that case it would be nice if you had the time,  
8 but no, I wouldn't.  I would decontaminate a non-injured  
9 EMT at the hospital or at the facility rather than risk the  
10 life of the individual who had the heart attack.

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1                   Did I answer your question?

2           Q        I think so.  If you would just give me a second  
3 here.  Does the ambulance team have to make an evaluation  
4 about whether there is contamination?  Suppose they get some-  
5 body who has had a massive heart attack and needs CPR.  Do  
6 they have to, at that point if it is a radiological disaster  
7 and they have been alerted to -- do they have to make a  
8 decision about whether there is contamination?

9           A        Based on Section 6.5.3 of the Applicant's generic  
10 emergency plan which has been admitted as Golden Exhibit 1 --  
11 I would like to read, as far as the evaluation of contamina-  
12 tion with radioactive material.  "...will be accompanied  
13 by a person qualified in radiation monitoring techniques  
14 from the facility."

15           Q        So you do have to make the evaluation.

16           A        Not the ambulance team; the person from the  
17 facility.  The person from the facility would be a radiation  
18 chemistry technician or a health physicist.

19           Q        Is that going to be a person with the ambulance  
20 team or a person at the hospital?

21           A        Neither.  It would be a person where you pick  
22 up the contaminated, injured person at the facility who  
23 was injured onsite.

24           Q        Suppose this is an off-site injury.

25           A        Are you talking about an injury that occurs away

1 from the facility?

2 Q I could imagine -- I'd better not start  
3 imagining. Yes.

4 A That would be more in the realm of a FEMA  
5 review, as far as what type of provisions would be made by  
6 the ambulance team to evaluate contamination.

7 My own personal opinion, though, speaking from  
8 my own personal opinion, if I were an ambulance driver, I  
9 am not really concerned about the level of contamination  
10 because it is usually always minor. I would take the indi-  
11 vidual to a hospital, notify the authorities that I have a  
12 potentially contaminated individual, and then I would hope --  
13 I assume that the state plan has made provisions to send  
14 somebody to the hospital to provide that care, or they  
15 could send somebody from the licensee's facility to provide  
16 that support and monitoring.

17 Q Before you take the injured person to the  
18 hospital, don't you have to notify them whether or not they  
19 are contaminated?

20 A If we are talking about picking up a contaminated,  
21 injured individual in the field, we already have basically  
22 four extremely improbable events. First of all, we have a  
23 Class 9 accident, which is improbable. Second of all, we  
24 have had a major failure of containment, which is improbable.  
25 Thirdly, we have had an evacuation that was not conducted so

1 that the individual is actually out there to be contaminated,  
2 to begin with, which is improbable. And fourth, the plume  
3 has arrived to that individual and contaminated him. Besides  
4 the fact that he has to be injured.

5 Q Improbable or not, isn't there a situation that  
6 you have just described in which ambulance drivers would have  
7 to give treatment?

8 A Off the top of my head, that would be highly  
9 unlikely. That is why the requirement specifically addresses  
10 on-site personnel and there are no special requirements for  
11 members of the general public.

12 I would refer you to the Commission's decision,  
13 CLI 83-10, dated April 4th of 1983.

14 Q How will the ambulance workers themselves be  
15 protected from irradiation?

16 A In what sense?

17 Q Contamination.

18 A The easiest thing is to put on a pair of gloves  
19 and wear clothing.

20 JUDGE SMITH: It looks like you're starting an  
21 entirely new line of inquiry. You have some new advice and--

22 MR. SAVAGE: If you think so, I will stop. I  
23 thought the Applicant's counsel had raised the issues and I  
24 thought I should address it, about whether ambulance drivers  
25 had to treat contaminated people. What I was trying to do

1 was show the situation -- the kind of injury that is so mixed  
2 and associated with contamination that you would have to do  
3 something about the contamination, and in that sense,  
4 treat them.

5 JUDGE SMITH: But I want to observe the schedule.  
6 Immediately after the lunch break we had some renewed optimism.  
7 It has just been shattered already.

8 MR. SAVAGE: No, Your Honor, it hasn't been  
9 shattered.

10 JUDGE SMITH: The Board has questions.

11 WITNESS PHILLIPS: As I understood, he was  
12 asking if an ambulance driver would be expected to make an  
13 evaluation of radiation injury due to exposure, or to provide  
14 decontamination. Those were the two questions I answered;  
15 not whether or not the ambulance driver would be required to  
16 actually determine what level of contamination is involved  
17 and all the relative risks of the injury versus the  
18 contamination.

19 MR. SAVAGE: No more questions.

20 JUDGE SMITH: We will have a 10-minute afternoon  
21 break.

22 (A short recess was taken.)

23 JUDGE SMITH: Are you ready to proceed?

24 MR. SAVAGE: Yes, sir. I would like to offer  
25 now Mr. Bowes.



1 JUDGE SMITH: Wait a minute. The Board has  
2 some questions of this panel.

3 MR. SAVAGE: Excuse me, I'm terribly sorry.

4 BOARD EXAMINATION

5 BY JUDGE COLE:

6 Q I have two questions; one short question and  
7 one long question. The answers don't have to be that long,  
8 though.

9 Mr. Phillips, in the summary page of your  
10 testimony and on page 1 and 2 -- or I assume that is what  
11 is on pages 1 and 2 -- you refer to some exceptions in the  
12 Applicant's on-site emergency plan. I assume you are talking  
13 about the open items that are referred to at the top of page 2.  
14 Is that correct, sir?

15 A (Witness Phillips) Yes, the open items of the SER.

16 Q What is the status of the open items?

17 A Based on licensee commitments, I would say all  
18 of these open items essentially are closed. Assuming we  
19 can say, for example, that they are going to hold an exercise  
20 on August 24th and that was one of the open items, that can  
21 be closed when, in fact, it has not been held yet. There  
22 will be a supplement to the SER that will be written basically  
23 after the exercise which will provide FEMA's interim findings.  
24 We have not yet provided any findings in the SER on the status  
25 of off-site preparedness. There is nothing in there on that

1 right now.

2 Q My last question, the long one, on pages 5 and 6  
3 in different places, there are statements that read like,  
4 "There are no special planning requirements for members of  
5 the general public." An equivalent to this is contained in  
6 the San Onofre decision. No particular pre-planning for  
7 contaminated individuals who may be injured from the general  
8 public is required. In NUREG-0396, the task force recommended  
9 or did not recommend several things. For example, they did  
10 not recommend that massive emergency preparedness programs  
11 be established around nuclear power plants, and they provide  
12 several examples. No special radiological medical provisions,  
13 no special local decontamination provisions, no stockpiles  
14 of anti-contamination equipment, no special decontamination  
15 equipment.

16 Going back to the first statement I made, no  
17 special planning or no special pre-planning requirements for  
18 members of the general public, well, sir, in consideration  
19 of our responsibility to protect the public health and  
20 safety from undue risk and harm, what is the basis or  
21 rationale and reasoning for a policy like that?

22 A The Staff's position essentially is that the  
23 likelihood of such an event that requires medical capabilities  
24 for contaminated injured individuals off-site is extremely  
25 remote. It is basically a probability consideration based

1 on the fact that you do have facilities available for on-  
2 site emergency workers. Those facilities could be adapted,  
3 if necessary, to handle contaminated, injured individuals  
4 from the general public, and the number of people you would  
5 be expecting in such an event would be relatively low.  
6 Or you would expect basically the number of injuries you  
7 normally would see for a particular population over that  
8 particular period of time, that they would be exposed to  
9 a plume involving those people within the plume that never  
10 were evacuated.

11 Do you follow all of the considerations that  
12 are involved? That's the basic rationale.

13 Q All right, sir. Mr. Wenger, would you like to  
14 add to that?

15 A (Witness Wenger) No comment.

16 Q Thank you.

17 BY JUDGE CALLIHAN:

18 Q Mr. Phillips, on page 9 of your testimony, you  
19 make reference in the full paragraph on that page, the third  
20 sentence, to something about sheltering following the declara-  
21 tion of a general emergency.

22 A (Witness Phillips) That's correct.

23 Q For the life of me I cannot picture the area  
24 that you are describing there.

25 A I guess I should have specified what a sector is,

1 first of all. Emergency planning zones basically consist of  
2 the EPZ divided into 16, 22 1/° wide sectors. If you take  
3 the plant at the center, come out two miles and do a radius,  
4 now we take the downwind sector and the adjacent sectors on  
5 both sides and go out in that other one for a distance of  
6 5 miles to form what looks like a keyhole. That is what it  
7 looks like. It is diagrammed, I believe, in Board Exhibit 3.  
8 Let me get the exact page for you.

9           If you have a copy of NUREG-0654, which is Board  
10 Exhibit 3, on page 16 there is an example of what I am  
11 trying to picture when I say sheltering two-mile radius;  
12 5 miles downwind. In this case, it is identified by an  
13 area with slashes through it.

14           Q       The area consists primarily of a circle, two-  
15 mile radius around the site.

16           A       Correct.

17           Q       And then the downwind arc is at a radius of 5miles.

18           A       Correct.

19           Q       Thank you very much.

20                    Mr. Wenger, at the outset of your testimony, on  
21 page 2, as a matter of fact, you address provisions for  
22 emergency workers, and remark about the course of their  
23 emergency functions. In that context, what is an emergency  
24 worker? What is his responsibility, what does he do?

25           A       (Witness Wenger) An emergency worker is one who

1 responds to an emergency situation that is organized into a  
2 departmental routine.

3 Q Is this ambulance drivers? And your volunteers  
4 and so forth that you have been talking about?

5 A Ambulance, fire, police, coroner, yes.

6 Q I guess I have the concern about the people,  
7 the residents. What governs actions to them, to their  
8 condition, if any? I'm sorry.

9 A (Witness Phillips) That might be better directed  
10 to me. I'm not quite sure I understand your question. You  
11 mean what governs the choice of protective actions to, say,  
12 in the people in sector A within 5 miles of the plant  
13 should evacuate by proceeding east or west? That decision  
14 is basically made based on a protective action recommendation  
15 that is given by the utility to the state.

16 I believe you have had some testimony from Mr. Ed  
17 on how that is confirmed. But they basically do a calcula-  
18 tion of projected dose to the population, and in the state  
19 of Illinois, if that dose exceeds one rem whole body, or  
20 5 rem thyroid, they recommend that protective action which  
21 is essentially to evacuate, unless there are operational  
22 considerations. The phrase that Dr. Golden used. But unless  
23 there are prohibitive factors that have to be taken into  
24 account -- for example, the roads are impassable, you can't  
25 move -- in that case, you would shelter in place.



1           Q       What responsibility or interest does FEMA have  
2 in that group of people? That is really my question.

3           A       (Witness Wenger) We want to have assurance in  
4 planning that the general population is going to be protected,  
5 whatever the recommendations may be, dependent on what the  
6 extent of the release is. The wind direction, et cetera.

7                   We have planning documents. We want them to  
8 demonstrate to us that there are provisions, that they will  
9 make these recommendations, and that there are people who  
10 are going to carry out these responsibilities to provide  
11 protection to the populace.

12           Q       So in a sense, you look at operators' provisions,  
13 utilities' provisions that carry the load.

14           A       We have responsibility as charged by the President  
15 in a statement December 7th, 1979, I believe it was, that  
16 charges the Federal Emergency Management Agency with the  
17 lead responsibility to assure there will be adequate and  
18 appropriate off-site protection of the population. We are  
19 overseeing it, using NUREG-0654, FEMA Revision 1, as the  
20 guidance document. And the presidential statement also  
21 directed that FEMA chair the body known as the Regional  
22 Assistance or Advisory Committee to review plans, make  
23 comments on the plans, to review exercises as an ongoing  
24 concern. Not just one time, but these plans are living  
25 documents which under go change as responsibilities change,

1 as communities grow.

2                   So we are constantly monitoring these planning  
3 documents and the exercises. The exercises are annual at  
4 this time. We call for and receive and accept revisions to  
5 the plans anytime.

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1           A           (Witness Phillips) The way that the adequacy  
2 of emergency preparedness around a particular fixed nuclear  
3 facility is determined, the NRC -- I'm almost quoting out  
4 of the rule now; I have to apologize if I do -- the NRC  
5 basically reviews the status of onsite plans and preparedness  
6 as far -- and reviews offsite only to the extent that it  
7 applies to relating to onsite. For example, we mentioned  
8 doing an implementation review as it would relate to the  
9 hospital. That would be the hospital that would provide  
10 care for onsite individuals that were injured.

11                       We look at the onsite aspects. FEMA looks at  
12 the offsite aspects, provides the NRC with a finding based  
13 on their review or inspection or whatever it is that they  
14 do to make the determination that the offsite status is  
15 acceptable. We review their findings to ensure they are  
16 complete, and it is on that basis that we make a determination  
17 that the total picture is complete. It is basically a  
18 bifurcated review.

19           A           (Witness Wenger) FEMA's position is we do not  
20 approve or disapprove planning documents or exercising. We  
21 carry out our responsibility through federal regulation of  
22 the Federal Register known as 44 CFR Part 350. That has  
23 specific milestones and events that are to be met by my  
24 agency, FEMA, and NRC has responsibility in those as well.

25                       We make a recommendation in a document we refer

1 to as a 350 submission. We recommend an approving position  
2 or disapproving to our national office. They take that into  
3 consideration in their review and forward the documents to  
4 the NRC for part of the overall analysis. And they actually  
5 give it, not just the recommendation, but they forward a  
6 position that our national office may take of approving  
7 or disapproving.

8 Q Returning for a moment to your visit to the  
9 Rockford Hospital and so forth, will there at some time in  
10 the future be by yourself or a peer another inspection or  
11 review of those facilities?

12 A Our responsibilities are this. When the exercise  
13 takes place -- there is quite a procedure leading up to that.  
14 The state will notify us of the objectives to be completed  
15 in the scenario, and then at a later period of time they  
16 will provide us with a scenario. Based on that scenario  
17 we will assign our observers. There will be an observer who  
18 will visit hospitals in the area. One of those will be  
19 Rockford Memorial Hospital.

20 Our observer would like to arrive there at the  
21 time that the individual is transported from the Applicant's  
22 location to that hospital. He is looking at the facilities  
23 that are available, not necessarily their equipment or the  
24 staff involved. He will oversee that. But he will look  
25 at the facilities to receive and care for contaminated,

1 injured.

2 Q Is that a more thorough review than that which  
3 you did the past few months or whenever?

4 A I believe you could say that it will be more  
5 thorough. That actually gets entered into the reporting  
6 document which will go forth to our national office with  
7 comment.

8 Q Based on your observation as of this moment,  
9 are you satisfied with what you have found in your review?

10 A I don't know that I can say I am satisfied. I  
11 am pleased to see what is taking place. I was treated very  
12 nicely, and I was afforded a great deal of information. I  
13 have a very strong feeling that what these people say is  
14 going to take place will actually take place. They seem to  
15 be very enthused. They are most happy to provide a service  
16 to the community. They have a responsibility for that. I  
17 have known hospitals at other locations that utilized the  
18 exercise of a nuclear power plant as a certification. Hospitals  
19 are responsible to perform their emergency response capability  
20 for certification, and some hospitals I visited have done  
21 just that.

22 But the attitude is very positive. I was shown  
23 the existing facilities. They can now receive people because  
24 there are source materials in the community which could have  
25 effects on people should they be exposed to them. And they



1 are building this new care facility, emergency care facility,  
2 and they were very careful to tell me how people would be  
3 received in a separate receiving corridor and taken care of.

4 I do not know the particulars. I did not delve  
5 into that because that once again is not my field of expertise.  
6 But I am quite excited over it. I think that they are meeting  
7 a community responsibility.

8 A (Witness Phillips) I would like to add that we  
9 will conduct a detailed review as part of our emergency  
10 preparedness implementation appraisal program.

11 Q Revision 3?

12 A Yes.

13 Q Returning, Mr. Wenger, to the latter part of your  
14 testimony, you make the statement in the discussion of the  
15 planning and so forth, and then you say, "I believe there  
16 has not been sufficient time allowed the state and local  
17 government in which to prepare the necessary documents" and  
18 so forth. Would you like to amplify on that? Is that set  
19 in any way in the context of this hearing or the scheduling  
20 of this hearing?

21 A (Witness Wenger) I feel sincerely this is an  
22 important comment I make in that with due respect to everything  
23 that has taken place, when we look at the offsite planning,  
24 that is where my statement comes from. I think there are  
25 two things taking place in these hearing proceedings. One is

1 onsite and the other being offsite. The offsite has been  
2 mainly this week.

3           The State of Illinois has probably -- it has  
4 the heaviest responsibility in this federal region, FEMA  
5 Region V. It maybe could be compared to other FEMA regions.  
6 I know a sister region has a great number of plants, but  
7 for any one state in the United States I do not know offhand  
8 right now -- there is some indication there may be one  
9 other, but there ultimately will be seven operating nuclear  
10 power plants in the state. Four of them are on line currently,  
11 and there are three more that are under construction, Byron  
12 being one of those. The three under construction -- Byron,  
13 Braidwood and Clinton.

14           The hearing proceedings taking place here this  
15 week and what has taken place probably will be similar to  
16 what Braidwood may have or Clinton. It comes at a time when  
17 the state government is normally in the process of preparing  
18 plans for exercising. Comparably, let's say the previous  
19 exercise date previous to what has been set now was to be  
20 in May. That would be next month. The exercise has been  
21 rescheduled, to a large degree, because of the Applicant's  
22 progress in construction.

23           The readiness to have this exercise, which the  
24 exercise is to be -- is specified to be a joint onsite-offsite  
25 exercise, so the Applicant must be ready, as well as the

1 offsite jurisdictions.

2           So it is usually -- the State of Illinois, because  
3 of their workload, has tentatively planned, projected that  
4 five months basically prior to an exercise they will begin  
5 the intensified planning.

6           Now, planning goes on all the time. At the state  
7 level it has been going on for some time. But for the  
8 site specific to get with the community leaders and develop  
9 this, it is about five months prior to the exercise date.  
10 Therefore, I think if you could back, that would be about  
11 September or October of last year.

12           So the state began with that first meeting on  
13 July 20th, public officials conference. It was announced in  
14 that meeting that in September, basically September, the  
15 first of October, that there would be people coming into  
16 the community from state organizations and starting to work  
17 with them.

18           You see what has taken place is that the exercise  
19 date has slipped now from May to in August. The state did  
20 not rest on their laurels, but it affords them a little more  
21 time to go through their planning stages. I think they  
22 have done a good job from what I have been able to discuss  
23 with them and what I have seen.

24           But with other people in the community being  
25 very sensitive to the planning that is going on and asking

1 a lot of questions and making visitation, I think what it  
2 has done is caused some community leaders and some people  
3 in prominent business positions to voice an opinion. And  
4 I'm concerned because someone from outside a state or local  
5 organization has come in and interviewed them, and I think  
6 it has alarmed them.

7 I personally do not feel that this alarm would  
8 take place had the hearing process not brought this on, the  
9 offsite hearing process. I think it would have taken a  
10 normal progression such that we have witnessed at the other  
11 four nuclear power plants in the State of Illinois and the  
12 other power plants in this region.

13 I'm not indicating it would have been a relaxed  
14 approach to it. I am indicating that these questions that  
15 have been raised I feel very seriously will be answered.  
16 If this hearing, this portion was not to take place for  
17 another month, I would have a great deal more to say here  
18 at this type of hearing about their plan than I can today,  
19 because once again, I do not have the official document to  
20 comment on.

21 In fact, Mr. Jones made it clear to me that they  
22 would make this volume available to me, but it was not for  
23 my comment because it was more of an internal state govern-  
24 ment working document. It was made available to community  
25 leaders, counties and states, government agencies that have

1 emergency response during time of nuclear plant problems.

2           So my testimony which I have given here I apologize  
3 for it, because it does not appear to have a great deal of  
4 substance as to a yes or no. It is largely predicated on  
5 the challenges which have been made by the Intervenors and  
6 raised concern in my mind, and I have investigated them in  
7 my official capacity to check them out to try to gain more  
8 knowledge and information maybe prior to receiving this  
9 document, which certainly is going to help me look at this  
10 document more thoroughly. This is worthwhile.

11           But in that sense I feel that it is as I state:  
12 sufficient time has not been allowed to these governing bodies  
13 to prepare the necessary documents, meaning the site-specific  
14 plans, and the related activities which are training, drills,  
15 tests, NUREG-0654. There are a lot of acronyms going on,  
16 a lot of levels of events that take place which terms are  
17 misused.

18           There are exercises which we feel is kind of  
19 the ultimate. Leading up to that there are tests. There  
20 are drills. There is training. And they all lead up to  
21 this exercise, qualifying exercise, which is the exercising  
22 of this plan. It is approaching the ultimate. That is what  
23 my statement is based on.

24           I do not know if it has been unfair, but I think  
25 it is very early. It is somewhat premature.



1 Q Thank you very much.

2 JUDGE SMITH: Any cross examination on the Board  
3 questions?

4 MR. SAVAGE: Just one.

5 CROSS EXAMINATION ON BOARD EXAMINATION

6 BY MR. SAVAGE:

7 Q You said that you investigated Intervenors'  
8 contentions. Did you find that those contentions had sub-  
9 stance?

10 MR. BIELAWSKI: What is the relevance of that?

11 JUDGE SMITH: The question -- you say you just have  
12 one question. What if he says yes?

13 MR. SAVAGE: I wasn't going to ask any more.  
14 That's all I wanted to know.

15 JUDGE SMITH: That is for us to decide. That is  
16 not a proper question in the first place. That's for us  
17 to decide.

18 MR. SAVAGE: Then I don't have any more questions.

19 JUDGE SMITH: Do you have redirect?

20 MR. STEVEN GOLDBERG: A bit.

21 REDIRECT EXAMINATION

22 BY MR. STEVEN GOLDBERG:

23 Q Mr. Phillips, do you recall questions about  
24 ambulance services from both Mr. Bielawski and Mr. Savage?

25 A (Witness Phillips) Certainly.

1 Q Can you briefly explain what role ambulance service  
2 plays in handling contaminated, injured individuals?

3 A They provide initial traumatic treatment, if  
4 necessary, and they transport.

5 Q Would I be correct in saying that the NRC consider-  
6 ation of the ambulance service capabilities is in the context  
7 of its review of the adequacy of emergency planning relative  
8 to subpart (b) (12) in Section 50.47?

9 A That is correct. That review is conducted in  
10 relationship to their response to handling contaminated  
11 onsite individuals.

12 Q And do you have an opinion about what capability  
13 the ambulance service should have to perform the role you  
14 described?

15 A As far as facilities and equipment?

16 Q Yes.

17 A They should have obviously a bed, whatever it is  
18 called, a gurney that can be transported into the facility  
19 to put a patient on. They should probably have gloves.  
20 Dosimetry is usually provided by the station, but dosimetry  
21 would be necessary for onsite individuals. The ability to  
22 monitor decontamination is also provided by the station.

23 We look at the whole picture. I don't want to  
24 try and separate and say what the ambulance service has. We  
25 are looking at basically how is the patient cared for is

1 more of our concern than what the ambulance service has  
2 specifically. We are looking at the total picture. We are  
3 looking that somebody has decontamination monitoring equip-  
4 ment, that somebody has protective clothing that they can  
5 provide the ambulance service or the ambulance service has  
6 it itself.

7           In that case we're talking about basically either  
8 a set of gloves, surgical gown possibly to protect the  
9 regular clothing. We are looking for a gurney that can be  
10 transported in and brought out. We're looking for blankets.  
11 In the worst possible case where you would want to transport  
12 and you don't really need to do treatment, you cannot do  
13 decontamination, you would want basically to localize the  
14 containment, which means basically wrapping the patient in  
15 some form to keep the activity there and not all over the  
16 place.

17           You would want to look for the ability to monitor  
18 the vehicle after it arrived wherever it was going to verify  
19 that the vehicle itself was not contaminated after the  
20 patient was removed.

21           Again, those facilities are described, or at least  
22 the provisions are described in the emergency plan.

23

24

25

1 Q Have you seen the ambulance survey disseminated  
2 by the Intervenors in the Byron region?

3 A I have seen it. I don't have a copy in front  
4 of me right now.

5 Q If I gave you a copy of the survey, can you give  
6 me your opinion about whether or not the information requested  
7 of the ambulance services surveyed by that questionnaire has  
8 to possess the equipment or knowledge sought on the  
9 questionnaire --

10 MR. SAVAGE: Excuse me, objection. Am I to assume  
11 that because you are questioning about the survey that you  
12 are not questioning its admissibility?

13 MR. GOLDBERG: I think there were some questions  
14 on cross examination about the capability of ambulance  
15 services, and this witness has testified about the role that  
16 ambulance services play in the necessary level of preparedness  
17 that ambulance services must possess. And I'm asking him in  
18 his expert opinion to comment on whether or not ambulance  
19 services have to possess the knowledge or equipment solicited  
20 of the ambulance services surveyed in the Intervenors' survey.

21 Now, if this is not admitted, this will have  
22 proved just -- I hope -- very briefly time consuming.

23 BY MR. GOLDBERG (Resuming):

24 Q I would like to show you a copy of that survey.

25 JUDGE SMITH: Do you think that perhaps --

1 Mr. Phillips is going to be here. Maybe he could be given  
2 some time to evaluate the survey and we could get on with the  
3 other witness, and then you can elicit his opinion later on.

4 MR. GOLDBERG: I don't believe this will take  
5 very long.

6 JUDGE SMITH: You are directing him to particular  
7 information?

8 MR. GOLDBERG: I'm going to direct him to any  
9 of the 24 questions contained in the survey and just ask  
10 him briefly if he can identify any information sought in any  
11 of those questions that he believes is unnecessary for  
12 ambulance services to possess.

13 BY MR. GOLDBERG (Resuming):

14 Q Mr. Phillips, would that take you long to  
15 accomplish?

16 A (Witness Phillips) It should not take long at  
17 all. For example, number 7 would not be necessary for an  
18 ambulance corp driver.

19 Q When you give the number, please identify the  
20 information.

21 A It asks whether they are competent in the  
22 evaluation of exposure levels. I assume that question deals  
23 with whether or not -- if I have received 140 rem, if I am  
24 life-threatened or not, or if I have received 35 rem if I  
25 am life-threatened or not. I assume that is what that



1 question addresses.

2 Same thing for the evaluation of decontamination.  
3 They would not be required to know that. Questions 10 through  
4 13 I think are very good.

5 JUDGE SMITH: I can't hear.

6 WITNESS PHILLIPS: 10 through 13 are good  
7 questions.

8 JUDGE SMITH: Good -- ?

9 WITNESS PHILLIPS: Good questions. Assuming  
10 one has a written protocol for radiological emergency  
11 procedures, if you are talking about being able to have a  
12 letter of agreement with the Applicant, that would -- if  
13 that is what that means, it would be good. Otherwise, no.  
14 It certainly is not required by the regulations, but it is  
15 nice information. That was number 14 and its subparts.

16 I guess that is my main concern. As I look  
17 through the rest of it, I really do not have any great  
18 heartburn with any of the questions. For example, question 22  
19 could be a bit misleading in some of the requests when it  
20 talks about protective gloves, protective gowns. Essentially,  
21 if that is understood and the people know what the phrase  
22 "protective clothing" means. Any glove is protective, is  
23 what it boils down to. Plastic bag marked for radiological  
24 waste container should read plastic bags. They do not  
25 necessarily need to be waste containers; they do not

1 necessarily need to belong to the ambulance company.

2 My biggest concern would be, as I read the  
3 requirements, the only individual ambulance company that  
4 would even need to be qualified, so to speak, from looking  
5 at the on-site review, is the Byron Fire Protection Ambulance  
6 District. That is about it for my review.

7 BY MR. GOLDBERG (Resuming):

8 Q When you speak, you have to consistently speak  
9 into the microphone in a more measured tone.

10 A (Witness Phillips) I don't know where I left  
11 off because I'm done.

12 Q I guess it is safe to say in summary, then, that  
13 a number of questions in the survey elicit information that  
14 you don't believe would be necessary for an ambulance service  
15 to possess in order to handle contaminated, injured indi-  
16 viduals. Is that correct?

17 A That's correct.

18 MR. GOLDBERG: No further questions.

19 RECROSS EXAMINATION

20 BY MR. SAVAGE:

21 Q What in your background qualifies you to be  
22 competent to assess whether these questions are designed  
23 to elicit information that is needed?

24 A (Witness Phillips) Besides the fact that I am  
25 a health physicist, I worked at the Mare Island Shipyard

1 the Radioactivity Control Branch and one of my functions was  
2 to actually assist the doctor in performing decontamination  
3 of injured patients and to evaluate ambulance drills involving  
4 potential contaminated patients coming from nuclear sub-  
5 marines to the dispensary at the shipyard.

6 MR. SAVAGE: Thank you.

7 JUDGE SMITH: Any further questions?

8 MR. BIELAWSKI: None from Applicant.

9 JUDGE SMITH: All right, you are excused, gentlemen.

10 (Witnesses Wenger and Phillips  
11 were excused.)

12 Are you ready for your witness?

13 MR. SAVAGE: Mr. Bowes, yes.

14 JUDGE SMITH: Mr. Phillips, are you going to  
15 be around?

16 MR. PHILLIPS: For the duration of the day, you  
17 mean?

18 JUDGE SMITH: I hope you are here when we have  
19 the argument about the ambulance survey.

20 MR. PHILLIPS: So do I.

21 JUDGE SMITH: I hope we all are.

22 MR. PHILLIPS: I'm going on vacation the last  
23 week of May. If it's going to be the last in May, I won't  
24 be here.

25 JUDGE SMITH: I think we should be able to

1 reach that this evening.

2 MR. SAVAGE: May I have an explanation from the  
3 Board of why Mr. Goldberg's question of Mr. Phillips about  
4 the ambulance survey does not constitute a waiver of his  
5 agreement with Mr. Bielawski to move for the striking of  
6 the ambulance survey?

7 JUDGE SMITH: Who is the question directed to?

8 MR. SAVAGE: The Board. I'm asking the Board  
9 for a clarification of why -- I objected to it. There never  
10 was a ruling. I assume from your silence and my silence  
11 that the questioning would be allowed and I am wondering  
12 why. I assume Mr. Goldberg has joined in the motion to  
13 strike, and why was his examination of Mr. Phillips about  
14 the ambulance survey not a waiver of that motion?

15 MR. GOLDBERG: I do not even understand that  
16 comment. I did address it when the objection was first  
17 raised. In my mind, it was a legitimate redirect on the  
18 basis of questions asked on cross about capability of  
19 ambulance services.

20 One piece of proffered testimony in the case is  
21 Intervenors' ambulance survey. In that context, I solicited  
22 this witness's expert opinion about information sought to  
23 be elicited in that survey. I have yet to take a position  
24 and the motion has yet to be argued. I don't even under-  
25 stand the waiver point.

1 JUDGE SMITH: The point of the argument on the  
2 motion is relevancy. Sometimes in our hearings we just cannot  
3 take people in the sequence that would be ideal. I do think  
4 we should have deferred Mr. Phillips' examination on that  
5 point, and I made that observation.

6 I suppose the answer is that if a motion -- if  
7 they prevail on the motion, no harm. If they don't prevail,  
8 then the testimony will be relevant.

9 MR. SAVAGE: Thank you.

10 Mr. Thomas Bowes.

11 Whereupon,

12 THOMAS BOWES

13 was called as a witness by counsel for Intervenors and,  
14 after being first duly sworn, was examined and testified  
15 as follows:

16 DIRECT EXAMINATION

17 BY MR. SAVAGE:

18 Q Do you have an affidavit before you entitled,  
19 "The Affidavit of Thomas Bowes" subscribed to and sworn  
20 before Ruth Dalton on the 16th of February, 1983?

21 A Yes, I do.

22 Q Is there attached to that affidavit a document  
23 entitled, "Testimony of Thomas Bowes on Emergency Preparedness"  
24 DAARE/SAFE Contention 3, Rockford LWD Contentions 19 and  
25 108"?



1 A Yes, there is.

2 Q Does that document consist of 9 pages of  
3 testimony and 10 pages of attachments?

4 A Yes, it does.

5 Q Did you supervise the drafting and writing of  
6 the testimony?

7 A Yes, I did.

8 Q Are there any corrections you would like to make  
9 to the testimony?

10 A None.

11 Q Is the testimony correct and true, to the best  
12 of your knowledge and belief?

13 A Yes.

14 Q Do you adopt the testimony as your own?

15 A I do.

16 MR. SAVAGE: At this point, I would like to offer  
17 the testimony but none of the attached exhibits into evidence.

18 JUDGE SMITH: None?

19 MR. SAVAGE: None.

20 I will explain why. The first attachment,  
21 Exhibit A, is relative to an issue that is under commitment,  
22 and the rest of the attachments come from the preliminary  
23 revision of the IPRA plan which is already in evidence.

24 JUDGE SMITH: Are there any objections?

25 MR. BIELAWSKI: Point of clarification. I'm not

1 certain what copy Mr. Bowes is looking at of his testimony  
2 or what the Board has.

3 MR. SAVAGE: I'm sorry, I didn't give the  
4 Applicant a copy because the copies I gave the Board and  
5 reporter and Mr. Bowes were Xeroxed from the copy Applicant  
6 gave me.

7 MR. BIELAWSKI: The Board has copies of portions  
8 which have been --

9 MR. SAVAGE: That is correct. They have copies of  
10 the affidavit which you and I sat down and struck portions  
11 out of. For everybody's information, the X'd out portions  
12 or lined-out portions are portions which we have agreed are  
13 irrelevant to issues under litigation, and relevant to  
14 issues under commitment. And I believe with respect to  
15 the purported expert testimony of Mr. Bowes about the  
16 sheltering capabilities of his facility, Mr. Bielawski  
17 and I and Mr. Goldberg have agreed to stipulate that he is  
18 not an expert but is qualified on the basis of his personal  
19 experience to give that kind of opinion. Is that correct?

20 MR. BIELAWSKI: Yes, I do have one problem. I  
21 don't object to the admission of this testimony and that it  
22 be bound into the record. I have not seen this copy. I  
23 would like to just reserve so I can assess whether or not  
24 it is, in fact, duplicative of what I had agreed to, number one.

25 Number two, Mr. Bowes does discuss on page 6,

1 starting at the last question which runs onto page 7 and  
2 going to that answer, the next question and answer, the  
3 question of sheltering of his nursing home. As we stated  
4 earlier today, that is a subject of a commitment. I guess  
5 neither . . . Savage nor I caught it when we were going through  
6 these documents trying to call out the irrelevant portions  
7 of the testimony, and I would ask Mr. Savage whether he would  
8 agree with my characterization.

9 MR. SAVAGE: I agree with your characterization.

10 JUDGE SMITH: So we strike that.

11 MR. BIELAWSKI: Yes.

12 JUDGE SMITH: All right.

13 JUDGE CALLIHAN: Mr. Savage, purely for identifi-  
14 cation, is page 3 completely deleted, for example, and 4?

15 MR. SAVAGE: Yes. I believe it is completely  
16 deleted.

17 JUDGE CALLIHAN: On page 7 of the copy I have  
18 there are some rather illegible marginal notes on the right-  
19 hand side.

20 MR. SAVAGE: I ask your apology, Your Honor, I  
21 was cutting and pasting this morning in order to get those  
22 marginal notes out, and they really have nothing to do --

23 JUDGE CALLIHAN: No problem.

24 MR. SAVAGE: I was afraid somebody would ask  
25 that, though, and that's why I was cutting and pasting.

1 JUDGE SMITH: We are going to delete page 6,  
2 the question -- the last line at the bottom of the page  
3 beginning there, is that correct? "Have you been advised  
4 by ESDA..." And that will go through to the middle of  
5 the following page up to the question which begins, "Has  
6 ESDA or Commonwealth given you any indication..." Everything  
7 is deleted between the two. Isn't that correct?

8 MR. SAVAGE: That's correct.

9 JUDGE SMITH: The first 13 lines on page 7.  
10 Now, make sure that the copy that the reporter gets reflects  
11 that.

12 MR. BIELAWSKI: With those changes, I have no  
13 objection to the admission of Mr. Bowes' testimony.

14 MR. GOLDBERG: No objection.

15 JUDGE SMITH: The testimony is received.

16 (The Testimony of Thomas Bowes follows:)

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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

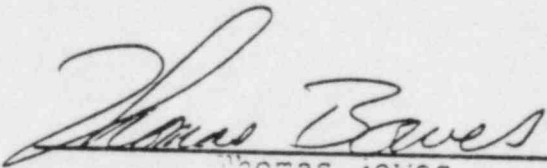
BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of  
COMMONWEALTH EDISON COMPANY  
Byron Nuclear Power Station,  
Units 1 & 2

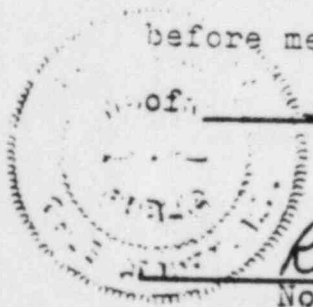
Docket Nos. 50-454 OL  
50-455 OL

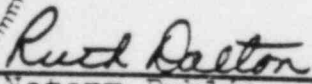
AFFIDAVIT OF THOMAS BOWES ~~By~~

The attached statements, questions, and answers together with attached exhibits constitute my testimony in the above-captioned proceeding. The testimony is true and accurate to the best of my knowledge, information and belief.

  
Thomas Bowes

Subscribed and sworn to  
before me this 16<sup>th</sup> day  
of Feb., 1983.



  
Ruth Dalton  
Notary Public

My commission expires:

June 14, 1983



TESTIMONY OF THOMAS BOWES ON EMERGENCY PREPAREDNESS:  
DAARE/SAFE CONTENTION 3 - ROCKFORD LWV CONTENTIONS 19 AND 108  
AND AMENDED AND CONSOLIDATED

Affiant states that he has read and is familiar with the documents attached hereto as Exhibits A, B, C, D, E, and F.

- Q. Please state your name.
- A. Mr. Thomas Bowes.
- Q. To which contention is your testimony addressed?
- A. DeKalb Area Alliance for Responsible Energy/Sinnissippi Alliance for the Environment ("DAARE/SAFE") Contention 3 and Rockford League of Women Voters ("Rockford LWV") ~~Contentions 19 and 108~~, <sup>AMENDED AND CONSOLIDATED CONTENTION</sup> all of which concern emergency preparedness.
- Q. What is your occupation, and in what position are you currently employed?
- A. I am a nursing home administrator, and I am currently the administrator and owner of the White Pines Manor Nursing Home ("White Pines"), located at 811 South Tenth Street in Oregon, Illinois.
- Q. What is your educational background?
- A. I have a degree in Business Administration and Nursing Home Administration from DuPage College in Wheaton, Illinois.
- Q. What is your professional background?
- A. I have been a nursing home administrator for 19 years. I was an administrator with the Bowes Nursing Homes in Elgin and Dundee from 1964 to 1975. I have been the administrator and owner of White Pines for the last seven years. I am also a member of the Illinois Nursing Home Association and an active member of their Peer Review Committee.

- Q. Is White Pines within the ten-mile Emergency Planning Zone ("EPZ") for the Byron Nuclear Power Station ("Byron Station")?
- A. Yes, White Pines is  $5\frac{1}{2}$  miles south-southwest of the Byron Station.
- Q. Have you investigated the various problems of implementing protective actions for the residents of your facility in the event of an accident at the Byron Station?
- A. Yes, I have. Over the last year I have made determinations as to the vehicle capacity, manpower and medical assistance which would be necessary for an evacuation. I have considered in some detail the finances and time required for such measures. I have contacted other nursing homes and numerous hotels in search of a suitable host site and input from other facilities on their plans. Finally, I have considered sheltering as a protective action.
- Q. Have you had assistance from the Emergency Services and Disaster Agency or Commonwealth Edison in making these determinations, calculations or investigations?
- A. No, I have not.
- Q. How many people currently reside at White Pines, and what is the status of their mobility?
- A. White Pines presently cares for 55 patients, 25 of whom are ambulatory and 30 of whom require wheelchairs.
- Q. During any given month, what is the average number of residents at white Pines?
- A. White Pines has the capacity for 57 residents. During an average month, there are 55 residents.
- Q. If an evacuation should ~~become~~ necessary, what vehicles are

owned by your facility and available for the transport of your residents and the support equipment necessary to maintain their nursing care?

- A. White Pines owns two vehicles, a van and a pickup truck, with a maximum total capacity of 12 persons.
- Q. What increase in vehicle carrying capacity would be necessary to evacuate all residents and support equipment from White Pines?
- A. A five- to six-fold increase in carrying capacity would be necessary to transport patients in a most rudimentary way. Several additional trips or vehicles would be necessary to transport needed medical supplies, medication, charting, wheelchairs, linens and hospital beds.
- Q. Do you have any plans to increase your vehicle carrying capacity?
- A. No, it is not financially feasible to do so.
- Q. Has the local (Oregon) School District agreed to provide the residents of White Pines with transportation in the event that an evacuation becomes necessary?
- A. Yes, five years ago the Oregon School District agreed to provide transportation services for an evacuation. A letter from Mr. Edward J. Gebhardt, Business Manager for the Oregon School District, dated December 22, 1977, is attached to this Affidavit as Exhibit A. This agreement, however, depends on the availability of buses. The Oregon School District has the capability to transport about half of its students in a single trip. Should an evacuation of Oregon become necessary while school is in session, White Pines

- 7 -

residents would be competing with school children for available buses; and I believe that the children will be given precedence.

Q. How many of your non-ambulatory patients would require transportation of greater sophistication than could be provided with school buses?

A. My facility, alone, has 15 persons who should have medical assistance in-transit. These patients at White Pines have serious medical problems and are particularly likely candidates for transfer shock. Anything short of ambulance care increases the already probable chances that lives will be lost in transit.

Q. Would local ambulance service be available to transport these more critical cases in the event of an evacuation?

A. The only ambulance service or, for that matter, the only transportation resource designated in the Illinois Plan for Radiological Accidents, Volume VI, Preliminary Revision 0, Byron ("IPRA-Byron, Revision 0"), to transport nursing home patients is the Oregon Ambulance Service. IPRA-Byron, Revision 0, VI (3) p. 3 is attached to this Affidavit as Exhibit B.

Q. Will the resources of the Oregon Ambulance Service be sufficient to meet your needs?

A. No. The Oregon Ambulance Service has only two ambulances. Oregon Ambulance Service Resource Summary, IPRA-Byron, Revision 0, VI (2) p. 311 is attached as Exhibit C. Pinecrest Manor Nursing Home in Mt. Morris is located in a sector adjacent to White Pines and may well be evacuated at the same time as White Pines. The relevant portion of the IPRA-Byron, Revision 0, "Evacuation Guide" is attached to this Affidavit

as Exhibit D. Furthermore, it should be noted that the Oregon Ambulance Service has been designated in IPRA-Byron, Revision 0 to serve in the following additional capacities:

- 1) the transport of homebound private residents (Exhibit B);
- 2) the notification of the general public that an emergency situation exists;
- 3) traffic and access control; and
- 4) following standard operating procedures for fire prevention and emergency medical services. IPRA-Byron, Revision 0, VI (2c) pp. 25-26 are attached to this Affidavit as Exhibit E.

Q. Have any state, county, or local officials agreed to provide transportation for the residents of White Pines in case of evacuation?

A. No.

Q. Has the Commonwealth Edison Company agreed to provide transportation for the residents of White Pines in case of evacuation?

A. No.

Q. Have any other private or charitable organizations agreed to provide transportation for the residents of White Pines in case of evacuation?

A. No.

Q. How many staff members are on duty at White Pines?

A. During the day, there are as many as 15 staff members on duty. However, during the evening, as few as three staff members are on duty.

Q. Are there sufficient staff on duty at White Pines during the



day or night to effect an evacuation?

A. ~~Daytime staffing might be sufficient for mobilization, but, again, available and appropriate vehicles would have to be acquired.~~ (Realistically, even if all the daytime staff remained on duty and did not go home to their families during the emergency,) ~~we would not have adequate personnel to transport or accompany patients and to move support equipment, such as wheelchairs, medical supplies, medication, charting, linens and beds.~~ (A night time evacuation would be a logistical impossibility for the White Pines night staff.)

Q. What would be required of a host facility?

A. All equipment mentioned earlier must be available, viz., medical supplies, medication, charting, lines, wheelchairs and beds. Sufficient staffing would be necessary. Regular White Pines staff will be scattered throughout the region during an evacuation and replacements must be found quickly. Because of a predictable shortage of staff, a host facility should be capable of housing a large number of patients, so that a small number of nurses and aides can care for a larger number of patients.

Q. Do you know of any facilities that would meet these requirements?

A. A hospital would be the only appropriate relocation site for about 15 White Pines residents. I have been contacting nursing homes and hotels outside of the EPZ in efforts to find a suitable facility for my ambulatory and stronger wheelchair patients. I do not yet have any relocation sites outside of the 20 miles suggested radius for relocation.

Q. Have you been advised by ~~ESDA~~ that sheltering at White Pines

may be a prescribed protective action pursuant to PRA-Byron, Revision 0?

A. No, I was advised of this by DAARE/SAFE and the Rockford LWV. As I understand the matter, for a shelter to offer a measurable protection from a release of radioactivity it should have a windowless or basement area. Cement structures are preferred and ventilation should be restricted.

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Q. Do you consider sheltering to be an option which would have value as a protective action for White Pines?

A. Marginally. The ventilation in White Pines is very good. There is no basement and no windowless areas. Restriction of ventilation would have to be engineered. I have been given no guidance by ESDA or Commonwealth Edison regarding this

Q. Have ESDA or Commonwealth Edison given you any indication that they will make efforts to ease the financial burden of adapting your facility to offer more adequate shelter?

A. No, they have not.

Q. Have ESDA or Commonwealth Edison given you any indication that they will make efforts to ease the financial burden of maintaining adequate patient care at some relocated site?

A. No, they have not.

Q. Are you familiar with the portions of Commonwealth Edison's December 1982 "Evacuation Time Estimates for the Plume Exposure Pathway of the Emergency Planning Zone for the Byron Nuclear Generating Station" ("Evacuation Time Estimates" related to nursing homes?

A. Yes, I am familiar with Tables 3-5 and 6-2; as well as Section 4.2 titled "Special Facilities Time Estimate Methodology and Assumptions;" and Section 6.2, "Special Facilities Evacuation

Times." The above portions of Evacuation Time Estimates are attached to this Affidavit as Exhibit F.

- Q. On the basis of your education and professional experience, your knowledge of White Pines and your investigation of the difficulties of carrying out protective actions in the face of a radiological accident at the Byron Station, do you have an opinion about the adequacy of the plans contained in Exhibits B, D and E?
- A. Yes. The plans as written do not provide for the health and safety of nursing home residents in the area surrounding the Byron Station. As mentioned earlier, the demands placed on the Oregon Ambulance Service are unreasonable. Besides this, there is simply no mention of the needs of nursing homes, let alone the plans formulated to meet these needs in an emergency. The Commonwealth Edison Evacuation Time Estimates are, to say the least, unrealistic. I am supposed to evacuate in 54 minutes. That is less time than is estimated for the Oregon schools' evacuation, which must be completed before I can receive transportation for White Pines. It is my belief that nursing homes cannot be evacuated or sheltered safely by using the present plan.
- Q. Were you contacted by any of the people responsible for drafting either the IPRA volume or the time estimates?
- A. ESDA's only contact with White Pines was a brief phone conversation with my secretary. The caller asked what our policies were for evacuation. Our plans address an evacuation due to a facility emergency (fire, power outage) where we must only leave the building, not the county. Commonwealth Edison's evacuation estimates are certainly not based on any discussions

with me, directly or indirectly.

- Q. On the basis of your education and professional experience, your knowledge of White Pines, and your investigation of the difficulties of carrying out protective actions in the face of a radiological accident at the Byron Station, do you have an opinion about how a more adequate evacuation plan should be drawn?
- A. Better planning can be done. A plan which actually addresses the problems of sheltering, evacuation, and relocation will be necessary if such protective actions are to be effective. Consideration must be given to means by which the probable loss of life due to transfer shock can be minimized. The kind of provisions presently made for transportation and relocation of the elderly will not only forego any protective character, but will also endanger the lives of my patients. Better planning, which brings the implementors into the planning process, might alleviate such health hazards.

Affiant incorporates the material contained in Exhibits A, B, C, D, E and F, attached hereto, as part of his testimony.

THOMAS BOWES  
EXHIBIT A

Edward J. Gebhardt  
School Business Manager

## Oregon Community Unit School District 220

Oregon, Illinois 61061  
815-732-2186

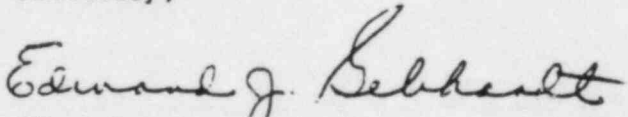
December 22, 1977

Mr. Tom Bowes  
White Pines Manor  
10th and Rhodes Sts.  
Oregon, Illinois 61061

Dear Mr. Bowes:

The Oregon Community Unit School District 220, Ogle County, Illinois has agreed to furnish a bus to evacuate patients from the White Pines Manor in case of emergency. The bus will be provided, if available, and the White Pines Manor will be charged on a per cost basis.

Sincerely,

  
Edward J. Gebhardt

EJG:bb



the Oregon Police. Also, Commonwealth Edison maintains a list (called a Polio List) of health care patients who are dependant upon electrical power for their home based health care equipment. The CECO Polio List for Ogle County is available from the Dixon-Sterling District Headquarters (815/288-2211). The Sherrif's Department will interface and coordinate with the Oregon Police and CECO for notification and evacuation of shut-ins.

c. Population with Special Transportation Requirements

The Ogle County Sherrif's Department will interface and coodinate with the Oregon Ambulance Service to arrange transportation for people needing special assistance.

These people may include both private residents or nursing home patients who may not have adequate or readily available transportation.

d. School Students

A situation may occur during the evacuation of school students in that they may not have adequate numbers of bus seats available using their own district buses. When this situation

OREGON AMBULANCE SERVICE RESOURCE SUMMARY

Communication Equipment

20 Pagers

Telephone

Mercy radio in ambulance vehicle

Mandpower

20 Volunteers, 10 with EMT training, 8  
with 1st responder training

Vehicles

2 Ambulance vehicles with 2-way radios

Miscellaneous Equipment

3 Resuscitator units

1 Surtech unit

Miscellaneous first aid/emergency equipment

THOMAS BOWES  
EXHIBIT D

EVACUATION GUIDE

<u>Wind into Sector</u>	<u>Sectors Affected</u>	<u>Evacuate</u>	<u>Via</u>	<u>To Shelter</u>
East	D,E,F	Stillman Valley	IL 72 E to US 51 S to IL 64 E	Sycamore
		Davis Junction	IL 72 E to US 51 S to IL 64 E	Sycamore
		(1) Kings	IL 64 E	Sycamore
ESE	E,F,G	Davis Junction	IL 72 E to US 51 S to IL 64 E	Sycamore
		(1) Kings	IL 64 E	Sycamore
		(1) Rochelle	IL 38 E	DeKalb
SE	F,G,H	Chana	Chana Rd. S to Flagg Rd. E to IL 251 S to IL 38 E	DeKalb
		(1) Rochelle	IL 38 E	DeKalb
SSE	G,H,J	Chana	Chana Rd. S to Flagg Rd. E to IL 251 S to IL 38 E	DeKalb
		(1) Rochelle	IL 38 E	DeKalb
South	H,J,K	Oregon	IL 2 S to IL 88 S	Sterling & Rock Falls
		Chana	Chana Rd. S to Flagg Rd. E to IL 251 S to IL 38 E	DeKalb
SSW	J,K,L	Oregon	IL 2 S to IL 88 S	Sterling & Rock Falls
SW	K,L,M	Oregon	IL 2 S to IL 88 S	Sterling & Rock Falls
		Mt. Morris	IL 64 W to IL 26 N	Freeport
WSW	L,M,N	Oregon	IL 2 S to IL 88 S	Sterling & Rock Falls
		Mt. Morris	IL 64 W to IL 26 N	Freeport

A. 7. Oregon Ambulance Service

Upon receiving notification of an incident at the BYRON STATION from the OREGON ON-DUTY POLICE OFFICER, the OREGON AMBULANCE DIRECTOR will perform the following tasks:

IF SITE EMERGENCY CLASSIFICATION

1. Receive authorization from the OREGON MAYOR to initiate the department call list.
2. Notify Department personnel stating a point of assembly, the OREGON FIRE DEPARTMENT.
3. Ensure the distribution of dosimetry (instant read dosimeter and TLD card) and completion of a radiation exposure record for all personnel that may be entering an exposure pathway area.

THOMAS BOWES  
EXHIBIT E

Ogle County  
Preliminary Rev. 0 12/82

Potassium iodide (KI) tablets are to be distributed only upon the recommendation of IDNS. Assign a department person to maintain a Dosimetry Control Log (see Annex 2h):

Name: \_\_\_\_\_ Title: \_\_\_\_\_  
Phone: \_\_\_\_\_

IF PROTECTIVE ACTIONS REQUIRED OR GENERAL EMERGENCY

4. Follow standard operating procedures for the fire prevention and emergency medical services.
5. Assists OREGON POLICE DEPARTMENT in notification of the public traffic and access control, if requested.
6. During re-entry ensure collection of all dosimetry and radiation exposure records. Turn in all radiation exposure records and TLD's to the OREGON ESDA COORDINATOR for forwarding to IDNS.



THOMAS BOWES  
EXHIBIT F

- One car per employee at major employers and schools will be used in an evacuation.
- Boats will moor and the occupants will then evacuate by car with one vehicle allotted per boat.
- One car per campsite at recreational campgrounds will be used for evacuation. (This assumes 3.3 people per car as this is the Illinois State average number of people per family.®)
- Adequate transportation will be available for summer camps. ✓

#### 4.2 SPECIAL FACILITIES TIME ESTIMATE METHODOLOGY AND ASSUMPTIONS

In addition to an estimate of the time required to evacuate the general population, NUREG 0654 recommends that a separate estimate be made of the time required to evacuate special facilities within the EPZ. Special facilities, as defined in NUREG 0654, can include health care facilities, nursing homes, jails, schools, and other facilities requiring special transportation or mobilization considerations during an evacuation. For this study, special facilities identified as requiring separate estimates included schools, nursing homes, and the Ogle County jail. These evacuation time estimates for special facilities are presented in Section 6.2.

Special facility evacuation time estimates include mobilization time for obtaining transportation, time for loading persons into vehicles, and the travel time out of the EPZ. Mobilization and loading times for special facilities have been obtained by State of Illinois ESDA personnel through interviews with facility officials. Special

THOMAS BOWES  
EXHIBIT F

facilities and transient populations have been loaded on the network  
an average of 15 minutes to receive warning and an average of  
30 minutes to prepare to leave. The 30-minute average time for  
preparation to enter the roadway conforms to the estimates provided by  
school official through State of Illinois ESDA personnel. Therefore,  
the response curve for these populations is similar, with respect to  
time, to the light scenario shown on Figure 4-1, since that curve is  
also the combination of a 15-minute and a 30-minute event.

Travel time out of the plume exposure pathway EPZ has been determined  
using the average vehicle speed calculated by the NETVAC2 model along  
the appropriate evacuation route. Data for these calculations has been  
taken from the general population evacuation simulation for the full EPZ  
winter time scenario for both normal and adverse weather conditions.  
The winter simulation has been utilized for these special facility  
evacuation time estimates since the winter period is concurrent with the  
school year. The individual mobilization time estimates for each  
special facility have been combined with the travel time out of the  
plume exposure pathway EPZ to calculate the total special facilities  
evacuation time.

THOMAS BOWES  
EXHIBIT P

The evacuation time estimates for the four 0-5 mile evacuation zones in normal weather for the daytime range from about 184 minutes to about 191 minutes, and for the nighttime evacuation from 96 to 110 minutes. The adverse weather condition evacuation time estimates for the four 0-5 mile evacuation zones during the day range from about 217 minutes to 226 minutes, and at night from about 98 to 122 minutes. The evacuation time estimates for the 0-2 mile evacuation zone are only a few minutes less than the 0-5 mile results.

Special events evacuation scenarios, such as the Autumn on Parade in Oregon (attendance approximately 25,000 to 30,000) and large weekend events at the Byron Dragway and Motosport Speedway have been analyzed by separate simulations. These special events do not increase the time required to evacuate (191 minutes) the primary evacuation zones even with the larger number of vehicles associated with these special events.

## 6.2 SPECIAL FACILITIES EVACUATION TIMES

As discussed in Section 4.2, the evacuation time estimates for special facilities have been calculated separately from those of the general population. These results are shown in Table 6-2. The special facilities evacuation times range from approximately 50 to 60 minutes during normal weather conditions, and from about 51 to about 68 minutes during adverse weather conditions. The largest component of these time estimates is the mobilization time, 45 minutes. This indicates that a significant factor in evacuating many special facilities is the time required to ready persons and necessary vehicles, and not the travel time out of the EPZ.

THOMAS BOWES  
EXHIBIT F

TABLE 6-2

SPECIAL FACILITIES  
EVACUATION TIMES

<u>Facility (2)</u>	<u>Location</u>	<u>Evacuation Time(1)</u>	
		<u>Normal Weather</u>	<u>Adverse Weather</u>
Oregon Schools	SSW/5-6	55	58
Mt. Morris Schools	WSW/7-8	50	51
Leaf River Schools	WNW/6-7	50	52
Byron Schools	NNE/4-5	53	57
Stillman Valley Schools	ENE/5-6	51	53
Oregon Bible College	SSW/4-5	56	62
Lorado Taft Field Campus	SW/3-4	60	68
Ogle County Educational Co-op	WSW/7-8	50	51
Oregon Annex School	SSW/5-6	54	58
Neighbor's Nursing Home	NNE/4-5	54	58
White Pines Manor	SSW/5-6	54	58
Pine Crest Manor	WSW/7-8	50	51
Ogle County Jail	SSW/4-5	56	62

NOTES:

- (1) Times have been rounded to the nearest minute.
- (2) Figures 3-11 and 3-13 show Special Facilities locations.

1 MR. SAVAGE: I had some rebuttal. I don't know  
2 if it's proper to do it before their cross. They can go  
3 ahead and cross.

4 JUDGE SMITH: Give your rebuttal. That way they  
5 can address it. REBUTTAL

6 BY MR. SAVAGE (Resuming):

7 Q Are you currently employed as a volunteer  
8 policeman?

9 A Yes.

10 Q Where is that?

11 A I am the President of the Reserve Association  
12 for the Ogle County Sheriff's Department and on the advisory  
13 board.

14 Q In that capacity, will you be called on to  
15 participate in emergency planning for the Byron station?

16 A No.

17 Q Have you worked in any other capacity as a  
18 volunteer?

19 A Yes. For the past 20 years I have worked as  
20 a volunteer for many civic organizations -- Rotary, Jaycees,  
21 I have been on the board, I have been in 9 different organi-  
22 zations since I have lived in the Oregon area.

23 Q Working as a volunteer in the capacities you  
24 have just described, would you be called upon to volunteer  
25 in any types of natural disasters?



-22-bl

1 A Yes.

2 Q What types?

3 A In my role as reserve deputy, I would be called  
4 upon to assist at the nuclear site, for what ever role the  
5 sheriff decides on. I have been involved with accidents  
6 scenes; floods, things of that nature.

7 Q Have you had any training as a volunteer?

8 A Yes, I have.

9 Q What did that training consist of?

10 A The sheriff's department requires that all new  
11 deputies start with a minimum of 250 hours training and one  
12 year probationary time riding with command officers before  
13 they are allowed to function as a reserve deputy. You must  
14 also go through the state firearms, mandated firearms course.  
15 And we receive monthly training. And beyond that also by  
16 different organizations that are relevant to what we do.

17 Q Have you had any training which would qualify you  
18 -- strike that. Have you had any training as an EMT?

19 A No; not as an EMT, no.

20 Q Have you ever worked for an ambulance service?

21 A No.

22 Q Have you ever been called upon to evaluate ambu-  
23 lance services?

24 A No.

25 Q Have you had any training with respect to nuclear

1 incidents?

2 A None.

3 Q Do you feel competent to give an opinion about the  
4 manner in which volunteers react to disasters?

5 A Disasters; you mean stressful situations?

6 Q Stressful situations.

7 A I think so, yes.

8 Q This morning -- if I characterize his testimony  
9 correctly and I don't I am sure I will hear about it in a  
10 second -- I believe that in response to a question from Mr.  
11 Goldberg put to Mr. Jones, I believe the question was: In  
12 Mr. Jones' experience, has he ever been aware of a situation  
13 in which a volunteer panicked. And I believe that he re-  
14 sponded; no he hadn't.

15 Now, let me put the question to you: In your 10  
16 or so years' experience as a volunteer have you ever encount-  
17 ered a situation in which a volunteer panicked?

18 A I need some clarification of panic. You mean by  
19 panic, not being rational or unable to act safely, would that  
20 be panicked?

21 Q By panic, I would have in mind hesitated in a way  
22 which interfered with the volunteer's ability to provide the  
23 services which he or she was called upon to provide.

24 MR. BIELAWSKI: I don't think that is a common  
25 understanding of the word panic.

2-b3

1 JUDGE SMITH: Let's don't call it panic. Let's  
2 call it hesitation.

3 BY MR. SAVAGE:

4 Q Hesitation which resulted in inability of the vol-  
5 unteer to render the services that he or she was called  
6 to render.

7 A You have to start with the beginning of the ques-  
8 tion.

9 Q Okay.

10 During the term of your work as a volunteer over  
11 the years, have you ever encountered a situation in which  
12 a volunteer reacted in the manner which I just described?

13 A Yes.

14 Q Can you give me an example?

15 A I need to preface it first. Volunteers working --  
16 obviously in many capacities. They are trained to different  
17 levels. The level that the reserve deputy in the sheriff's  
18 department is trained is far more intensive than a volunteer  
19 that might be, for instance, coming into my nursing home to  
20 talk to a resident or write letters.

21 I have never seen a police officer or a reserve  
22 deputy ever act in any manner that I would consider other  
23 than proper. Being on the scene of many accidents and things  
24 of that nature, I have observed ambulance drivers not acting  
25 properly, hesitating. I have seen fire volunteers responding

1 to the whistle, with the little blue lights on, acting very  
2 irrationally: running lights, hitting cars, things of that  
3 nature.

4 Q Is that last example you gave an example that you  
5 would describe as a situation of panic?

6 A Yes. I think that perhaps -- I don't know if I --  
7 I cannot speak for the other person, but it would seem to me  
8 that they have one purpose in mind when they hear the siren  
9 off and the little light come on, that is to get down to the  
10 fire department as quickly as possible. And they sometimes  
11 forget about traffic and traffic laws that they are required  
12 to obey.

13 Q Do you know whether these volunteers had training?

14 A Yes; they would be trained through their respective  
15 organizations.

16 Q Do you believe that training reduces the probability  
17 that a volunteer will panic?

18 A Yes. I believe as you are trained, you fall back  
19 on that.

20 Q But it does not apparently completely eliminate  
21 that possibility?

22 A No. Any of us could panic.

23 Q What do you attribute the panic to? Do you feel  
24 competent to render an opinion about that?

25 A I don't think I --

B-22-B-5

1 MR. BIELAWSKI: Once again, your Honor, can we  
2 have -- we have gone from hesitation to panic. I don't know  
3 what we mean by panic.

4 MR. SAVAGE: We can agree on panic, I think. Ir-  
5 rational behavior, for example, in the case of firemen would  
6 cause them to run into cars.

7 JUDGE SMITH: That does not comport with my view of  
8 what panic is.

9 MR. BIELAWSKI: What Mr. Savage has just described  
10 is somebody who is hurrying to a fire station so he can get  
11 on the fire truck and fight a fire. He was not describing  
12 somebody running away from a situation where he would be  
13 needed as an emergency worker, which I think is the thrust  
14 of what Mr. Savage is trying to establish.

15 JUDGE SMITH: We are dwelling too much on what  
16 labels we give the conduct, rather than what the witness  
17 says.

18 BY MR. SAVAGE:

19 Q Do you have an opinion about why training reduces  
20 the type of behavior you have just described?

21 A The people become more familiar with how to react  
22 in specific instances, and when those are drilled into them,  
23 they have a tendency to react as they are trained.

24 Q Do you think that part of what reduces the be-  
25 havior described in training occurs because the training gives



B-22-b-6

1 the volunteer an accurate understanding of the danger that he  
2 or she faces?

3 A Yes.

4 Q Do you think that to the extent that such training  
5 would not give the volunteer an accurate understanding of  
6 the danger that he or she faces that the beneficial effect  
7 of training with respect to panic or hesitation described  
8 would be lost?

9 MR. BIELAWSKI: I am going to object to that. This  
10 is Mr. Savage's witness. He is putting on really supplement-  
11 ary direct and not rebuttal. He is leading the witness  
12 incredibly.

13 MR. STEVEN GOLDBERG: I would also add that the  
14 question vague. We have no foundation for this witness'  
15 expertise in emergency response training. I think it really  
16 takes a quantum leap for somebody to have --

17 MR. SAVAGE: With respect to the objection about  
18 foundation, I think part of what qualified Mr. Smith yester-  
19 day to give an opinion about how volunteers would behave and  
20 questions which were not objected to, was his experience as  
21 a volunteer and his contacts with other volunteers.

22 I believe --

23 MR. STEVEN GOLDBERG: We are going from experience  
24 to training. I am saying this witness has no demonstrated  
25 expertise in volunteer training or emergency response

s-22-b-7

1 training. We don't know what kind of emergency for which the  
2 training is conceived in the question.

3 JUDGE SMITH: In the first place, the question took  
4 a different direction away from this witness' own experience  
5 and own observations. He has talked about training to --  
6 or the lack of training which permitted volunteers to do  
7 things that they shouldn't do.

8 I have not heard him say anything about training  
9 which addresses volunteers' fears.

10 MR. SAVAGE: I asked him --

11 JUDGE SMITH: He did not identify any experience  
12 or training he has concerning volunteers' fears.

13 BY MR. SAVAGE:

14 Q With respect to your training, if you would bear  
15 with me just a moment, Mr. Bowes, with respect to your train-  
16 ing as a volunteer policeman, is there any aspect of it which  
17 helped alleviate fears you would have had before the train-  
18 ing about the danger you would face as a volunteer?

19 A Yes.

20 Q Could you describe what that was?

21 A We are walked through situations that would be  
22 hazardous to a police officer, either through on hands or  
23 through training films and manuals and discuss the different  
24 procedures and policies that are available to us through  
25 the sheriff's department. And in following these policies

2-b-8

1 and procedures we can arrive at a safe conclusion to the  
2 particular problem.

3 Q Thank you.

4 JUDGE SMITH: Now would the lack of such training --

5 MR. SAVAGE: I didn't know whether I should hazard  
6 that question.

7 BY MR. SAVAGE:

8 Q Would the lack of such training in your opinion  
9 have reduced the likelihood that you would have not feared  
10 the danger which you face when you give your volunteer ser-  
11 vices?

12 MR. BIELAWSKI: Objection. He is asking the wit-  
13 ness to speculate as to what he would have done had he not  
14 received training that he received. How can this witness  
15 state that?

16 MR. SAVAGE: This is not speculation. We have got  
17 a foundation to qualify him as an expert on volunteers. I  
18 am asking him in his opinion as an expert whether, if he had  
19 not had that training, that fear would not have been reduced?

20 JUDGE SMITH: I think he probably possesses the in-  
21 formation that you are trying to get from him. I don't think  
22 it has all been developed and I just wonder how helpful it is  
23 going to be.

24 Have you observed persons who have not had training  
25 that have been called into service react in a manner of fear

-22-b-9

1 or reduced capacity, because of lack of training. Your testi-  
2 mony has been that the people you have worked with have all  
3 had the training.

4 THE WITNESS: I cannot recall anything specific.  
5 Sometimes we will use -- well, if you have got an accident  
6 scene for instance, and you are the only officer on the scene  
7 or you have a traffic problem, type of situation where you  
8 must assist the people in the accident, you might call upon  
9 a volunteer to direct traffic, where there is a hazard of  
10 stepping out in the path of a semi, or a traffic jam that  
11 might not have taken place if the person is properly trained.  
12 That is the only instance I am thinking of.

13 JUDGE SMITH: We are coming into an area where prob-  
14 ably everyone in this room has had his own or her own exper-  
15 iences that you fear the unknown and then you get trained and  
16 you are not afraid. I just think the information is being  
17 developed needlessly now.

18 MR. SAVAGE: All right. Fine.

19 I thought that Mr. Smith had testified yesterday  
20 that it was not going to be part of the training given to  
21 volunteers. Part of the training -- he did not believe that  
22 the fear of a radiological disaster would be reduced if the  
23 training for the volunteer included inadequate and -- an  
24 accurate description of the danger faced.

25 I am trying to rebut that. If it is everybody's

1 common experience that it does, then, fine.

2 THE WITNESS: I can relate to that. I was requested  
3 last year to get involved with --

4 MR. BIELAWSKI: Your Honor, there is not a question  
5 pending. If counsel wants to ask a question, the witness can  
6 answer it, but there is no question pending.

7 JUDGE SMITH: All right.

8 Mr. Bowes has taken the trouble to come here.

9 MR. BIELAWSKI: I agree. I guess I am a bit frus-  
10 trated by this examination. It is more or less catching us  
11 by surprise.

12 MR. SAVAGE: You agreed to let him on and I told  
13 you I was going to supplement the direct to rebut --

14 JUDGE SMITH: Let's hear what Mr. Bowes has to say.

15 THE WITNESS: The discussion came up last year as  
16 to having volunteers go into the area to check for contamina-  
17 tion, if there was an onsite emergency. And it was suggested  
18 to me that perhaps I might like to be one of those persons.  
19 Without any knowledge of nuclear power or radioactivity, I  
20 had a fear of becoming contaminated and declined. So talk  
21 about fear; it turned out to be perhaps unjustified, and later  
22 on I had more training, but at the time I flatly refused to  
23 do that because I was afraid.

24 BY MR. SAVAGE:

25 Q And what about the training; what aspect of the



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1 training reduced your fear of contamination?

2 A I think just through some training at the sheriff's  
3 office. It was discussed also through reading articles and  
4 talking to people that have come to my facility in the last  
5 couple of months that are experts in the field, and helped  
6 us understand our fears a little better.

7 MR. SAVAGE: I don't have any other questions.

8 Thank you.

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1 JUDGE SMITH: The witness is available for cross  
2 examination.

3 CROSS EXAMINATION

4 BY MR. BIELAWSKI:

5 Q I am Alan Bielawski, an attorney for the Applicant,  
6 Commonwealth Edison Company. I just have a few questions  
7 for you.

8 In the last two questions and answers you described  
9 an earlier fear of radiation and having received training  
10 and dispelling those fears to some extent. Can you please  
11 describe what that training was that you referred to?

12 A I was informed as to the types of radiation that  
13 would be emitted from the plant and the amount of exposure  
14 to those types of radiation as to the degree, informed that  
15 the plant won't "blow up." Also, having visited the nuclear  
16 plant and taking a couple of tours through there, that  
17 discussion was brought up also.

18 Probably one of the most helpful things that  
19 happened that I can recall that would maybe change my mind  
20 was Mr. Wenger came over to my facility and discussed these  
21 items and seemed to be very knowledgeable in them and was  
22 able to dispel my fears that way.

23 Q Mr. Gordon Wenger?

24 A Yes.

25 Q With respect to any information you received before

1 talking to Mr. Wenger, who gave you that information  
2 specifically -- representatives of the state, Commonwealth  
3 Edison representatives?

4 A I guess the experts would be Commonwealth Edison  
5 personnel.

6 Q In what context was this information imparted to  
7 you?

8 A Informal meetings with the Sheriff's Reserve and  
9 also through the nuclear plant and onsite tours.

10 Q Is it fair to characterize your testimony as now  
11 having received a certain degree of training, having achieved  
12 a certain level of understanding in terms of the risks, you  
13 would perform the duties that are assigned to you in the  
14 event of an emergency at Byron?

15 A If it did not conflict with my duties as admini-  
16 strator of White Pines Manor.

17 Q But fear -- fear might enter into it, but it would  
18 not make it run away from the situation, would it?

19 A If I saw the plume heading directly at me and  
20 I was told to man the roadblock, I would certainly get out  
21 of the way of the plume, and fear would definitely be a very  
22 strong motivator at that point.

23 JUDGE SMITH: Mr. Bielawski, I will give you a  
24 couple more questions, but the Board has decided that we don't  
25 want any more evidence on training and fear. You can make

1 two or three more questions to round it out if you want to.

2 MR. BIELAWSKI: I think Mr. Bowes --

3 MR. SAVAGE: Excuse me. Why don't you want  
4 evidence on training and fear?

5 JUDGE SMITH: We think the record is complete.

6 MR. SAVAGE: We have never had anybody come and  
7 say if they saw the plume coming they would turn the other  
8 way and get out of the road. All we have heard --

9 JUDGE SMITH: We are tryers of the facts. We have  
10 our own experiences. We have had a lot of testimony.

11 MR. SAVAGE: Your Honor, I just want the record  
12 to note my objection. I think that this evidence rebuts  
13 direct evidence --

14 JUDGE SMITH: You don't have any more evidence.  
15 Mr. Bielawski is who I am cutting short.

16 MR. SAVAGE: But look at the answer he just gave.

17 JUDGE SMITH: We believe that the testimony here  
18 that we have received over the course of this week has demon-  
19 strated what the training is going to be. We do not have  
20 anybody here at all who is a psychologist or who has given  
21 us expert testimony on fear. The Board members and the  
22 people in general are familiar with fear. Fear is a part  
23 of everyone's life. Training is a part of our lives. It  
24 has been a part of your life.

25 And now we are the tryers of fact. We have to take

1 the evidence we have received and feed it into our own life  
2 experiences.

3 MR. SAVAGE: Okay. Thank you. I agree.

4 BY MR. BIELAWSKI:

5 Q I just have a few questions with respect to your  
6 testimony.

7 On page 7 of your testimony you identify concerns  
8 regarding financial burdens which might be associated with  
9 evacuation.

10 A Yes.

11 Q Do you see that?

12 A Yes.

13 Q Would those concerns -- as a result of those  
14 concerns would you refuse to participate in emergency planning  
15 at this point in the development of the plans?

16 A You're going to have to clarify that a little  
17 better for me.

18 Q Certainly. Have you been contacted by a state  
19 official or has somebody from your nursing home been contacted  
20 by state officials or federal officials with respect to  
21 emergency planning?

22 A Yes, I've had some people over to discuss the  
23 broad spectrum of it.

24 Q And you are aware, are you not, that the plan  
25 will most likely have special provisions for your facility?



1 A Yes.

2 Q In developing those special provisions I am sure  
3 you would realize that your cooperation would be necessary  
4 to have a good plan.

5 A Yes.

6 Q Even if this concern that you raise here is not  
7 resolved within the next two or three months, would you  
8 refuse to cooperate with the planners so that they can  
9 develop a plan based on your input?

10 A No. I would consider that negligent.

11 MR. BIELAWSKI: I have no further questions.

12 JUDGE SMITH: Mr. Savage, in our previous exchange  
13 my remarks were really addressed to Mr. Bielawski. Now, if  
14 he developed a particular question that you feel you are  
15 prejudiced by being left unanswered, you may explore it. I  
16 want you to recall that the two technical members of this  
17 Board are men of considerable training, considerable experi-  
18 ence. They know something about the subject matter of educa-  
19 tion and training in dangers.

20 MR. SAVAGE: I don't think --

21 JUDGE SMITH: You are giving us a child's primer  
22 lesson.

23 MR. SAVAGE: No, sir, I don't think I was  
24 prejudiced. I had not been able to elicit such a favorable  
25 response in my questioning. I wanted Mr. Bielawski to continue.

1 I did not think of it as a primer lesson. This  
2 man has had 20 years of experience.

3 JUDGE SMITH: So you have not been prejudiced.

4 MR. SAVAGE: No. Thank you. I have not.

5 MR. STEVEN GOLDBERG: I just have one question.

6 BY MR. STEVEN GOLDBERG:

7 Q I am an attorney with the Nuclear Regulatory Com-  
8 mission Staff. I would just like to ask you whether in  
9 your experience as a volunteer sheriff deputy or otherwise  
10 you have ever been involved in an emergency necessitating the  
11 evacuation or relocation of large numbers of people?

12 A What do you consider large?

13 Q Say in the thousands.

14 A No.

15 MR. STEVEN GOLDBERG: I have no further questions.

16 JUDGE SMITH: Mr. Bowes, we appreciate very much  
17 your taking time off and coming here and sharing your views  
18 with us. Thank you, sir.

19 (The witness was excused.)

20 JUDGE SMITH: Now what do we do?

21 MR. SAVAGE: Your Honor, we had expected to have  
22 Mr. Turner and Mr. Miller here, two superintendents, but they  
23 were in a meeting with ESDA today, and it took longer than  
24 they expected. And I believe that Mr. Holmbeck told me they  
25 can be here tomorrow. I would rather tomorrow put Mr. Murphy,

1 Mr. Cowan, and Mr. Holmbeck on and get this ambulance survey  
2 question settled, and that would be the only survey question.  
3 I would propose to do that.

4 The remaining emergency planning issues remaining  
5 then would be having the rest of our witnesses come in. With  
6 respect to the school superintendents, I believe there may  
7 be some cross examination on the liability issue. Again,  
8 on the others I don't think there would be much at all.

9 What I'm trying to say is I don't think there's  
10 much left if we go through the ambulance question tomorrow.  
11 The problem with leaving it until the 23rd, if that is when  
12 it would be left, and I believe you indicated to me before  
13 there was nothing magic about that date.

14 JUDGE SMITH: But haven't we been approaching  
15 this afternoon as if we would try -- hadn't we revisited  
16 that, and aren't we trying to complete now, or have you  
17 decided that you can't do it? Right after lunch we said  
18 well, it looks like maybe we were wrong, and maybe we can  
19 complete the emergency planning.

20 MR. SAVAGE: When I told you that, I thought I  
21 gave you a tentative schedule. That was to put those  
22 witnesses on tomorrow. I had expected Mr. Turner, Mr. Miller  
23 and Mr. Maloney. I am not ready with Mr. Cowan now. All  
24 three are necessary to lay a foundation for the survey.

25 JUDGE SMITH: Why don't we argue the --

1 MR. SAVAGE: Mr. Bielawski has expressed a desire  
2 not to put Mr. Murphy on alone. I would rather have all three  
3 of them on at once, too.

4 MR. BIELAWSKI: I have a short voir dire -- well,  
5 for both Mr. Murphy and Mr. Holmbeck, Mr. Cowan as well.  
6 All three of them together, some way between them, are  
7 sponsoring the survey, the way I see it. One designed the  
8 survey, the other one implemented it, and the third one  
9 evaluated it. Without being able to talk to all three, I  
10 think the Board -- it could be confusing. The point might  
11 not get across.

12 There is one issue we could decide. Mr. Savage  
13 has stated that the Intervenors were withdrawing the hospital  
14 survey. Mr. Murphy's testimony in large measure deals with  
15 hospitals and hospital preparedness and treatment, and it  
16 is based, as I understand it, on the hospital survey. And  
17 I think if we could decide what portions should be stricken  
18 from Mr. Murphy's testimony, that would probably be productive.

19 JUDGE SMITH: I was going to suggest that with  
20 respect to the ambulance survey that I really do not see why  
21 Mr. Murphy is essential. It seems to me that the designer  
22 of the survey becomes less important because we can read  
23 the questions. In the context of the other two witnesses  
24 we can determine whether the questions are misleading or  
25 relevant or whatever. I don't really understand why Mr.

1 Murphy is necessary.

2 MR. SAVAGE: Let me tell you, because I have him  
3 here to present the rationale for the questions; to give  
4 testimony that the cover letter that Mr. Holmbeck sent out  
5 did not affect the reliability of the survey; to give testi-  
6 mony that the followup Mr. Holmbeck did was proper followup;  
7 to testify that the fact that DAARE/SAFE's name is on the  
8 survey does not affect its reliability; to tell you all of  
9 the literature search he did when he designed it, and so on  
10 and so forth. I think those are important.

11 JUDGE SMITH: He's going to be telling us things  
12 that we're going to have to decide.

13 MR. SAVAGE: He's going to give you his opinion  
14 on them.

15 JUDGE SMITH: Okay.

16 MR. SAVAGE: I believe Mr. Bielawski indicated  
17 before that he would raise these questions.

18 MR. BIELAWSKI: Certainly. Mr. Murphy, at least  
19 when I deposed him, purported himself as a survey expert  
20 in terms of the methodology of conducting a survey. I don't  
21 think Mr. Holmbeck is, and I think it would be appropriate  
22 to compare what Mr. Murphy thinks should be done when con-  
23 ducting a survey with what Mr. Holmbeck actually did. That  
24 might provide insight to the Board.

25 JUDGE SMITH: Can we argue, assuming a survey is



1 properly designed and was administered properly, if it  
2 reached the correct -- wasn't one of your points that it  
3 made a survey of the wrong people?

4 MR. BIELAWSKI: In the hospitals that is the case.  
5 In respect to the ambulance services it is much more diffi-  
6 cult to determine, for one because the document attached to  
7 Mr. Cowan's testimony does not identify what ambulance  
8 services in fact responded. We only have numbers. It is  
9 an anonymous survey.

10 JUDGE SMITH: One thing I want to ask about this  
11 is did Mr. Cowan make the actual responses available to you?

12 MR. BIELAWSKI: Yes, he did. I also had an oppor-  
13 tunity to depose Mr. Cowan, Mr. Holmbeck and Mr. Murphy. I  
14 do have that raw data.

15 JUDGE SMITH: You don't have concerns about the  
16 accuracy of the information, the accuracy of the percentages,  
17 for example?

18 MR. BIELAWSKI: In the tabulation there are a couple  
19 of arithmetic errors, but other than that I would not even  
20 point them out. In terms of the tabulation, I don't really  
21 have any problems with it. As I understand Mr. Cowan's  
22 testimony, that is all he is doing. He is saying I was  
23 handed these raw data sheets, and I put it into my calculator  
24 and came up with these percentages.

25 JUDGE SMITH: You can stipulate that.

1 MR. BIELAWSKI: I offered to do that earlier  
2 today.

3 JUDGE SMITH: But you want him anyway.

4 MR. SAVAGE: I believe he has other kinds of  
5 testimony that would be helpful; for example, the fact that  
6 he may have surveyed more ambulance services than would be  
7 required does not affect the reliability or relevance, if  
8 given the consistency of the answers we got. You can use  
9 that information to draw conclusions about ambulance services  
10 which will --

End tp 23

Beg 24

11 MR. BIELAWSKI: There is one point I neglected  
12 to mention with respect to Mr. Cowan. He gives, I guess,  
13 his opinion in the summary of findings, I believe on page  
14 1 -- not Roman I, page 1 -- which is the second page. The  
15 last two paragraphs there present his opinion as to what  
16 the non-respondents are likely to have answered. I would  
17 like to probe that a bit with Mr. Cowan actually.

18 JUDGE SMITH: To summarize then, there is not  
19 much we can do this afternoon then. You want to go ahead  
20 with a full-blown --

21 MR. SAVAGE: Can we address a threshold question,  
22 assuming it is reliable, it is relevant?

23 MR. STEVEN GOLDBERG: Judge, I really think there  
24 are so many potential infirmities in the survey, and I really  
25 think Intervenor ought to have the benefit of trying to lay

1 the proper foundation whichever it sees fit. If it is through  
2 its panel, it is through its panel. I really think it would  
3 be more orderly, and we can make a great deal of progress  
4 tomorrow.

5 I think the parties well understand the survey,  
6 and we have had other testimony that bears on the survey.

7 JUDGE SMITH: Certainly in the face of the fact  
8 that all of the parties involved in it want to come on with  
9 the panel and cross examination and everything, I don't know  
10 what we can do about it if you want to. It seems to me,  
11 however, that the Board is going to be more impressed by  
12 what the survey questions say than what Mr. Murphy tells us  
13 they say.

14 MR. STEVEN GOLDBERG: I would agree with that  
15 observation. I guess I'm saying that I have an expectation  
16 from the other parties that this can be brought to a point  
17 of decision for the Board fairly quickly tomorrow. There  
18 may be some foundation that -- some evidentiary foundation  
19 that Intervenor wants to lay. If they don't, we could  
20 certainly argue it on the basis of the record right now,  
21 but I would not think it is one that they would find that  
22 all favorable to the attempted introduction of the survey.

23 I also understood that with regard to some of the  
24 other affiants, that we had some tentative stipulation that  
25 would avoid the necessity for their personal appearance. I

1 did not think we would be taking up hearing time.

2 MR. SAVAGE: That's correct. I did not know whether  
3 the Board would want to question them. They don't have to  
4 come as long as there is a stipulation and their evidence  
5 gets into the record.

6 JUDGE SMITH: The testimony of --

7 MR. SAVAGE: Turner, Maloney, Miller, everybody  
8 is going to want question because of the line of questioning  
9 pursued with Mr. Smith and Mr. Ed. That was your indication  
10 yesterday, that you wanted to talk to them about their --  
11 my characterization of their hesitancy to cooperate in  
12 planning.

13 JUDGE SMITH: You backed off on that point.

14 MR. SAVAGE: Not all the way.

15 (Laughter.)

16 JUDGE SMITH: We just expressed a curiosity to  
17 see a public official who would not -- as you suggested --  
18 and I think you have explained it.

19 MR. SAVAGE: I thought you wanted to talk to  
20 them. If you look at their affidavits, there is a statement  
21 in Mr. Maloney's, for example, that the buses will not  
22 be available until the question is answered.

23 MR. STEVEN GOLDBERG: That is also the subject,  
24 it seems to me -- transportation for school children -- is  
25 the subject of a commitment.

1 JUDGE SMITH: I don't think we're going to be able  
2 to conclude emergency planning then this week the way it  
3 is going.

4 MR. SAVAGE: Can't we get the surveys done if  
5 the Board will indulge us and stay tomorrow? Now, if the  
6 Board can't, okay.

7 JUDGE SMITH: Yes, yes, we can. Yes, we can do  
8 that. It is going to be a deliberate proceeding. We are  
9 putting the parties on notice that we are not --

10 MR. SAVAGE: Putting up with any more of this.

11 JUDGE SMITH: Yes.

12 (Laughter.)

13 MR. BIELAWSKI: Your Honor, I would be willing  
14 to stipulate to Mr. Cowan's testimony in terms of certifica-  
15 tion and forego asking about that opinion and examine  
16 Mr. Holmbeck and Mr. Murphy because -- the vast majority  
17 of my questions are to them with respect to the reliability  
18 of the ambulance survey. We can do that now, if you like.

19 JUDGE SMITH: Do you concede Mr. Cowan's competence  
20 to conduct a survey?

21 MR. BIELAWSKI: He did not conduct it. He took  
22 the raw data sheets and came up with the percentages that  
23 he reported.

24 JUDGE SMITH: You concede that competence.

25 MR. BIELAWSKI: That they can do that, yes.



1 MR. SAVAGE: I do not want to stipulate him out  
2 of the panel. If you do not have any questions, don't ask  
3 him any. He will sit there silently, but I want to bring  
4 him in.

5 JUDGE SMITH: All right.

6 MR. BIELAWSKI: One last point. Mr. Savage, I  
7 think, is no longer pressing for the appearance of Dr. Watt,  
8 is that right?

9 MR. SAVAGE: That is correct at this time. If  
10 the emergency planning is going to run over, I would like to  
11 reserve the right to subpoena again. But at this time, no,  
12 we're not going to call her.

13 MR. BIELAWSKI: What about Steve Walters?

14 MR. SAVAGE: I'm not going to call him tomorrow.

15 MR. BIELAWSKI: Has he been informed of that?

16 MR. SAVAGE: No, but I will inform him.

17 JUDGE SMITH: What is the status of Mr. Swann's  
18 testimony?

19 MR. HOLMBECK: I spoke to Mr. Swann this morning.  
20 I spoke to all of our affiants last night and this morning  
21 because I thought the Board had expressed an interest in  
22 seeing all of them.

23 First, let me ask, is that still the case?

24 JUDGE SMITH: No. That was not understood  
25 when Mr. Savage suggested, as I recall, three officials

1 would not respond in an emergency because of liability  
2 purposes. I never saw a public official like that, and I  
3 would like to see one, you see. And that was the context of  
4 it.  
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1 MR. HOLMBECK: Okay.

2 JUDGE SMITH: I do want to see them myself.

3 The Board will consult. I think the question of liability  
4 has not been well put. The Board will consult on it and see.

5 My remark was -- I really was skeptical that a  
6 public official would not respond in an emergency because of  
7 liability considerations, and I wanted to withhold judgment  
8 until a man actually came in. As it turned out, my skepticism  
9 was well founded because as you later conceded, that was not  
10 the case.

11 MR. SAVAGE: The public officials who have the  
12 questions about liabilities were school superintendents only.

13 JUDGE SMITH: All right.

14 MR. SAVAGE: Mr. Turner and Mr. Maloney and Mr.  
15 Miller.

16 JUDGE SMITH: Right.

17 MR. SAVAGE: Mr. Swann was not involved in that.

18 JUDGE SMITH: I don't know who Mr. Swann is,  
19 so there's nothing that the Board has said so far that should  
20 indicate to you that you should bring people in that you  
21 don't plan to bring in. All of the Board members agree with  
22 that.

23 MR. BIELAWSKI: If all we have left is the  
24 panel and a few additional questions for Mr. Holmbeck on  
25 the balance of his testimony, I think we can definitely

1 finish up tomorrow by noon. At least insofar as my cross  
2 examination and voir dire is concerned, it should not take  
3 very long.

4 JUDGE SMITH: So continuing down, Mr. Maloney.  
5 What do you plan to do about Mr. Swann, then?

6 MR. SAVAGE: Mr. Swann called Mr. Holmbeck --  
7 Mr. Holmbeck called Mr. Swann this morning. He no longer  
8 wants to come and be a witness subject to cross examination.  
9 He indicated that his concerns are still real; he does not  
10 back down from them. He just doesn't like to be questioned  
11 by a lot of lawyers and would just like to work with the  
12 emergency planning officials to solve his concerns. He  
13 thinks that is a better way. I have to say I agree with him.  
14 We are withdrawing his testimony.

15 JUDGE SMITH: How about Mr. Maloney?

16 MR. SAVAGE: Mr. Maloney and Mr. Turner would  
17 be available to be witnesses tomorrow, but I would rather  
18 get the surveys done. I don't feel as though I want to ask  
19 them to sit here and then not be heard because they are  
20 very busy people.

21 JUDGE SMITH: Is that the same with Miller?

22 MR. SAVAGE: Miller is out of town until Monday.  
23 That leaves Mr. Montel.

24 JUDGE SMITH: What is your position with Miller?

25 MR. SAVAGE: He still is agreeing to be a witness.

1 The only witness that's withdrawing is Mr. Swann. As far  
2 as introducing the witnesses and their testimony into evidence,  
3 we would have to do that after Friday at the Board's  
4 convenience.

5 JUDGE SMITH: As to Mr. Miller, I'm trying to  
6 determine whether we're going to have to have another session  
7 on emergency planning.

8 MR. SAVAGE: I would like Mr. Miller to appear  
9 here, yes.

10 JUDGE SMITH: Mr. Montel?

11 MR. SAVAGE: Yes.

12 JUDGE SMITH: You want him to appear?

13 MR. SAVAGE: Yes.

14 JUDGE SMITH: So you do want Miller, Montel,  
15 Turner and Maloney. How about Lamb?

16 MR. SAVAGE: Mr. Holmbeck tells me he can be  
17 available tomorrow, too. Again -- I would like him to  
18 appear. I would like the rest of the affiants to appear.  
19 I will talke to Applicant and Mr. Goldberg and see if we  
20 can stipulate some of them out. Am I assuming now that you  
21 do not want to question any of the affiants, and there would  
22 not be that reason to have them appear?

23 JUDGE SMITH: Yes. You can say that you should  
24 not bring anybody here for the Board's benefit.

25 MR. SAVAGE: Then we may not have to bring anybody.



1 We'll have to sit down and talk and see.

2 JUDGE SMITH: I just noticed now I've had two  
3 versions of Mr. Bowes. I'm not sure which one we just  
4 received into evidence. The one I thought we were receiving  
5 had an affidavit in front of it.

6 MR. SAVAGE: It should. I will come up and look  
7 at it and tell you. I don't know how you got two different  
8 copies up there. There was a previous copy that you had --

9 JUDGE SMITH: I had one received in my office  
10 February 23rd, 1983.

11 MR. SAVAGE: That would be the original which  
12 has now been corrected. I just gave you a corrected version  
13 this morning for your convenience.

14 JUDGE SMITH: I see, all right. I'm somewhat  
15 concerned about the Westinghouse matter. Do you have any  
16 further information on that?

17 MR. MILLER: I have some, and Mr. Copeland has  
18 some, I believe. It comes up in the context of overall  
19 scheduling for next week. I think Mr. Copeland is handing  
20 out right now corrected testimony of Mr. Timmons, a revised  
21 versio of Mr. Butterfield's testimony which was just given  
22 to you earlier this afternoon. I urge you to discard the  
23 first.

24 JUDGE SMITH: He took it back.

25 MR. MILLER: Okay. The scheduling of our

1 witnesses, which I believe is agreeable to all the parties  
2 is that we will start with the Westinghouse panel on Monday  
3 morning, and then take whatever witnesses. I believe Mr.  
4 Bridenbaugh still must be crossed, and then there will be  
5 one staff witness recalled.

6 I believe that you will be receiving a request  
7 from Mr. Gallo on Monday that the cross examination of the  
8 Westinghouse panel be conducted in camera because of the  
9 likelihood that the cross examination will cause these  
10 individuals to reveal information that is deemed proprietary  
11 by Westinghouse. They would make any showing required to  
12 satisfy the Board that such a procedure is warranted.

13 Dr. Levine is today, I am told, having -- it  
14 should be a minor operation -- on his hand. Mr. Gallo  
15 believes that he will be able to be here earlier than  
16 Friday, if required. But again, asks the Board's indulgence  
17 to be able to give you a better fix on that when he is here  
18 Monday morning.

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1                   With respect to any discovery directed after  
2 Levine, I made my statement for the record as to our being  
3 opposed to it. I have urged Mr. Gallo to talk directly to  
4 Mr. Thomas to determine whether or not that is, in fact,  
5 what Mr. Thomas wishes and what the nature and scope of  
6 any such discovery would be. I am confident the two of them  
7 can work it out to their satisfaction.

8                   We do not believe any discovery is warranted.  
9 Let's see what Mr. Thomas has in mind, and if necessary, we  
10 can do something in the evening.

11                   JUDGE SMITH: Who is the Staff witness that is  
12 being recalled?

13                   MR. GOLDBERG: I can address that. As you  
14 recall, last week there was some concern about Dr. Rajan's  
15 return. In terms of the sequence of appearance, I would  
16 propose that Dr. Rajan be recalled if necessary, following  
17 the Applicant's direct case consisting of the separate  
18 testimony of the individuals identified here.

19                   I think you also inquired about the status of  
20 the Westinghouse proprietary matter which we --

21                   JUDGE SMITH: That is what I was hoping we  
22 could get some further information on.

23                   MR. GOLDBERG: That was brought out yesterday.  
24 My understanding -- and it is not firsthand -- is that there  
25 will be a Westinghouse attorney present on Monday to formally

1 justify and otherwise explain what, if any, portions of  
2 the referenced transcript pages are proprietary.

3           One other scheduling matter. We were discussing  
4 the possibility of a May 23rd session on hydrology. I am  
5 advised of the unavailability of one of the Staff hydrology  
6 witnesses that week only in May. It might be something we  
7 might have to factor into our future scheduling considerations.

8           I would ask, relative to Dr. Levine's appearance,  
9 if we could get some idea as soon as possible about whether  
10 his appearance can be accelerated to during next week. It  
11 would really be advisable in terms of the intended appearance  
12 and participation of any Staff parties.

13           MR. MILLER: We will do the best we can. With  
14 respect to the unavailability of one Staff hydrology witness,  
15 perhaps that individual could appear next week so that  
16 at the end of the week of May 23rd, which is the first week  
17 we can resume, as I understand it, in fact, the record is  
18 closed insofar as the contentions that are presently before  
19 the Board. To put it off yet another week seems to me to  
20 be counterproductive because we are going to have -- we're  
21 always going to have conflicts with this many witnesses.

22           MR. GOLDBERG: The witness had intended, in fact,  
23 to introduce his testimony next week along with the other  
24 hydrology testimony. Whether it is feasible or desirable to  
25 introduce his testimony out of turn, whether the parties are

1 going to be prepared to receive it at that time I don't  
2 know. I think we ought to know that as soon as possible.  
3 I'm not the attorney handling the case and the witness is  
4 not under my direct management on that issue.

5 JUDGE SMITH: Okay. But there has to be some  
6 flexibility. I am just as convinced as ever that the  
7 schedule for next week with hydrology was not realistic.  
8 The way we look at it down the road it means -- it has not  
9 significance as far as the timing of our ultimate decision.

10 MR. MILLER: I understand, Judge. It's just  
11 that I would hate to see it slip off. The next week is a holiday  
12 week; it is Memorial Day, and we will be well into June if  
13 we don't try and wrap this up on the schedule that the Board  
14 suggested.

15 JUDGE SMITH: You want to get the problem out  
16 of your lap and into our lap.

17 MR. MILLER: Correct.

18 MS. JOHNSON: I would like to say that I have  
19 not, as I mentioned this morning, -- our attorney, David  
20 Thomas, is out of town and will not be back until Monday.  
21 He cannot be consulted as of now on this matter of Mr. Levine.  
22 As far as the hydrology goes, he cannot be consulted on that,  
23 either, at this point. And I have not been able to reach  
24 Dr. Wood. I would probably be able to reach Dr. Wood this  
25 evening, and then I can let you know about him and the week



1 of the 23rd.

2 JUDGE SMITH: Is there anything further this  
3 evening, then?

4 MR. MILLER: No, sir.

5 MR. GOLDBERG: No, sir.

6 JUDGE SMITH: All right. Then we will meet  
7 tomorrow at 8:30.

8 (Whereupon, at 4:20 p.m., the hearing in the  
9 above-entitled matter was recessed, to reconvene at 8:30  
10 a.m. the following day, Friday, April 22, 1983.)

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CERTIFICATE OF PROCEEDINGS

This is to certify that the attached proceedings before the  
NRC COMMISSION

In the matter of: Byron Nuclear Station Units 1 & 2

Date of Proceeding: Thursday, April 21, 1983

Place of Proceeding: Rockford, Illinois

were held as herein appears, and that this is the original  
transcript for the file of the Commission.

BARBARA WHITLOCK

Official Reporter - Typed

*Barbara Whitlock*

Official Reporter - Signature

TAYLOR ASSOCIATES

REGISTERED PROFESSIONAL REPORTERS  
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