

ORIGINAL

UNITED STATES
NUCLEAR REGULATORY COMMISSION

IN THE MATTER OF:

DOCKET NO: 50-456 OL
50-457 OL

COMMONWEALTH EDISON COMPANY

(Braidwood Station, Units 1 and 2)

LOCATION: JOLIET, ILLINOIS

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DATE: TUESDAY, MARCH 11, 1986

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NATIONWIDE COVERAGE

1 UNITED STATES OF AMERICA
2 NUCLEAR REGULATORY COMMISSION
3 BEFORE THE ATOMIC SAFETY AND LICENSING BOARD
4

5 -----X
6 In the Matter of: :
7 COMMONWEALTH EDISON COMPANY : Docket No. 50-456 OL
8 (Braidwood Station, Units 1 : 50-457 OL
9 and 2) :
-----X

10 Will County Court House
11 Courtroom #405
12 14 West Jefferson Street
13 Joliet, Illinois 60431

14 Tuesday, March 11, 1986

15 The hearing in the above-entitled matter reconvened
16 at 9:00 A. M.

17 BEFORE:

18 JUDGE HERBERT GROSSMAN, Chairman
19 Atomic Safety and Licensing Board
20 U. S. Nuclear Regulatory Commission
21 Washington, D. C.

22 JUDGE RICHARD F. COLE, Member,
23 Atomic Safety and Licensing Board
24 U. S. Nuclear Regulatory Commission
25 Washington, D. C.

JUDGE A. DIXON CALLIHAN, Member,
Atomic Safety and Licensing Board
U. S. Nuclear Regulatory Commission
Washington, D. C.

APPEARANCES:

1 On behalf of the Applicant:

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9 On behalf of the Nuclear Regulatory
10 Commission Staff:

11 STUART TREBY, ESQ.
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16 H. JOSEPH FLYNN, ESQ.
17 Federal Emergency Management Agency
18 Washington, D.C.

19 On behalf of the Intervenor:

20 MS. BRIDGET LITTLE ROREM,
21 117 North Linden Street
22 P.O. Box 208
23 Essex, Illinois 60935

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JANA S. FAIROW

LAWRENCE D. BUTTERFIELD, JR.

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EUGENE C. FIELD

DIRECT EXAMINATION BY MR. EDGAR: 857

1 JUDGE GROSSMAN: Good morning ladies and
2 gentlemen.

3 The hearing in the matter of the Braidwood
4 operating license is reconvened, this being the second
5 day of hearing, the first having been held on October
6 29, 1985.

7 Again, we will continue with emergency planning
8 and, hopefully, that will be completed this week.

9 I would like Counsel for the parties to introduce
10 themselves, and I ask that everyone speak into the
11 microphones.

12 Staff and Intervenor are going to have to share
13 that one microphone.

14 We will start with Mr. Edgar.

15 MR. EDGAR: My name is George Edgar. I am an
16 attorney in the Washington law firm of Newman &
17 Holtzinger.

18 To my immediate left is Mr. Thomas Schmutz of my
19 law firm; and immediately behind me is Mr. Donald
20 Silverman of my law firm.

21 JUDGE GROSSMAN: Ms. Rorem.

22 MS. ROREM: My name is Bridget Little Rorem,
23 and I am an Intervenor.

24 I am representing myself and other individual
25 Interveners, and Appleseed.

1 JUDGE GROSSMAN: Mr. Treby.

2 MR. TREBY: For the the NRC Staff, my name is
3 Stuart A. Treby, Assistant Chief Hearing Counsel.

4 Also appearing on behalf of the Staff is Miss
5 Elaine I. Chan, Staff Counsel.

6 Since the hearing section involves emergency
7 preparedness and offsite emergency preparedness matters,
8 the Government's case will be presented by the Federal
9 Emergency Management Agency. They have their own
10 counsel here, Mr. Flynn, and I will have him make his
11 own appearance at this time.

12 MR. FLYNN: I am H. Joseph Flynn, appearing
13 on behalf of the Federal Emergency Management Agency.

14 JUDGE GROSSMAN: Okay. We will begin with
15 some preliminary matters.

16 First, I think we want to discuss, in general,
17 subpoenas, because it appears to me that the practices
18 of some of the parties is somewhat different than my
19 practice with regard to subpoenas, and I think we ought
20 to have that clarified at the outset.

21 As far as I understand the NRC rules, they are
22 modeled after the Federal Rules of Civil Procedure.

23 Under those rules, subpoenas are ex parte matters.

24 They are issued under the Federal rules for either
25 depositions or a hearing.

1 Depositions must be properly noticed; that is, a
2 notice given to each party, that the depositions will be
3 held.

4 When the Notice of Deposition is served, a request
5 for subpoenas are made ex parte to the clerk, and there
6 is no requirement that notice be given to any other
7 party.

8 When it comes to a hearing, if the hearing is
9 scheduled, again, subpoenas are issued ex parte,
10 without notice being given to any other party.

11 Now, the practice that I have seen here is that
12 there hasn't been a Notice of Deposition, but I have
13 accepted the fact that the applications for subpoenas
14 for deposition were noticed on the parties, so we have
15 accepted that in lieu of notices of deposition.

16 Now, the only difference between the NRC rules and
17 the Federal rules, as far as I can see, is that there is
18 provision made for subpoenaing merely for production of
19 documents, under the NRC rules.

20 As to whether notice is required for production of
21 documents where there is no hearing being held is a
22 matter of conjecture. We haven't had that problem arise
23 yet, because the only subpoena for production of
24 documents that we have received, the only application
25 for subpoena had been served upon the other parties, so

1 that, in effect, whatever notice may have been required
2 was satisfied.

3 Now, I understand, some of the parties may feel
4 that this interpretation is incorrect, and I will be
5 happy to listen to them even now, or if they want more
6 time to research it after lunch; but, Mr. Edgar, you
7 appear eager to speak, so if there is any problem --

8 MR. EDGAR: Maybe I gave myself away.

9 I would like to be heard; and, however, I think
10 it's important, that we are here for evidentiary
11 hearings, and that we proceed with that and not -- I
12 don't want to extend the argument in any great detail.

13 The Board statements of the Federal rules and
14 practice in regard to subpoenas I don't argue with, in
15 the abstract.

16 However, I think we have to construe those
17 provisions in the context of the schedule adopted for
18 this proceeding, and the customary practices associated
19 with NRC proceedings.

20 In particular, we have here a Board Order that
21 established a schedule for filing pre-filed written
22 testimony.

23 As a matter of fundamental fairness, we expect the
24 parties to comply with that rule, we expect the parties
25 to have reasonable notice of what testimony will be

1 elicited, and we expect the hearings, therefore, to run
2 efficiently and fairly.

3 I think in this case the issuance of a subpoena or
4 the application for a subpoena coming at such a late
5 date in the hearing schedule, in effect, undercut those
6 notice provisions which are implicit in having pre-filed
7 written testimony.

8 JUDGE GROSSMAN: Mr. Edgar, before we proceed
9 any further, we have not prejudged the issue of whether
10 that witness will be heard.

11 MR. EDGAR: Okay.

12 JUDGE GROSSMAN: Our issuance of the subpoena
13 did not determine --

14 MR. EDGAR: All right.

15 JUDGE GROSSMAN: -- that question.

16 Now, the Intervenor is at risk for having to pay
17 the expenses of the witness if she subpoenas a witness
18 and it appears that he's not going to be heard, but
19 that's a separate matter now.

20 If you wish to discuss that, I don't see that it's
21 right for discussion at this point; but we can entertain
22 it, if you wish.

23 MR. EDGAR: Well, maybe I misunderstood the
24 Board.

25 What I am suggesting is a relatively simple point

1 here; that if this subpoena is to issue -- and I am
2 assuming now, having heard the Chairman, that the
3 subpoena -- the question of whether it will be
4 returnable and enforce -- and whether the Board will
5 maintain that, is an open question.

6 What I am suggesting to the Board is that, in this
7 instance, there is no -- there is a schedule impact on
8 the hearing; that if this subpoena is to be issued,
9 there must be concomitant provisions established by the
10 Board to accommodate that.

11 I am suggesting that, if the Board will issue that
12 subpoena, then we would like to get that witness on
13 right now, first, and hear him and reserve the
14 opportunity to review that transcript or to assess
15 matters at a brief break and determine then how we will
16 proceed with cross examination.

17 JUDGE GROSSMAN: Well, Mr. Edgar, I don't
18 think you understand fully that we did, in fact, issue
19 the subpoena.

20 MR. EDGAR: Yes.

21 JUDGE GROSSMAN: And that is not a matter
22 that I think is subject to attack.

23 What is subject to attack is Ms. Rorem's attempt to
24 have the witness testify, and there may be legitimate
25 reasons why the witness would be heard, notwithstanding

1 the witness was not listed.

2 It could be an impeaching witness or rebuttal
3 witness, something that made the appearance of the
4 witness necessary in Ms. Rorem's mind from the pre-filed
5 testimony that you served.

6 MR. EDGAR: Right.

7 JUDGE GROSSMAN: I don't know. I am only
8 speculating.

9 MR. EDGAR: Right. I'm sorry.

10 That's the problem I am having.

11 There is no showing on the face of Ms. Rorem's
12 application that the matters that she would seek to --
13 first of all, what those matters she would seek to
14 elicit are, where there is a need for that witness, why
15 that information would be relevant, why that information
16 couldn't be elicited otherwise from the witnesses that
17 are already scheduled.

18 We think without that showing it's very difficult
19 for yourself to stab in the dark and know why she has
20 applied for the subpoena and what the justifications are
21 for having that subpoena issued.

22 JUDGE GROSSMAN: Okay. Again, we seem to be
23 passing in the night.

24 What I am trying to say is that the issuance of the
25 subpoena itself does not --

1 MR. EDGAR: I am sorry.

2 JUDGE GROSSMAN: -- does not conclude the
3 issue, it does not mean we are going to hear the
4 witness; and what I am saying, the only one, basically,
5 who can attack the issuance of the subpoena is the
6 witness himself, who they might have to quash for his
7 own or her own reasons.

8 MR. EDGAR: All right.

9 JUDGE GROSSMAN: What we would ordinarily
10 have is an objection to the presentation of the witness
11 when Ms. Rorem attempts to present that witness, for
12 grounds that the witness may not have been listed or
13 whatever grounds you might have; but I don't see
14 anything objectionable about discussing it right now,
15 since everything is out on the open; and you may want to
16 attack her calling a witness at this point.

17 Let me say I understand the witness has not been
18 served.

19 You may be doing Ms. Rorem a favor by having it
20 discussed now, and perhaps it will save her the fees if
21 the witness is not going to be called.

22 But I would suggest that, notwithstanding whatever
23 discussion we have now, things that are said by your
24 witnesses in cross examination may indicate some
25 necessity for calling her witness to rebut them or to

1 impeach your witnesses; so we can't be sure that any
2 discussion now would be dispositive.

3 Now, I don't know if everything I am saying is
4 understandable or whether you accept that, but we will
5 see.

6 MR. EDGAR: I understand.

7 I think I understand.

8 We object to the testimony of the witness, to the
9 calling of the witness, on the grounds of no showing of
10 what Ms. Rorem hopes to elicit, no showing of relevance,
11 no opportunity for us, under the rules established for
12 this proceeding, to prepare, there is no showing of need
13 for the witness, there is no showing that the same
14 information can't be elicited from existing witnesses.

15 The attempt to bring this witness on and hear
16 testimony of this witness is untimely. Ms. Rorem did
17 not update discovery to give us advance notice. The
18 testimony date has long since passed.

19 There is no showing here of any efforts to obtain
20 the cooperation of this witness or, indeed, to obtain
21 the cooperation of the parties.

22 This will have a schedule impact. It will create
23 uncertainty in regard to the schedule. We think it's
24 unfair and unreasonable and we, therefore, object.

25 JUDGE GROSSMAN: Okay. Ms. Rorem, you

1 understand now the issue is whether you should be able
2 to call the witness in the absence of your having listed
3 that witness and indicated the nature of the witness'
4 prospective testimony.

5 Now, do you wish to --it's your chance to respond
6 to that.

7 MS. ROREM: I was unaware of the need for my
8 showing that I had attempted to solicit the testimony of
9 this person willingly. That's the first thing I wish to
10 say.

11 I did, as a matter of fact, attempt for -- at some
12 length -- to attempt -- I did attempt to solicit his ,
13 testimony.

14 He was not willing to be a willing witness.

15 I did not know that -- and I am still not sure I
16 agree -- that there was a necessity for my disclosing
17 this person's name as a witness when he was not going to
18 be a willing witness; and I find it very difficult to
19 understand how I could have pre-filed testimony when he
20 was not willing to be a witness.

21 I did think over the matter for several days or a
22 week, because I thought that perhaps I could elicit the
23 information which I wished this witness to present from
24 the testimony of the Applicant's witnesses and the NRC
25 Staff's witnesses.

1 When I read their testimony, it became more and
2 more clear to me that this person had important evidence
3 that was contradictory to some of the evidence contained
4 in the pre-filed testimony of the Applicant and the NRC
5 Staff.

6 I read the Code of Federal Regulations, 10 CFR
7 2.720, and I did not understand any way in which I was
8 doing something improperly.

9 I think that my application stated enough about who
10 this person is, what position and responsibilities he
11 holds, to explain why his testimony is important.

12 JUDGE GROSSMAN: Okay. Let me say, first of
13 all, that at the time you made the application for the
14 subpoena, the deadline had already passed on submitting
15 pre-filed testimony.

16 MS. ROREM: Yes.

17 JUDGE GROSSMAN: But you do raise some valid
18 points here; one being that -- well, let me ask you
19 this:

20 Is the nature of what you attempted to -- will
21 attempt to elicit from that witness stated in your offer
22 of proof; have you covered the subject matter there?

23 MS. ROREM: Fairly much, yes.

24 I am trying to think of this -- some of the
25 specifics; but I think it is all covered in a general

1 way.

2 Some of it is also covered under Contention 1(b),
3 for -- which was accepted.

4 JUDGE GROSSMAN: Well, let me suggest that if
5 Ms. Rorem cross examines your witnesses and does not get
6 the right answer, or has gotten -- in her mind -- or has
7 gotten a wrong answer already in your pre-filed
8 testimony, I would think that it would be appropriate
9 for her to call another witness to come up with
10 contradictory testimony or impeaching testimony.

11 I don't see anything that would violate the rule
12 for filing pre-filed testimony.

13 The parties were on notice that Ms. Rorem was going
14 to cross examine your witnesses, and there are points
15 that she made in her offer of proof that your witnesses
16 should have been prepared to discuss.

17 Now, it would seem to me that the witness would
18 then be in the nature of a rebuttal witness or an
19 impeaching witness, and I don't see any prohibition
20 against her calling a witness for that; but I don't want
21 to deprive Staff of -- including FEMA -- of an
22 opportunity to discuss this matter, also; so let me call
23 on Staff, and then we will get back to you, Mr. Edgar,
24 as to what your position is on this matter.

25 Mr. Flynn.

1 MR. FLYNN: Thank you.

2 Your Honor, the first thing I want to say is that
3 the NRC Staff and FEMA support the position articulated
4 by the Applicant.

5 The next point that I would like to make is that,
6 from the discussion so far, it appears that the role of
7 the witness would be limited to that of rebuttal.

8 It's not clear to me that, in fact, is what Ms.
9 Rorem intends; and I think, before I can respond in a
10 complete way to the question of should the witness be
11 allowed to testify, it would be helpful to get a more
12 complete summary from Ms. Rorem of what she expects the
13 testimony to be.

14 JUDGE GROSSMAN: Okay. When I say rebuttal,
15 I would assume that the parties were on notice that Ms.
16 Rorem was going to cross examine Applicant's witness or
17 directly examine them on the matters that she brought up
18 in her offer of proof.

19 Is that correct?

20 Is that your understanding, Mr. Flynn and Mr.
21 Edgar?

22 MR. EDGAR: That's correct.

23 JUDGE GROSSMAN: Okay. So to the extent that
24 she does not get the correct answers in her mind from
25 your witnesses on those matters that she has brought up

1 in her offer of proof, I wouldn't think there is any
2 dispute as to whether or not it could be considered
3 rebuttal testimony.

4 MR. EDGAR: She she has an opportunity for
5 rebuttal, we have an opportunity for rebuttal. I don't
6 deny that.

7 But the thing we are missing here as a basic set of
8 fact is just what it is she hopes to elicit, and just
9 what it is that falls within her offer of proof that
10 would be obtained from this witness.

11 We are speculating at this point. We can't know
12 that because she hasn't stated it.

13 JUDGE GROSSMAN: And the reason we are
14 speculating is that it really isn't right for
15 determination now, until Ms. Rorem puts a witness on and
16 attempts to ask him questions. That's why I suggested
17 that at the beginning, because I don't think we can make
18 a dispositive determination in advance.

19 MR. TREBY: Mr. Chairman.

20 JUDGE GROSSMAN: I think it's important to
21 set the ground rules now as to what she is doing now.

22 If Ms. Rorem attempts to open some other subjects
23 with that witness, I would certainly expect objections
24 from the parties, and I am not sure that the Board
25 itself would not --

1 MR. EDGAR: Yes.

2 JUDGE GROSSMAN: -- object to any such
3 matters.

4 Mr. Flynn or Mr. Treby.

5 MR. TREBY: Well, I just wanted to make one
6 comment, and that is:

7 The thing I guess that is troubling the Staff is
8 that, in order for a subpoena to be issued, the
9 requirement is a showing of general relevancy; and I
10 guess, as has been stated here, we are having some
11 difficulty determining what is the general relevancy of
12 Mr. Dvorak's testimony.

13 What I am hearing is that, during the course of the
14 direct testimony of the Applicant and the FEMA
15 witnesses, cross examination will take place and,
16 perhaps, during that cross examination, matters will
17 come up which will require rebuttal, and that is what
18 this witness is for; but that's pure speculation. We
19 don't at this point know what is the general relevance
20 of Mr. Dvorak.

21 JUDGE GROSSMAN: Well, Mr. Treby, what I am
22 suggesting is that the question of general relevance is
23 a matter only for the Board to consider. It is an ex
24 parte matter. It's not a matter that's open to
25 discussion by the parties.

1 As long as the proponent of the evidence or the
2 seeker of the subpoena suggests some general relevance
3 that is satisfactory to the Board, the subpoena is
4 issued, and without discussion.

5 Your role comes when the witness is going to be
6 called by Ms. Rorem.

7 We were satisfied that there was a showing of
8 general relevance, and that's the end of the matter of
9 the subpoena, not the end of the matter of calling of
10 the witness.

11 MR. EDGAR: Your Honor, I think we understand
12 what's been discussed.

13 In our view, it's premature for the Board to rule.

14 We would like to call our witnesses to the stand
15 right now.

16 JUDGE GROSSMAN: Okay. That sounds fine.

17 Is there in any further discussion on this or any
18 other preliminary matters?

19 MR. FLYNN: No, your Honor.

20 JUDGE GROSSMAN: Okay. Mr. Treby, if you
21 wish, after lunch, when everyone has had a chance to
22 research it, or some other time in the future, to
23 discuss a matter further, in general, as to subpoenas
24 and the calling of witnesses, we will be happy to
25 entertain that further discussion; so you may feel free

1 at any time in the future to bring the matter up.

2 MR. TREBY: Thank you, Judge Grossman.

3 JUDGE GROSSMAN: Okay. Fine.

4 Why don't we have Mr. Edgar call the first witness?

5 MR. EDGAR: We are calling a panel of Jana S.
6 Fairow and Lawrence D. Butterfield.

7 Will they please take the stand.

8 JUDGE GROSSMAN: Mr. Butterfield, I believe
9 you have been sworn already?

10 WITNESS BUTTERFIELD: That is correct, sir.

11 JUDGE GROSSMAN: And you continue to be under
12 oath.

13 Miss Fairow, I don't believe you have been, have
14 you?

15 WITNESS FAIROW: No, I haven't.

16 JUDGE GROSSMAN: Will you stand, please, and
17 raise your right hand.

18 (The witness was thereupon
19 duly sworn.)

20 JUDGE GROSSMAN: Fine.

21 Why don't you be seated.

22 MR. EDGAR: Your Honor, I have a series of
23 exhibits to mark for identification.

24 It will be a logistics problem.

25 If you will indulge me, I will go through the list

1 of the exhibits and ask that they be marked for
2 identification in sequence.

3 JUDGE GROSSMAN: That's fine.

4 MR. EDGAR: The first document that I would
5 like to have marked for identification is a document
6 entitled, "Testimony" -- excuse me --

7 JUDGE GROSSMAN: Well, excuse me for a
8 second, Mr. Edgar.

9 Miss Rorem, you had made a request, ex parte, and I
10 don't know if you wish to have a five-minute recess now
11 with regard to the subpoenas.

12 Have you made a decision as to whether you wish to
13 pursue the matter or do you -- if you have and you wish
14 to have a recess now and make Application to the Board,
15 that's fine with us. We will take a recess.

16 MS. ROREM: That's okay. I would like to do
17 that.

18 JUDGE GROSSMAN: Okay. Why don't we take a
19 five-minute recess then.

20 (Whereupon a recess was had, after which the
21 deposition resumed as follows:)

22 JUDGE GROSSMAN: Okay. We are back in
23 session, and the witnesses have resumed the stand.

24 Mr. Edgar.

25 MR. EDGAR: Yes.

1 I have handed to the Reporter four copies of a
2 series of documents, and I would request that they be
3 marked for identification as follows:

4 I will read the title of the document.

5 First, as Applicant's Exhibit 2, "Testimony of
6 Lawrence D. Butterfield, Jr., and Jana S. Fairrow,
7 regarding Contentions 1(a) and 1(b) parens (Emergency
8 Planning) close parens.

9 I request that that be marked as Applicant's
10 Exhibit 2.

11 JUDGE GROSSMAN: So marked.

12 (The documents were chereupon
13 marked Applicant's Exhibit No. 2 for
14 identification as of the 11th day of
15 March, 1986.)

16 MR. EDGAR: Next, Applicant Exhibit 3, a
17 document entitled, "Illinois Plan for Radiological
18 Accidents, Volume 1, State General Plan, Rev 2, June,
19 1985."

20 I would like that -- request that be marked for
21 identification as Applicant's Exhibit 3.

22 JUDGE GROSSMAN: So marked.

23 (The documents were thereupon marked
24 Applicant's Exhibit No. 3 for
25 identification as of the 11th day of

1 March, 1986.)

2 MR. EDGAR: Exhibit 4, "Illinois Plan For
3 Radiological Accidents, Volume 7, Preliminary Rev 0,
4 August, 1985."

5 I would like that to be marked as Exhibit 4,
6 please.

7 JUDGE GROSSMAN: It is so marked.

8 (The documents were thereupon marked
9 Applicant's Exhibit No. 4 for
10 identification as of the 11th day of
11 March, 1986.)

12 MR. EDGAR: Exhibit 5, "Illinois Plan For
13 Radiological Accidents, Volume 7, Standard Operating
14 Procedures, Preliminary Rev 0, August, 1985."

15 I request that be marked for identification as
16 Applicant's Exhibit 5.

17 JUDGE GROSSMAN: So marked.

18 (The documents were thereupon marked
19 Applicant's Exhibit No. 5 for
20 identification as of the 11th day of
21 March, 1986.)

22 MR. EDGAR: Exhibit 6, "Commonwealth Edison
23 Company Generating Stations Emergency Plan, Revision 5,
24 July, 1985."

25 I request that that be marked for identification as

1 Applicant's Exhibit No. 6.

2 JUDGE GROSSMAN: So marked.

3 (The documents were thereupon marked
4 Applicant's Exhibit No. 6 for
5 identification as of the 11th day of
6 March, 1986.)

7 MR. EDGAR: 7, "Commonwealth Edison Company
8 Generating Stations Emergency Plan, Braidwood Annex,
9 Revision 0, October, 1984."

10 I request that that be marked for identification as
11 Applicant's Exhibit 7.

12 JUDGE GROSSMAN: So marked.

13 (The documents were thereupon marked
14 Applicant's Exhibit No. 7 for
15 identification as of the 11th day of
16 March, 1986.)

17 MR. EDGAR: 8, "Commonwealth Edison Company
18 Generating Stations Emergency Plan Braidwood Annex,
19 Revision 1, March, 1986," and I ask that that be marked
20 for identification as Applicant's Exhibit 8.

21 JUDGE GROSSMAN: So marked.

22 (The documents were thereupon marked
23 Applicant's Exhibit No. 8 for
24 identification as of the 11th day of
25 March, 1986.)

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JANA S. FAIROW

LAWRENCE D. BUTTERFIELD, JR.

called as witnesses by counsel for the Applicant, having first been duly sworn by the Chairman, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. EDGAR:

Q Could each of the witnesses please state their name and address for the record?

A (WITNESS BUTTERFIELD) My name is Lawrence D. Butterfield, Jr. I reside at 25 South Wright Street, Naperville, Illinois.

A (WITNESS FAIROW) My name is Jana S. Fairrow. My address is 114 West Main, Morris, Illinois.

Q Do you have before you a copy of Applicant's Exhibit 2?

A (WITNESS BUTTERFIELD) Yes, I do.

A (WITNESS FAIROW) Yes.

Q Miss Fairrow, are you familiar with Applicant's Exhibit 2?

A (WITNESS FAIROW) Yes, I am.

Q How did you come to be familiar with it?

A (WITNESS FAIROW) I am responsible for the preparation of portions of it.

Q Which portions?

A (WITNESS FAIROW) Portions dealing specifically with

1 offsite emergency planning.

2 Q Do you have any corrections or additions you would like
3 to make to that testimony?

4 A (WITNESS FAIROW) Yes, I do.

5 Q Could you please read them into the record?

6 (Indicating.)

7 A (WITNESS FAIROW) On Page 23.

8 JUDGE COLE: Is that microphone on?

9 Can you hear her out there?

10 JUDGE GROSSMAN: I am not sure it is.

11 MR. EDGAR: I am having a little trouble
12 hearing.

13 JUDGE COLE: Could you tap on the mike to see
14 if it's working?

15 WITNESS BUTTERFIELD: (Indicating.)

16 MR. EDGAR: Maybe if you swing it ever so
17 slightly?

18 WITNESS FAIROW: (Indicating.)

19 MR. EDGAR: If it will.

20 WITNESS FAIROW: (Indicating.)

21 A (WITNESS FAIROW) On Page 23, the third line from the
22 bottom, it should read, "IPRA comma Braidwood," insert
23 "Braidwood."

24 On Page 31 --

25 JUDGE GROSSMAN: I am sorry. We didn't quite

1 get that.

2 JUDGE COLE: There are two IPRAS on there.

3 A (WITNESS FAIROW) Okay.

4 It should be the first IPRA.

5 JUDGE GROSSMAN: Instead of the period, a
6 comma?

7 A (WITNESS FAIROW) Right.

8 JUDGE GROSSMAN: And then "Braidwood."

9 A (WITNESS FAIROW) And then, "Braidwood, Volume 7."

10 JUDGE GROSSMAN: Okay.

11 JUDGE COLE: Okay.

12 JUDGE GROSSMAN: Fine.

13 A (WITNESS FAIROW) Page 31, the fourth line from the
14 top, the sentence begins, "Use of NARS form." Delete the
15 word "assures" and insert "insures."

16 Page 35, the seventh line from the top, it begins,
17 "protective action," should be plural.

18 JUDGE COLE: It should be "actions."

19 JUDGE GROSSMAN: Okay.

20 A (WITNESS FAIROW) On Page 60, Answer 82, it should
21 begin, "Signs will be offered." Delete "provided" and
22 replace it with "offered."

23 That's all.

24 BY MR. EDGAR:

25 Q Miss Fairow, subject to those corrections, are the

1 statements made in Applicant's Exhibit 2 true and
2 correct to the best of your information and belief?

3 A (WITNESS FAIROW) Yes, they are.

4 Q Mr. Butterfield, subject to -- how did you come to be
5 familiar with Applicant's Exhibit 2?

6 A (WITNESS BUTTERFIELD) I was responsible for the
7 preparation of the portion dealing with onsite emergency
8 planning.

9 Q Subject to the corrections indicated by Miss Fairrow, are
10 the statements in Applicant's Exhibit 2 true and correct
11 to the best of your information and belief?

12 A (WITNESS BUTTERFIELD) Yes, they are.

13 Q Miss Fairrow, do you adopt Applicant's Exhibit 2 as your
14 sworn testimony in this proceeding?

15 A (WITNESS FAIROW) Yes, I do.

16 Q Mr. Butterfield, do you adopt Applicant's Exhibit 2 as
17 your sworn testimony in this proceeding?

18 A (WITNESS BUTTERFIELD) Yes, I do.

19 MR. EDGAR: Your Honor, I would like to offer
20 Applicant's Exhibit 2 into evidence, and ask that it be
21 bound into the transcript as if read.

22 JUDGE GROSSMAN: Ms. Rorem, any objections?

23 MS. ROREM: No objections.

24 JUDGE GROSSMAN: Staff?

25 MR. FLYNN: No objection.

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JUDGE GROSSMAN: Fine.

Admitted and so bound into the record.

THE REPORTER: Yes, sir,

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of: :
COMMONWEALTH EDISON COMPANY : Docket Nos. 50-456
(Braidwood Station, Units 1 and 2) : 50-457

TESTIMONY OF LAWRENCE D. BUTTERFIELD, JR., AND JANA S. FAIROW
REGARDING CONTENTIONS 1(a) AND 1(b)
(EMERGENCY PLANNING)

- Q:1 Mr. Butterfield, please state your full name and title.
- A:1 My name is Lawrence D. Butterfield, Jr., and I am
Manager of the Nuclear Services Technical Department for
Commonwealth Edison Company ("CECo").
- Q:2 What are your duties and responsibilities with respect
to emergency planning?
- A:2 In my current position, I am responsible for the
Emergency Planning Group which develops and maintains
CECo's onsite emergency plans for its nuclear power
plants, and develops plans and schedules for the
emergency planning drills with offsite authorities. The
Emergency Planning Group also works with offsite
authorities to develop, modify and implement their
emergency plans. The Group's activities include day-
to-day contact with offsite officials, as well as

APPLICANT'S EX No. 2 i 4
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individuals residing in the 10 mile plume exposure pathway Emergency Planning Zones ("EPZ") surrounding the Company's nuclear power reactors. I participate with the Emergency Planning Group by taking part in various emergency drills both within CECo facilities and at various offsite facilities. I am involved in decisions relating to significant aspects of the emergency planning issues as they evolve.

Q:3 Describe your educational background and professional experience.

A:3 I have a Bachelor's Degree in Electrical Engineering and a Master's Degree in Nuclear Engineering, both from the University of Florida. I am also a Registered Professional Engineer in the State of Illinois.

Shortly after receiving my Master's Degree in Nuclear Engineering, I joined CECo as a member of the Technical Staff at Dresden Station. I have been with CECo about nineteen years. During that time, I have had assignments at Dresden Station as Administrative Assistant to the Superintendent, as Supervisor of Engineering Analysis in the Nuclear Fuel Services Department, as an Engineer in the Nuclear Licensing Department and as a Section Engineer in the Station Nuclear Engineering Department. I assumed my present position in June 1984.

I have been involved in emergency planning for nuclear power plants for at least the last six years. I have received training for various special assignments in the event of an emergency at Braidwood Station, including Technical Support Manager, Engineering Director, and Intelligence Director. I have also participated in at least one drill/exercise a year for about the last six years and I have been a controller at other exercises. Recently, I served as the news liaison and liaison between CECO and offsite organizations. It was my responsibility in the news liaison position to obtain the technical information about accident conditions from the Company's engineers and relate that information, in laymen's terms and in an accurate manner, to the news information officials who represent the Company and the State.

Q:4 Ms. Fairrow please state your full name and title.

A:4 My name is Jana S. Fairrow and I am employed by the Illinois Emergency Services and Disaster Agency ("IESDA") as the Radiological Emergency Planning Supervisor.

Q:5 What are your principal duties and responsibilities with respect to emergency planning for the Braidwood Station?

A:5 As the Radiological Emergency Planning Supervisor, I am responsible for developing, maintaining and supervising the Illinois Plan for Radiological Accidents ("IPRA")

for all seven nuclear power stations in Illinois including the Braidwood Station. These duties include: supervising planning, training, and exercises; coordinating with other State agencies and Federal agencies in the development of the IPRA; interpreting Federal planning guidance; developing and implementing IPRA policies; directing IPRA personnel and resources; and keeping current with all aspects of radiological emergency planning.

Q:6 Describe your educational background and professional experience.

A:6 Prior to joining IESDA in October, 1985, I was employed by Impell Corporation in their Systems Engineering Division. Impell provides consulting services to the State of Illinois and assists in the preparation of offsite radiological emergency plans for the State of Illinois. I was assigned to the IESDA emergency planning group as an emergency planner for the State of Illinois. In that capacity, I was involved in the preparation of offsite emergency plans and procedures for Dresden Station, Byron Station, and Braidwood Station. I was also lead planner for the revision of the State General Plan (Volume I) of IPRA that was completed June, 1985. Prior to joining Impell I was employed by IESDA from August, 1982 to December, 1983 as Administrative Rules Coordinator. In that position, my

responsibilities included: administration of IESDA's rulemaking; review and evaluation of public comment on proposed rules; and review of State and Federal laws, regulations and programs which affect IESDA. I graduated from the University of Illinois in 1982 with a B.A. in Political Science. I have also taken graduate courses in legal studies at Sangamon State University and am six hours away from completing my M.A. degree.

Testimony Regarding Contention 1(a)

Q:7 What is the purpose of this portion of your testimony?
A:7 In the Licensing Board's January 31, 1986 Memorandum and Order, the Board accepted for litigation under Contention 1(a) various matters alleged by the Intervenor in its October 25, 1985 Motion for Reconsideration in the Form of an Offer of Proof ("Offer of Proof" Issues 2, 3, 4 and 6). It limited litigation of those issues, however, to specific matters contained in Intervenor's January 21, 1986 Reply to Applicant and NRC Staff Motions for Summary Disposition on Offer of Proof Issues ("Reply"). Memorandum and Order (January 31, 1986) p. 11. The purpose of this portion of our testimony is to address the emergency planning issues encompassed within Contention 1(a) as admitted by the Licensing Board's Memorandum and Order.

Q:8 Please describe the general structure and organization of the emergency plan for Braidwood Station?

A:8 The emergency plan for Braidwood Station consists of an onsite plan (Commonwealth Edison's "Generating Stations Emergency Plan" or "GSEP") and an offsite plan -- IPRA. IPRA is organized into two major elements: the State General Plan (Volume I Rev. 2, June 1985) and the site specific plans (Volumes II through VIII). IPRA-Braidwood is Volume VII (Preliminary Rev. 0, August 1985). IPRA Volume VII is accompanied by a set of Standard Operating Procedures ("SOPs") which provide detailed guidance to responsible officials with respect to such matters as notification, traffic control, sheltering, evacuation and re-entry.

Volume I, IPRA-State General Plan, presents a general overview of IPRA. Volume I discusses the concept of operations, chain of command, communications network and the coordinated response of all participants during an accident at a nuclear power station. It deals specifically with the responsibilities of State agencies involved in the response to an accident. The site specific volumes of IPRA address the responsibilities of the cognizant local governments for emergency planning matters within the EPZs. State agencies which are involved through their district offices are also discussed in the site specific volumes.

The site specific volumes apply the general principles and guidance of Volume I to the particular concerns associated with each of the EPZs for the nuclear power stations located in Illinois. These volumes provide detailed procedures for the actions to be taken during and after a nuclear emergency, from initial notification and warning, through implementation of protective and parallel actions, to eventual recovery and re-entry.

Q:9 Would you explain the development of the IPRA?

A:9 An extensive planning effort has gone into the development of the IPRA as it relates to the Braidwood Station. The IPRA was developed in cooperation with cognizant State, county and municipal officials. IPRA is not intended to address every possible scenario which might occur; rather, IPRA was developed in a manner so that it may be adapted for specific situations by those persons responsible for implementing IPRA.

Q:10 Describe the GSEP.

A:10 The GSEP contains general information applicable to all of CECO's nuclear power plants. The current version of the GSEP is revision 5, dated July 1985. Site specific information is provided in the Braidwood Annex to the GSEP. The current Braidwood Annex is revision 0, dated October 1984. CECO also has implementing procedures

("Emergency Plan Implementing Procedures" or "EPIPs") which further delineate the responsibilities of cognizant CECO employees in the event of an emergency.

Q:11 Would you describe the respective responsibilities of the State, county, and municipal governments under IPRA?

A:11 In the event of an emergency, IPRA provides for response mechanisms at the State, county, and municipal levels of government. At the State level, the Governor will be the ultimate decision-maker for the overall emergency response. Under him, IESDA and the Illinois Department of Nuclear Safety ("IDNS") will handle, respectively, the operational aspects and the technical aspects of State emergency activities.

Q:12 What are the responsibilities of IDNS?

A:12 The responsibilities of IDNS are to coordinate the total radiological assessment of, and response to, radiological emergencies. IDNS will analyze all available technical information and assess the implications and consequences of the radiological emergency. In addition, IDNS performs various technical functions including food, water and milk control, radiation exposure control for evacuees and emergency workers and confirmatory accident assessment. During an emergency situation, IDNS will make protective action recommendations to the Governor and IESDA.

The IDNS response to a radiological emergency utilizes two functional sub-groups. They are the Radiological Emergency Assessment Center ("REAC") and the Radiological Assessment Field Team ("RAFT"). The IDNS has established REAC at its Springfield headquarters. REAC will serve as the State command location for all (State-related) radiological aspects of a nuclear incident. The Manager of the Office of Nuclear Facility Safety of IDNS, or his designated alternate, is in command of REAC. RAFT has been organized to perform the field radiological functions of confirmatory accident assessments during a nuclear emergency. RAFT consists of a Mobile Command Center, a Mobile Nuclear Laboratory, and monitoring and sampling teams.

Q:13 What are the responsibilities of IESDA?

A:13 In the event of a nuclear emergency, IESDA is responsible for overall coordination of the operational response functions at all levels of government. IESDA has the programmatic responsibility for implementing protective actions for the public as directed by the Governor. IESDA will coordinate the dissemination of the Governor's decision for recommended protective actions and will coordinate the distribution of resources and personnel necessary to implement those protective actions. The IESDA Director is the principal coordinator of the State's operational response and

serves as the liaison between the Governor and local governments for the implementation of protective action recommendations.

During an emergency, IDNS and IESDA will maintain contact with CECO officials to ensure that the status of the plant, and its potential or actual radiological impact, are fully understood. The Governor's role, as well as the roles of IESDA and IDNS, are described in IPRA Vol. I, Ch. 4, pp. 3-6; Ch. 5, pp. 1-10; Ch. 6, pp. 1-8. Other responsible State agencies, including the Illinois State Police, Department of Transportation, Environmental Protection Agency, Department of Conservation, and the Commerce Commission, will provide assistance. The responsibilities of these agencies are described in IPRA Vol. I, Ch. 6, pp. 11-47.

Q:14 Please describe the State Emergency Operations Center.

A:14 The State Emergency Operations Center (EOC) in Springfield, serves as the principal operational command center for State personnel during radiological emergencies, with local coordination of State response activities handled by the State Forward Command Post. The State EOC is equipped with a variety of communications equipment including the Nuclear Accident Reporting System ("NARS"), 1/ extensive radio capabilities,

1/ NARS is described in greater detail in response to questions 43-45.

dedicated phone lines, and commercial phone lines. The State EOC is staffed by IESDA personnel, as well as representatives of the Governor, IDNS, and various State agencies. The State Forward Command Post is a near site extension of the State EOC and is used to allocate State resources and personnel to local governments that have requested assistance. The State Police, Department of Transportation, Department of Conservation, IDNS, and the National Guard will be represented at the State Forward Command Post.

Q:15 Would you describe the responsibilities of the county and municipal governments?

A:15 At the county level, the overall emergency response objective will be to implement the State's overall direction to protect the public health and safety. This will involve the coordination and allocation of resources. Each county has established a county EOC. Emergency activities will be directed in each county EOC by the county Board Chairman, and coordinated by the county ESDA Coordinator. The county EOCs are in turn responsible for coordinating with municipal EOCs. The county EOCs will be informed by the State EOC via NARS as to the protective actions which must be implemented. These recommendations will then be disseminated to the

municipal governments within the counties' jurisdiction. The responsibilities of the counties in the event of an emergency are described in IPRA Vol. VII, Ch. 2-4.

Q:16 What are the responsibilities of the municipalities in the event of an emergency?

A:16 At the municipal level, emergency activities will be coordinated in municipal EOCs under the respective mayors or village presidents. The municipal EOCs are responsible for ensuring that the local emergency response organizations such as the fire department, police department, school superintendent and others perform their respective duties. Representatives of these organizations will be stationed at the municipal EOCs to ensure timely response to conditions as they arise. The responsibilities of the municipal EOCs are described in IPRA Vol. VII, Ch. 2-4.

Q:17 Does IPRA contain provisions for notification of the public within the EPZ of recommended protective actions in the event of an emergency at the Braidwood Station?

A:17 Yes. IPRA was prepared with the recognition that one of the most important elements of an effective emergency response program is efficient notification of the public within the EPZ regarding recommended protective actions. A major objective of IPRA is to ensure the prompt and accurate dissemination of emergency information to the

public. Accordingly, a number of means are established to ensure that those persons located within the EPZ are adequately informed of such information.

Q:18 "Offer of Proof" Issue 2 states:

Applicant must develop and demonstrate its capability to provide through scripts and/or other media information, substantive emergency information to adequately inform the public of emergency information in the event of an accident at the Braidwood Station through all radio, TV or EBS stations in the ingestion pathway zone, so as to enable the public to effectively evacuate in the event of an emergency and to effectively re-enter the affected zone in the event of an emergency.

What Emergency Broadcast System ("EBS") messages are included in IPRA?

A.18 Over 100 pre-scripted EBS messages are provided in IPRA for the respective use of the State of Illinois and each of the three counties in the EPZ. IPRA Vol. I, Ch.2; Vol. VII, SOP-8. These pre-scripted messages were developed by IESDA public information personnel, and are similar to the EBS scripts approved by the Federal Emergency Management Agency ("FEMA"), for the other CECO nuclear plants.

There are messages for four different types of situations: 1) "for information only" messages are used when no protective actions have been recommended for the public but when the public should be made aware of the situation at the power plant so that they may prepare for a possible protective action recommendation; 2) "take shelter" messages are broadcast when the

Governor has issued a take shelter recommendation; 3) "evacuate" messages are used when the Governor has recommended an evacuation; and 4) "re-entry" messages are used when it is safe for the public to return to an evacuated area. IPRA Vol. I, Ch. 2, pp. 13-18; IPRA Vol. VII, SOP-8, SOP-11. Additional pre-scripted messages are provided for transmission over speaker equipped siren systems in public areas and mobile public address systems.

Although Offer of Proof Issue 2 refers specifically to evacuation and re-entry messages and to the "ingestion pathway zone," this testimony discusses "for information only" and "take shelter" messages as well, in order to provide a more complete description of the substantive emergency information provided in IPRA. Additionally, while EBS messages will be broadcast outside the EPZ, there is no requirement to do so.

Q:19 What is the purpose of the EBS messages?

A:19 The pre-scripted EBS messages are designed to convey essential emergency information in a concise manner that can be readily understood by the public. Inclusion of non-essential information in the messages which does not appreciably assist the public in taking prompt and appropriate protective action would hamper the overall effectiveness of the emergency response.

Q:20 Describe the EBS "for information only" messages.

A:20 Pre-scripted "for information only" messages (which would typically be directed at the entire EPZ) are provided for both the Governor (or the IESDA Director if the Governor is unavailable) (IPRA I(2) 13) and the counties in the EPZ (e.g., IPRA VII, SOP-8, Attachment C). 2/ These messages immediately indicate the importance of the message, state that a radiological incident has occurred at the nuclear plant site, and instruct the public to stay tuned to the EBS station for further information as it becomes available. Additional situation specific information may be added to the county messages by the county ESDA Coordinators and, in particular, provision is made in the county messages for notifying the public to place milk producing animals on stored feed if such action has been recommended by appropriate authorities. Id.

Q:21 Describe the specific matters raised by the Intervenor in its Reply with respect to Offer of Proof Issue 2.

A:21 Intervenor has identified four specific matters under Offer of Proof Issue 2. The first such matter is that the pre-scripted EBS "take shelter" and "evacuation"

2/ Specific provisions governing the activities of Grundy, Will and Kankakee Counties are contained in IPRA Vol. VII, Ch. 2-4, respectively; IPRA Vol. VII, SOP-8, Attachments C-E respectively; and in other portions of IPRA. Many of those provisions are identical for each of the three counties. Accordingly, unless there is some significant difference between the IPRA provisions, this testimony will reference the section of IPRA governing only one of the counties' activities with an "e.g."

messages do not contain general instructions as to what action to take or what provisions will be made if an individual or a member of an individual's household is at a recreational area at the time the EBS messages are broadcast. Reply p. 4. Intervenor states that the EBS messages should indicate that persons at recreational areas will have special arrangements made to shelter or evacuate them. Id. p. 6.

Q:22 Describe the Governor's EBS "take shelter" message.

A:22 The Governor's "take shelter" message (which would be issued by the Governor or, in his absence, the IESDA Director), immediately indicates the importance of the message and provides a general description of the area affected by the take shelter recommendation. The message identifies the nuclear plant affected and requests that the public take "immediate shelter." The nature of the incident is also briefly described.

The Governor's message instructs the public not to evacuate and explains that doing so may result in unnecessary radiation exposure. The message informs those not inside to immediately proceed to their homes, work places or other familiar locations and provides specific instructions for securing shelter against radioactive emissions. It also instructs individuals not to make unnecessary telephone calls, and to use the telephone only for emergency situations in order to

leave the lines free for emergency personnel. The message states that school children and nursing home residents are being well attended to by trained personnel, that there is no need to go to such locations and warns against entry into the area affected by the take shelter recommendation. Traffic and access control posts will help assure compliance. Finally, listeners are instructed to stay tuned to the EBS station for further information. IPRA Vol. I, Ch. 2, pp. 15-16.

Q:23 Describe the counties' EBS "take shelter" message.

A:23 The counties' "take shelter" messages are similar to the Governor's message but specifically identify the area affected by the take shelter recommendation by geographic and political boundaries. Such messages instruct the public to prepare for a possible evacuation recommendation by packing essential clothing, medical supplies and special dietary food for two days. Additional situation specific information may be added by the county ESDA Coordinators. E.g., IPRA Vol. VII, SOP-8, Attachment C.

Q:24 Describe the Governor's EBS "evacuation" message.

A:24 The Governor's "evacuation" recommendation message would be issued by the Governor, or in his absence, the IESDA Director, to inform the public that an evacuation has been recommended for a portion of the EPZ. The message immediately notifies the public of the importance and

seriousness of the information to be provided, briefly describes the nature of the emergency, and instructs evacuees to pack necessary clothing, medical supplies and food for special diets, to be ready to leave within a designated period of time and to stay tuned to the EBS station for information from a county representative on the direction to evacuate and the routes to be used. IPRA Vol. I, Ch. 2, pp. 17-18. Additionally, it states that those persons in areas not specifically identified should not evacuate, informs the public that all school children and nursing home residents are being provided for, and warns against entering the area being evacuated for any reason. Id.

Q:25 Describe the counties' EBS "evacuation" messages.

A:25 Unlike the Governor's message, the counties' "evacuation" messages convey information specific for the evacuation of each area. Each of the messages contains a description of the area affected by the evacuation by geographical and political boundaries. The pre-scripted messages also provide, among other things, the following information as applicable: 1) the evacuation routes to be used; 2) the cities where shelters are being opened; 3) the specific facilities being used as shelters; 4) the schools being evacuated and the specific shelter to which each school within the affected area is being relocated; 5) instructions to pack clothing, medical

supplies and food for special diets; 6) a telephone number for mobility-impaired persons, who have not made prearrangements, to call for assistance; 7) instructions for persons who need public transportation; and 8) instructions for pet owners. The county ESDA Coordinators may add any situation specific information necessary. E.g., IPRA Vol. VII, SOP-8, Attachment C.

Q:25 How will persons in recreational areas within the EPZ receive general instruction as to what action to take in the event of a take shelter or evacuation recommendation?

A:26 As described in response to question 30 below, the sirens at recreational areas are equipped with a public address capability and will broadcast the evacuation message even if only a take shelter recommendation has been issued. As necessary, additional situation specific information for persons in recreational areas may be included in the counties' EBS messages.

Additionally, county ESDA Coordinators have a call list including recreational area contact persons, to be used to inform those facilities of the evacuation recommendation. Signs will be offered to each of the recreational areas which will direct persons to tune their radios to the EBS station in the event of a public notification of an emergency.

Q:27 Do the EBS take shelter and evacuation messages provide sufficient information to deter individuals from entering recreational areas in the EPZ?

A:27 Yes. Both types of messages warn against entering the area affected by the protective action recommendation. Additionally, traffic and access control posts will help ensure compliance.

Q:28 Describe the second specific matter raised by the Intervenor in its Reply with respect to Offer of Proof Issue 2.

A:28 The second such matter is that the EBS take shelter and evacuation messages do not provide take shelter instructions for transients who are in the EPZ at the time of an emergency. Reply pp. 4, 6.

Q:29 How is protective action information provided to transient persons?

A:29 Through the Prompt Notification System ("PNS") and EBS, transients will be alerted to the emergency and will be informed regarding shelter and evacuation recommendations. Traffic and access control posts will require such individuals to leave the affected area, and will prevent their entrance into the affected area. Vehicles with public address systems can also provide appropriate information. Additionally, IPRA Vol. VII, SOP-8, provides that "special facilities" are to be notified of the protective action recommendations. Special faci-

ilities include locations where transients are likely to be found including recreational areas, hotels, motels, and industries (IPRA Vol. VII, SOP-8 pp. 5, 9 and 13), and are listed in Attachments F, G and H to SOP-8 by sector and distance from the Braidwood Station. These attachments also identify the county or municipality which is responsible for notifying each facility of the protective action recommendation. IPRA Vol. VII, SOP-8, Attachments F-H.

Q:30 What is the Prompt Notification System?

A:30 The Braidwood Station EPZ Prompt Notification System is an outdoor warning system consisting of mechanical and electronic sirens located throughout the EPZ which alert the public to tune their radios to the designated EBS station. IPRA Vol. VII, Ch. 1, p. 15. The PNS is designed to be audible outdoors throughout the entire EPZ. The electronic sirens located near most recreational areas are equipped with public address capability. Specific instructions for activation of the PNS are provided in IPRA Vol. VII, SOP-6. As a backup to the sirens, public announcements will be made over mobile public address systems on emergency response vehicles, such as police cars and fire trucks. Id.

Q:31 Describe the third specific matter raised by the Intervenor in its Reply with respect to Offer of Proof Issue 2.

A:31

The third such matter is that the EBS take shelter and evacuation messages are not sufficient to deter persons from going to or calling schools, nursing homes or hospitals in the EPZ during an emergency. Reply pp. 4-6. Intervenor states that no explanation is provided as to why persons should not call or go to such facilities. Id. p. 5.

Q:32

Do the pre-scripted take shelter and evacuation messages provide sufficient information to deter individuals from going to or calling schools and nursing homes?

A:32

Yes. As described in response to questions 22-25 above, the messages state that school children and nursing home residents are being well attended to by trained personnel, that there is no need to go to such locations, and clearly warn against entry into the affected area. In addition, the take shelter message instructs individuals to leave telephone lines free for emergency personnel use. The counties' EBS evacuation messages identify the specific shelters to which each school is being evacuated. Finally, the Braidwood Public Information Booklet specifically warns individuals not to attempt to pick up children or other persons at schools, hospitals, campgrounds or nursing homes and that if they attempt to do so, they will probably miss connections. The Booklet also instructs persons not to use the phone unless they have a special

emergency at their location. This information, coupled with the description of the nature of the emergency contained in the EBS message, and the presence of traffic and access control posts, should deter individuals from attempting to go to or call schools or nursing homes. There are no hospitals in the EPZ.

Q:33 Describe the fourth specific matter raised by the Intervenor in its Reply with respect to Offer of Proof Issue 2.

A:33 The fourth such matter is that there is "no provision" for release of re-entry messages by media stations to host communities outside the EPZ, so that persons sheltered in private homes, rural areas, and congregate care shelters will receive notification of the re-entry recommendations. Reply pp. 5, 7. Intervenor states that the "additional cooperation" of the Livingston, LaSalle, Kane and Kendall County ESDA Coordinators must be obtained to ensure adequate notification, and recommends development of a "media contact list" to facilitate notification. Id.

Q:34 Describe the counties' EBS "re-entry" messages.

A:34 Pre-scripted messages for "unrestricted" and "restricted" re-entry of the evacuees are provided in IPRA. IPRA Vol. VII, SOP-11. The "unrestricted re-entry" message instructs evacuees that the entire evacuated area is safe for re-entry (IPRA Vol. VII, SOP-11,

Attachment D, pp. 1-2), while the message for the "restricted re-entry" informs evacuees that only a portion of the evacuated area may be re-entered. IPRA Vol. VII, SOP-11, Attachment D, pp. 3-4. The latter message describes the area that is safe for re-entry and the area that is not safe. Id. That information will be added to the pre-scripted message, at the time re-entry is recommended, by the county ESDA Coordinator after consultation with IDNS. E.g., Vol. IPRA VII, SOP-11, p. 3. The restricted re-entry message also informs evacuees who cannot re-enter that shelters will remain open to accommodate them. IPRA Vol. VII, SOP-11, Attachment D, p. 4. Both the unrestricted and the restricted re-entry messages provide the following information to returnees: 1) the re-entry routes to be used; 2) instructions for persons who need transportation for re-entry; and 3) a telephone number for persons who require special assistance. Additional instructions on precautionary information for returnees may be added by the county ESDA Coordinators. Id. pp. 1-4. This matter is discussed further in connection with Issue 6.

Q:35

How will evacuated individuals in private homes, rural areas, and congregate care shelters outside the EPZ receive notification of re-entry recommendations?

A:35 The designated EBS stations (WJOL and WLLI), which are located outside the EPZ, will broadcast re-entry information as described in response to question 53 below. Other EBS stations outside the EPZ (and covering Livingston, LaSalle, Kane and Kendall Counties) will monitor the designated stations and automatically rebroadcast re-entry information. Persons in private homes and rural areas will have access to such broadcasts. Furthermore, it is the responsibility of the Regional IESDA Coordinator to disseminate information to the ESDA Coordinators in surrounding counties who will coordinate the provision of re-entry recommendations to individuals evacuated to their counties.

Q:36 Would a media contact list assist in the dissemination of re-entry information?

A:36 Although the State maintains a media contact list by municipality, the IPRA does not rely on the media other than the EBS stations to broadcast re-entry information. Press releases will, however, be issued by the State when it is safe to re-enter affected areas of the EPZ.

Q:37 "Offer of Proof" Issue 3 states:

Applicant must demonstrate its capability to adequately inform residential and transient populations within the EPZ in the event of an emergency so as to enable the populations to effectively evacuate or shelter including development of the specific means and content of such communications to specific populations.

What are CECo's responsibilities relating to the transmission of emergency information to residential and transient populations within the EPZ during an emergency?

A:37 Direct transmission of protective action recommendations to the public within the EPZ in the event of an emergency at Braidwood Station is the responsibility of offsite authorities. CECo, however, is responsible for the initial notification of offsite authorities (IPRA Vol. VII, Ch. 3, p. 2; IPRA Vol. I, Ch. 5, p. 11), and for continuing communication with those authorities in order to provide them with accurate and timely technical information regarding the events and conditions at the Braidwood Station site, including expected radiological releases to the environment. IPRA Vol. I, Ch. 3, p. 2. It is important to note, however, that while CECo will transmit news information to the media, such information is not relied upon to ensure that the public within the EPZ is apprised of protective action recommendations. Nevertheless, such information may supplement the protective action information provided through the EBS.

Q:38 How does CECo carry out its responsibility for notification of offsite authorities in the event of an emergency at Braidwood Station?

A:38 The GSEP contains detailed provisions governing CECO's responsibility for the notification of offsite authorities. The precise manner in which CECO carries out that responsibility depends, in part, upon the nature and severity of the emergency. In particular, the GSEP delineates a number of emergency conditions covering the spectrum of emergency situations which may occur at Braidwood Station. GSEP p. 5-1; GSEP BWA p. 5-1.

Q:39 What are those emergency conditions?

A:39 The conditions are classified as: (1) Unusual Event; (2) Alert; (3) Site Emergency; and (4) General Emergency. GSEP BWA p. 5-1. These conditions correspond to the emergency classification system provided in Appendix 1 to NUREG-0654/FEMA-REP-1, Rev. 1 (November, 1980) ("NUREG-0654").

Q:40 Define the emergency conditions.

A:40 An "Unusual Event" is an event which indicates a potential degradation of the level of safety of the plant. An "Alert" is declared when there is or has been an actual or potential substantial degradation of the level of safety of the plant. A "Site Emergency" is an event which involves actual or likely major failures of plant functions needed for the protection of the public. A "General Emergency" involves actual or imminent substantial core degradation or melting with the potential for loss of containment integrity. GSEP BWA

p. 5-2. GSEP Table BWA 5-1 provides specific initiating conditions for each of these emergency classes at the Braidwood Station.

Q:41 What individual at CECO is responsible for notification of offsite authorities in the event of an emergency at Braidwood Station?

A:41 Upon the occurrence of an emergency condition at Braidwood Station, it is the responsibility of either the Braidwood Station Director, Corporate Command Center ("CCC") Director or Recovery Manager stationed at the offsite Emergency Operations Facility ("EOF"), to declare and classify the emergency. GSEP p. 5-1. Pending activation of the CCC or EOF, the responsibility for declaration, classification and notification rests with the Station Director who is located at the Station site in either the Control Room or Technical Support Center ("TSC"). GSEP Table 4.2-1.

If an emergency condition has been declared and the CCC Director has formally assumed control of the emergency response from the Station Director, the CCC Director will assume responsibility for notification of appropriate offsite authorities. GSEP Table 4.3-11. If the Recovery Manager has formally assumed control of the emergency response from the CCC Director or the Station

Director, the Recovery Manager will assume responsibility for CECO's notification of offsite authorities. GSEP Table 4.3-1.

Transfer of authority between the Station Director, CCC Director and the Recovery Manager will not occur until, as appropriate, the CCC and EOF become sufficiently staffed, the staff has been fully briefed, and a statement of turnover has been made. GSEP p. 4-57. The Station Director is required to keep the CCC Director and Recovery Manager apprised of plant status at all times. GSEP p. 4-12.

Q:42 What individuals are designated as the Station Director, CCC Director and Recovery Manager?

A:42 The Station Director in the event of an emergency is the Plant Manager who is the individual who directs the operation of the Station during non-emergency conditions. GSEP BWA p. 4-1. Other designated Braidwood Station operating personnel may act as initial Station Director in the Plant Manager's absence and pending assumption of responsibility by the primary Station Director, CCC Director or Recovery Manager. GSEP pp. 3-4, 4-7. The CCC Director and the Recovery Manager will be company officials with nuclear station experience.

Q:43 How does the responsible CECO official notify offsite authorities regarding emergency information?

A:43

The medium through which CECO informs offsite authorities is the NARS. NARS links the Station Control Room, CCC, TSC, EOF, and appropriate offsite authorities via a dedicated telephone communications system, thus limiting access to the designated organizations. GSEP p. 7-7. The responsible CECO official, upon being informed of an event that may represent an emergency condition, will complete a NARS form and communicate the information contained therein to appropriate offsite authorities over the dedicated phone lines. NARS is monitored 24 hours a day at the IESDA Dispatch Center, the IDNS REAC, and designated police or sheriff's dispatchers in each of the three counties in the EPZ. In addition to NARS, there are other phone lines, microwave systems and radio systems linking onsite and offsite emergency facilities. GSEP BWA pp. 7-3, 7-4; IPRA Vol. I, Ch. 3, pp. 25-26.

Q:44

What information is contained on the NARS form?

A:44

The NARS form identifies, among other things, the affected nuclear facility; emergency condition classification; whether a release has or may occur; the type of release (gaseous or liquid); the time of the incident; the geographic sectors of the EPZ affected; and the recommended protective actions.

Q:45

Why is the NARS form used?

A:45 Completion of the NARS form enables prompt identification of predesignated sectors of the EPZ which are affected by the emergency based upon the prevailing wind conditions. Use of the NARS form assures that essential information is promptly and accurately transmitted to appropriate offsite authorities and permits prompt selection of the appropriate EBS messages.

Q:46 What offsite authorities are informed of the emergency information?

A:46 If the initial emergency condition is classified as an Unusual Event, Alert or Site Emergency, the responsible CECO official will simultaneously notify IESDA and the IDNS. GSEP Figures 6.1-1(B), 6.1-1(C). If the initial condition is classified as a General Emergency, designated county authorities will also be notified simultaneously. GSEP Figure 6.1-1(D). In the case of Braidwood, the county authorities are the designated representatives of Grundy, Will, and Kankakee Counties, the three counties within the EPZ. NARS permits simultaneous transmission of the emergency information to all of these authorities.

Q:47 How promptly must CECO provide such information to the responsible offsite officials?

A:47 CECO must contact those officials within fifteen (15) minutes of classifying the emergency condition. GSEP p. 3-4.

Q:48 Does CECo communicate any other information to the offsite officials?

A:48 Yes. Plant data, which enables IDNS to perform its own evaluation of the condition of the plant, will be continuously communicated via a separate, dedicated datalink directly to IDNS. Additionally, gaseous and liquid effluent monitoring datalinks will, in the future, be established in order to provide such information to IDNS. Furthermore, additional information can and will be communicated, as necessary, over the other communication links described in response to question 43 above.

Q:49 Does CECo provide information to the offsite authorities after the initial NARS notification?

A:49 Yes. CECo will update the NARS information and communicate it to the appropriate offsite authorities within fifteen (15) minutes of reclassifying an emergency condition (upgrading or downgrading). GSEP p. 3-4. Additionally, CECo will provide hourly updates of emergency information. EPIP EOF-10 p. 1.

Q:50 What do IESDA and the affected counties do once they have been notified of a potential emergency?

A:50 Upon receiving notice from CECo, IESDA will verify the NARS message via commercial telephone lines, consult with IDNS regarding the general nature of the incident, and then notify the county dispatchers of the situation

at Braidwood Station via NARS. The county dispatchers will also verify the NARS message and will then call their respective county ESDA Coordinators who will activate their EOCs and their emergency response personnel as necessary, even if the NARS message indicates that no protective actions have been recommended but that the counties should prepare for a possible recommendation. IPRA Vol. VII, SOP-1; e.g., IPRA Vol. VII, Ch. 2A, pp. 5, 9. Provisions exist in IPRA to notify and mobilize county officials on a 24 hour basis and to maintain EOC operations around the clock. The county call list contains each official's home and business telephone numbers and the home and business telephone numbers of each official's alternate. Alternates have been designated to facilitate 24 hour operations of the EOCs. In addition, the counties in the Braidwood EPZ have 24 hour dispatching capabilities. IPRA Vol. VII, SOP-2,3,4 and 5, Attachments B-L; e.g., IPRA Vol. VII, Ch. 2, pp. 1, 5, 7 and 45.

Q:51 Who has the authority to issue a protective action recommendation?

A:51 The authority to issue a protective action recommendation such as to take shelter or to evacuate ultimately rests with the Governor of the State of Illinois. IPRA Vol. I, Ch. 4, p. 3. Upon receipt of CECO's NARS information, including its protective action recommen-

dation, IDNS analyzes all available technical information and assesses the implications and consequences of the radiological incident. IPRA Vol. I, Ch. 6, p. 1. Based upon this assessment, IDNS determines and provides their protective action recommendations to the Governor and IESDA simultaneously. Concurrent with the IDNS determination, IESDA determines the feasibility of implementing protective actions. Id. IESDA simultaneously advises the Governor and IDNS of their determination. The Governor makes the final decision concerning protective actions and commitment of State resources. Id.

Q:52 Once the decision to recommend a protective action has been made, how is it communicated?

A:52 Upon receipt of the Governor's recommendations, IESDA will inform the counties in the EPZ of the recommendation via NARS. Within fifteen (15) minutes after this notification, the counties will activate the local EBS station and the PNS. IPRA Vol. VII Ch. 1, pp. 15-16; IPRA Vol. VII, SOP-6.

Q:53 Describe how the EBS functions.

A:53 The EBS stations designated for the Braidwood EPZ broadcast over two frequencies: 1340 AM (WJOL) and 96.7 FM (WLLI). The method by which the EBS station is activated is described in IPRA Vol. VII Ch. 1, pp. 15-16. The State and the three county ESDA Coordinators

will provide messages to the EBS stations by telephone after sheltering or evacuation has been recommended. The State, through the Illinois Information Service, will contact the designated EBS station News Director, General Manager or their alternate and notify them that the Governor or IESDA Director is about to recommend protective action for the public. After receipt of a code word, the station will begin recording the State's message. The counties' messages will be received in a similar manner. Id. Once received, the designated EBS station promptly broadcasts the EBS messages.

The EBS messages from the designated EBS stations will be automatically relayed to nearby EBS affiliates for rebroadcast. Id. p. 16. The counties within the EPZ may also notify other local radio stations of the emergency information.

Q:54 How will the county ESDA Coordinators promptly and accurately identify the appropriate descriptions of the areas affected, evacuation routes and other information specific to the particular emergency for inclusion in the EBS messages?

A:54 Receipt of the NARS information, particularly the identification of the predesignated geographic sectors affected and the protective action recommendation, enables the ESDA Coordinators to turn directly to a page of their SOPs which corresponds to the sectors affected

and protective action recommendation, to select the appropriate pre-scripted EBS message. Once the general protective action information is identified, the county ESDA Coordinators may add specific additional information. Such information will be provided to the ESDA Coordinators by other State and county officials at the county EOCs.

Q:55 Describe the specific matters raised by the Intervenor in its Reply with respect to Offer of Proof Issue 3.

A:55 Intervenor states that the messages to be broadcast over the electronic siren and mobile public address systems are deficient in not providing sheltering instructions for transients and persons at recreational areas. Reply p. 8. Intervenor states that the messages provide no instructions for persons without radios and should contain a standard instruction "which can be adapted to each location," indicating the closest location or authority that persons can contact for additional sheltering or evacuation information. Id. pp. 8-9.

Q:56 What is the substance of the warning messages provided over the electronic siren and mobile public address systems?

A:56 Warning messages for the counties to broadcast over the electronic siren public address systems and over mobile public address systems are provided in IPRA Vol. VII, SOP-6 for take shelter and evacuation conditions. The

electronic siren warning messages inform listeners that the Governor has recommended that the facility where they are located is being evacuated and that they should proceed to their vehicles and prepare to evacuate even if the Governor's recommendation is to take shelter. Listeners are instructed to tune their radios to the EBS station. IPRA Vol. VII, SOP-6, Attachment C. The mobile public address warning scripts advise listeners of the protective action recommendation and to tune to the EBS station. IPRA Vol. VII, SOP-6, Attachment D. Answer 26 also describes other mechanisms for providing emergency information to persons in recreational areas.

Q:57

"Offer of Proof" Issue 4 states:

The program for notification of the public at the time of an accident is deficient in that it provides no means of informing employers in the EPZ as to what actions they should take with respect to facility shutdown, sheltering, or the release of employee personnel in the event that evacuation is required.

Describe the specific matters raised by the Intervenor in its Reply with respect to Offer of Proof Issue 4.

A:57

Intervenor states that the plan is deficient because it contains no provision for a message to be given to employers as to what actions they should take with respect to facility shutdown, sheltering and release of employees in the event of an evacuation. Reply pp. 9-10.

Q:58

How will employers be notified of the potential need to cease operations or to provide for shelter or evacuation of employees?

A:58

Evacuation and take shelter recommendations for employers are generally the same as for the general public. Employers would receive notification of protective action recommendations through the PNS and the EBS. In addition, as mentioned above, IPRA Vol. VII, SOP-8 also provides that county and municipal officials are responsible for notifying employers of take shelter or evacuation recommendations for affected "special facilities" which include industries in the EPZ with over twenty-five (25) employees. IPRA Vol. VII, SOP-8 pp. 5, 9 and 13. Attachments F, G, and H to SOP-8 identify 17 industries in the Braidwood EPZ, exclusive of the Braidwood Station.

With respect to provisions for shutdown of such facilities, employers are in the best position to determine the most appropriate actions to minimize damage to equipment or machinery. IESDA surveyed the shutdown times of these facilities. Based on that survey, 16 of 17 facilities can be shutdown without damage to the facilities within 60 minutes, and one, which operates only during the day, can be shutdown within 90 minutes.

Q:59

"Offer of Proof" Issue 6 states:

Applicant's public information program is deficient in that it fails to set out the means by which the public will be informed during an emergency of re-entry protective measures to be followed by the public in an emergency and the content of such means with respect to information concerning decontamination and interdiction of foodstuffs, water supplies, dairy and livestock, and field and garden crops.

Describe the specific matters raised by Intervenor in its Reply with respect to Offer of Proof Issue 6.

A:59 Intervenor states that no specific instructions concerning decontamination and interdiction of foodstuffs, water supplies, dairy products, livestock and field and garden crops are provided in EBS re-entry messages and that a statement should be included in the messages stating that information regarding such matters will be provided via EBS or by appropriate authorities. Reply pp. 10-11.

Q:60 How will the public be notified of re-entry protective measures as set out in Issue 6?

A:60 The general contents and use of the re-entry messages as found in IPRA Vol. VII, SOP-11 were explained previously in response to questions 34-35 above. As mentioned earlier, additional special instructions or precautionary information for returnees may be added by the county ESDA Coordinators. If any protective measures are necessary at the time of re-entry, IDNS will provide the information to the county ESDA Coordinators so that

the information may be included in the re-entry message provided to the EBS station for broadcast. IPRA Vol. I, Ch. 5, pp. 42-43.

Because the choice of the appropriate re-entry protective measures is dependent on a number of incident specific variables, such as the type of radiological release and weather conditions, it is not feasible to pre-script such information in re-entry messages. Such information, however, will be provided both prior to and during re-entry. The special instructions or precautionary information may consist of instructions to deal with decontamination and interdiction of food-stuffs, water supplies, dairy and livestock, and field and garden crops. This type of information would be provided by IDNS, after consultation with the appropriate State agencies. IPRA Vol. I, Ch. 5, pp. 42-43. As explained in IPRA Vol. I, Ch. 5, IDNS obtains information concerning the type and extent of radioactive contamination and acts as the coordinating agency for a number of State agencies which would perform technical functions in the event of an emergency. IPRA Vol. I, Ch. 5, p. 49. The Illinois Department of Agriculture is responsible for monitoring agricultural and horticultural products as well as meat, poultry and livestock. Id. pp. 51-52. The Illinois Environmental Protection Agency is responsible for monitoring water

supplies for contamination. Id. pp. 53-57. The Illinois Department of Public Health responsibilities include identifying and disposing of contaminated food and dairy products. Id. pp. 61-63. Those activities of the three agencies are at the request and under the direction of IDNS.

Q:61 What conclusions have you drawn as to whether the public within the EPZ will be adequately notified of protective action information in the event of an emergency at Braidwood Station?

A:61 CECO's actions in the event of an emergency, coupled with activities of offsite authorities, assure that the public within the EPZ will be timely and adequately notified of protective action information in the event of an emergency at Braidwood Station.

Testimony Regarding Contention 1(b)

Q:62 What is the purpose of this portion of your testimony?

A:62 The purpose of our testimony is to address Intervenor's Contention 1(b) which states:

Intervenor contends that an adequate emergency plan for the Braidwood Station shall include the following:

* * *

(b) assurance that institutions within 10 miles of the Station, such as nursing homes can be

evacuated or adequately protected
in the event of a radiological
emergency. 3/

Q:63 What is your understanding of the scope of this
 Contention?

A:63 It is our understanding that the scope of this
 Contention is limited in a number of ways. First, the
 Contention challenges only the adequacy of the IPRA for
 the Braidwood Station. Second, the Contention addresses
 only the provisions in the IPRA for offsite "insti-
 tutions" such as schools. Third, the Contention is
 limited to such institutions within the EPZ. In
 addition, based on Intervenor's responses to discovery
 requests and discussions between Intervenor and counsel
 for Applicant as related to us, the scope of this
 Contention has been further defined. First, the phrase
 "institutions" refers to nursing homes, schools,
 including parochial schools and pre-schools, 4/ and
 recreational areas. Second, as to these facilities, the

3/ Contention 1(b) originally referenced hospitals and the
 federal prison of Joliet. By agreement of the parties, the
 reference to hospitals and the federal prison were deleted
 from the Contention because there are no hospitals within the
 EPZ and the federal prison at Joliet is outside the EPZ.
 Transcript of February 20, 1985 conference call, pp. 42-44;
 Transcript of July 23, 1985 Prehearing Conference, pp. 118-
 119; Prehearing Conference Order of August 1, 1985, p. 4.

4/ Pre-schools includes nursery schools and licensed day care
 centers.

Contention challenges the adequacy of the IPRA with respect to evacuation and sheltering of persons within these facilities.

Q:64 What is your opinion as to the adequacy of the IPRA in regard to its treatment of schools, recreational areas and nursing homes?

A:64 In our opinion, the IPRA adequately provides for the evacuation and sheltering of persons in these facilities located within the EPZ. The IPRA was developed in accordance with the guidance provided in NUREG 0654 and not only makes specific provisions for such facilities, but also provides sufficient flexibility to respond to unforeseen conditions at the time of a radiological emergency at the Braidwood Station.

Q:65 Please describe generally IPRA's provisions for sheltering or evacuating schools, recreational areas and nursing homes.

A:65 IPRA's provisions for ensuring that schools, recreational areas, and nursing homes within the EPZ can be adequately protected in the event of a recommendation to either evacuate or take shelter can be divided into three categories: (1) planning activities; (2) notification and communication procedures; and (3) responses to recommended actions.

Q:66 Would you describe the planning activities for schools undertaken by the State in developing the IPRA?

A:66

Prior to undertaking any specific planning activities, IESDA conducted a detailed assessment of the schools within the Braidwood EPZ. IESDA first identified all of the public, parochial schools and pre-schools in the EPZ. IESDA identified 20 public schools, 2 parochial schools and 5 pre-schools located within the EPZ. IESDA then surveyed all of the identified schools, which involved visits and/or telephone calls to each of these schools, to obtain data regarding the student and staff population, the grade levels of the schools, the number of students bused to the schools, the number of buses available to each school, the number of bus drivers, the average number of student and staff cars, and information regarding the time required to mobilize available transportation.

Q:67

How was the assessment data used by IESDA?

A:67

As a result of its surveys, IESDA prepared facility specific emergency instructions for each school including facility specific checklists to be used in the event of either an evacuation or a take shelter recommendation. (Copies of typical checklists are attached to this testimony as Exhibit A). These facility specific instructions have been provided to the regional and district school superintendents. The responsibilities of school officials and staff are discussed during the training sessions provided by IESDA for

schools within the Braidwood EPZ. In addition, the data obtained from the schools were used to assess the transportation resources of the schools, to determine the appropriate congregate care center for each school and to determine any additional special needs of the schools.

Q:68 Does the IPRA provide for training of school personnel?

A:68 Yes. One of the activities conducted by IESDA and IDNS is emergency response training of school personnel and bus drivers. All of the regional and district superintendents and their alternates within the EPZ and the managers of the private bus companies were invited by IESDA to attend Executive Training. Executive Training covers the following topics:

- The purpose of IPRA
- An explanation of the EPZ and the counties and municipalities within the EPZ
- The locations of county and municipal EOCs and press centers
- The on-scene press statement policy
- The accident classifications
- Protective and parallel protective actions
- The role of each executive in response to an incident at the Braidwood Station.

In addition to Executive Training, the superintendents, school principals, teachers and bus drivers have been invited by IESDA to attend Operational and Radiological Emergency Worker Training conducted by IESDA and IDNS. Operational Emergency Worker training provided by IESDA includes instruction in the following topics:

- The purpose of IPRA
- A discussion of the EPZ and the counties and municipalities within the EPZ
- An explanation of the functions and locations of the county and municipal EOCs and press centers
- The on-scene press statement policy
- Accident classifications
- Protective and parallel actions
- The role of emergency workers in response to an emergency.

Radiological Emergency Worker training provided by IDNS includes instruction on the following topics:

- The types of radiation including background radiation and radiation resulting from a nuclear power plant emergency
- The use and maintenance of dosimetry equipment
- The purpose of taking potassium iodide (KI) and its biological effects
- An explanation of the units of radiation measurement
- Contamination and decontamination
- Exposure control.

Q:69 Have any training sessions been conducted to date?

A:69 To date, IESDA has conducted six Executive Training sessions for the regional and district school superintendents. On September 23, October 1, October 8 and October 30, 1985, municipal 5/ Executive Training sessions were attended by the senior school officials from South Wilmington, Braceville, Coal City and Gardner/South Wilmington. On October 2 and October 24, 1985, county Executive Training sessions were attended by the regional superintendents of Kankakee and Will

5/ Executive Training is provided to both municipal and county school officials. The training sessions generally cover the same material, but municipal Executive Training emphasizes the role of the municipalities in an emergency while county Executive Training emphasizes the role of the counties.

Counties and the alternate of the Kankakee Regional Superintendent. In April 1985, the Regional Superintendent of Grundy County received Executive Training during the training sessions held for school officials in connection with the Dresden Station.

During 1985, IESDA and IDNS conducted fourteen Radiological and Operational Emergency Worker Training sessions for communities within the Braidwood Station EPZ. Bus drivers and other school personnel were invited to attend these sessions.

In addition to these training sessions, IESDA also conducted three IPRA orientation programs to familiarize school officials with the purpose of IPRA and the role of school officials in the event of an emergency. On September 9, 1985, an orientation program was held for the Reed-Custer Superintendent of Schools. On October 30, 1985, an orientation program was held at the request of the Coal City School Superintendent. In attendance were the Superintendent, three Coal City principals, the Coal City Terminal Manager of the Kline Bus Company, and the directors of two pre-schools. On November 13, 1985, an orientation program was also provided to the Gardner/South Wilmington Citizens Advisory Council, a group comprised of parents and teachers, which advises the school administration. The Gardner/South Wilmington High School Principal also attended this program.

Q:70 Does the State intend to conduct further training?

A:70 Yes. As part of the annual training program, IESDA and IDNS presently plan to conduct Executive and Emergency Worker Training during the period October-November 1986. Invitations to attend these sessions will again be extended to the regional and district superintendents, the managers of the private bus companies, bus drivers, teachers and other regional and district school personnel, and the school staffs of the parochial schools and pre-schools. The State, in cooperation with the counties located in the EPZ, will also provide training at the request of any of the schools or other special facilities within the EPZ.

Q:71 Has the State assessed the transportation resources needed to evacuate the schools in the EPZ?

A:71 Yes. Based on surveys conducted by IESDA, the transportation requirements of each of the schools within the EPZ were analyzed against the available bus resources. The nine school districts within the EPZ have a total population of approximately 6,850 including the students, faculty and staff of the two parochial schools and five pre-schools. The transportation resources available under the IPRA are sufficient to ensure that evacuation of the school population can be effectively carried out. The sufficiency of these resources is supported by two levels of assessment.

First, the more meaningful case involves evacuation of a segment of the population within the EPZ. Under emergency conditions an actual evacuation would most likely be carried out for the entire 0-2 mile area of the EPZ and within three sectors along the prevailing wind direction for the remainder of the EPZ. This "keyhole" approach to evacuation is thus a realistic measure of the expected demands upon transportation resources. In this regard, if it were assumed that the 0-2 mile area and the entire quadrant of the EPZ containing the largest school population (the Northeast quadrant) were evacuated, then 57 buses would be required. This quadrant has 35 buses normally available to its schools. The apparent shortfall of 22 buses could be met by additional buses available within the three counties which comprise the EPZ. These three counties (Will, Grundy and Kankakee) have an excess of 854 buses available to assist with evacuation of the EPZ. Based upon agreements between the county school districts and the regional school superintendents, the regional school superintendents (who are responsible for allocating bus resources in the event of an emergency) could make these buses available to meet the apparent shortfall.

Second, as an upper bound case, if it were assumed that evacuation of the entire school population within the EPZ were required, the IESDA surveys show that 111 buses would be needed if no privately owned cars or other vehicles were used. The same surveys indicate that approximately 640 privately owned cars and other vehicles would be expected to be available. In this upper bound case, the schools within the EPZ have available to them 88 buses as part of their normal transportation resources. This shortfall of 23 buses could be met by the 854 additional buses available within the three counties that comprise the EPZ.

Q:72 Can the buses be made available to the schools in a timely fashion in the event of an emergency at the Braidwood Station?

A:72 Yes. Based on surveys of the schools, from the time the schools begin notifying the bus drivers, the buses could be brought to the schools in approximately 10 to 40 minutes.

Q:73 Are there sufficient bus drivers available to evacuate the schools, including parochial schools and pre-schools, in the EPZ?

A:73 Yes. IESDA conducted a survey of the number of bus drivers available throughout the three counties which comprise the EPZ as well as the bus drivers normally available to the school districts in the EPZ. Of the

three counties, the Regional Superintendent of Schools of Kankakee County has 217 bus drivers available, the Grundy County Regional Superintendent of Schools has 115 bus drivers available and the Will County Superintendent has 553 bus drivers available. Within the school districts in the EPZ, there are 84 regular bus drivers, 14 substitute bus drivers and 15 school personnel who are qualified as bus drivers. Assuming an evacuation of the 0-2 mile EPZ and the entire Northeast quadrant, the schools in that quadrant could be evacuated using approximately 57 drivers. Even if the entire EPZ were to be evacuated, the schools would require only 111 drivers. Based on the number of drivers available to the schools, as well as those available to the regional school superintendents, there are sufficient bus drivers available to evacuate the schools within the EPZ.

Q:74 Is there any requirement that the buses be maintained in good working condition?

A.74 Yes. Pursuant to State law, all of the school buses, including the buses owned by the private bus companies, are required to be maintained in good working condition. Moreover, State law requires school buses to undergo a minimum of two State inspections per year.

Q:75 Please describe the procedures which will be used to notify schools in the event of an emergency at the Braidwood Station.

A:75

Any abnormal event or condition at the Braidwood Station will be analyzed by personnel at the Station under criteria prescribed by the Braidwood onsite emergency plan to determine into which, if any, emergency response category it falls. As noted earlier, the categories (from least severe to most severe) are Unusual Event, Alert, Site Area Emergency, and General Emergency.

If a condition or event occurs at the Station that falls into any of these emergency response categories, the Station will give timely notification to the State. To minimize delay and communication problems, this notification and subsequent updates will be provided using NARS, which links the utility, State and county governments. As noted earlier in response to questions 43-44, NARS communicators will use a structured, coded form to notify the State and affected counties of the emergency and the recommended protective actions to be taken, if any. The State will notify Will, Grundy, and Kankakee Counties via the NARS. If the situation warrants, the counties will notify the municipalities within the EPZ, activate the county EOCs, and mobilize appropriate personnel. NARS will also be used to provide continuous updates on the status of the emergency and any recommended protective actions.

In the event of an emergency at Braidwood Station requiring notification of schools, the county regional superintendents of schools, who will be stationed at each of the county EOCs, will first coordinate with the county ESDA Coordinator and then contact the affected district superintendent of schools regarding the recommended take shelter or evacuation protective actions. The regional superintendent will also brief the district superintendents on the situation.

The district superintendents will contact the principals of the affected schools, including the parochial schools and pre-schools. The school principals will be told to implement the appropriate protective actions as provided in the emergency instructions prepared for each school. The district superintendent will also determine the availability of buses and bus drivers and provide that information to the regional superintendent. If for any reason an affected school could not be contacted by telephone, the municipal ESDA Coordinator will dispatch a police officer or other municipal personnel to the affected school in order to notify the school principal of the required action. Any changes in the recommended action will be communicated to the affected schools in a similar manner.

In order to ensure timely notification, the IPRA provides a list of the telephone numbers and contact points at each of the affected schools in the EPZ. This information is provided to both the regional and district school superintendents.

Q:76 Does the IPRA contain procedures for ensuring that schools within the EPZ will respond appropriately to a take shelter recommendation?

A.76 Yes. If protective actions are required as a result of an emergency at the Braidwood Station, the IPRA provides for response actions to be taken at the regional, district and individual school level. If sheltering is recommended, the regional superintendent will immediately contact the affected district superintendent and brief the district superintendent on the situation. The regional superintendent will direct the district superintendent to place all school bus drivers on call or standby and verify that all affected schools have been notified of the take shelter recommendation.

The district school superintendent, after notifying the principals of the affected schools of the recommended action, will coordinate with the principals to determine the number of buses required for evacuation, and will place bus drivers on call or

standby. The district superintendent will report the availability of buses and drivers to the regional school superintendent.

Upon receipt of the information from the district school superintendents, the regional superintendent will assess the availability of school buses and bus drivers and make any necessary arrangements for additional buses or drivers, drawing on buses and drivers available throughout the school districts in the county (including those of the private bus companies.) The regional superintendent will coordinate with the district superintendents to determine that all protective actions for take shelter are complete.

Upon notification of a take shelter recommendation, the affected school principals will implement the emergency sheltering instructions developed for each school within the EPZ. Those instructions require the school principals to take the following actions:

- Instruct all faculty, staff and students to report/remain indoors
- Shut off all intake fans, heaters and close all windows, shades and drapes and secure unattended doors as required by the specific ventilation checklist developed for each school
- Account for all faculty, staff and students
- Assign a member of the faculty or staff as a communicator for inquiries and rumor control
- Call in additional staff as needed
- Prepare for a possible evacuation recommendation by coordinating with the district superintendent to determine the number of buses required for evacuation
- Inform the district superintendent of schools when the take shelter action is complete.

Q:77

Would you describe the provisions of the IPRA for ensuring that schools within the EPZ will respond appropriately to an evacuation recommendation?

A:77

In the event of a recommendation to evacuate, the regional superintendent will coordinate with the county ESDA Coordinator to determine the appropriate evacuation actions to be taken. The county ESDA Coordinator will provide the evacuation routes to the regional superintendent. The regional superintendent will also obtain the name and location of the congregate care shelters to which the affected schools will be evacuated. The congregate care shelters are pre-designated for each school and listed in IPRA, Vol. VII, SOP-9, Attachments K, L, and M.

Once the evacuation routes and congregate care shelters are identified, the regional superintendent will notify the district superintendent of the evacuation routes and the location of the congregate care shelters. The district superintendent will be instructed to contact all affected school principals, mobilize buses and bus drivers at the affected schools and inform them of the evacuation routes and the location of the congregate care shelters. Should any of the affected schools require transportation assistance, the regional superintendent will coordinate the mobilization of additional buses and drivers needed by the

affected schools. The regional superintendent will also determine whether any assistance is required at any of the congregate care shelters. After verifying that the affected schools have completed the evacuation, the regional superintendent will report to the county ESDA Coordinator and recommend that a press release be issued notifying the public of the actions taken.

After receipt of notification to evacuate, the district superintendents will notify the school principals of the evacuation recommendation and advise them of the evacuation route and congregate care shelter locations. The principals will be directed to implement the specific emergency evacuation instructions developed for the particular school.

Upon receipt of notification from the district superintendent, the school principals will, if sheltering had not previously been recommended, implement the sheltering provisions of the school's emergency instructions. The school principal will contact the district superintendent for any required assistance, and will inform the district superintendent when all students, faculty and staff have been evacuated.

Q:78

Does the IPRA provide procedures for ensuring that requests for assistance are responded to promptly?

A:78

Yes. The IPRA provides for continual monitoring of the actions taken by the affected schools to ensure that any requests for assistance are promptly answered. In addition, information regarding transportation requirements at the affected schools is required to be provided to the regional superintendent once a take shelter recommendation is made. Any requests for other assistance, such as medical assistance, is communicated to the district superintendents in the municipal EOC by the particular school principal. If the request cannot be acted upon by the municipal EOC, the district superintendent will forward the request to the regional superintendent in the county EOC. The ESDA Coordinator at the county EOC is responsible for ensuring responses to any such requests. The county EOC will be staffed by representatives of the sheriff's department, the health department, and various other service agencies. If a particular request cannot be acted upon at the county level, the county ESDA Coordinator will coordinate with the IESDA representative in the county EOC for additional assistance through the State Forward Command Post located in Mazon, Illinois.

Q:79

Does the IPRA contain procedures for ensuring that recreational areas will respond promptly to recommended protective actions?

A:79 The provisions of the IPRA relating to protective actions for persons in recreational areas in the event of an emergency at the Braidwood Station, can be broken down into three components: (1) planning, (2) notification and communications; and (3) response to recommended action.

Q:80 Would you describe the State's planning efforts in regard to recreational areas?

A:80 The planning effort for the recreational areas began with the identification of all recreational areas within the EPZ and an assessment of their main characteristics. A listing of all recreational areas, including the name of a contact person for the area and his phone number, is included in IPRA Vol. VII, SOP-8, Attachments F, G, H. Each of the recreational areas was contacted by a representative of IESDA and data obtained regarding the season of operation, the average number of visitors by season, the number of peak day visitors, the number of overnight visitors, and the average number of buses and private vehicles present at the area on a daily basis.

Q:81 Will sirens be installed around the recreational areas?

A:81 Sirens are being installed around all recreational areas. The sirens have been placed so that the alert tone is capable of being heard throughout the particular area. With the exception of three recreational

areas, 6/ sirens with public address systems are being installed. The public address capability of the sirens will generally provide coverage in parking lots and at other areas where people are expected to congregate and will be used to provide specific instructions in the event of an emergency.

Q:82 Will signs be placed at recreational areas?

A:82 Yes. Signs will be provided to each of the recreational areas informing visitors of the purpose of the sirens and instructing them to listen to either of the two EBS Stations which will broadcast emergency information. The signs will generally be installed in parking lots, and other areas where people are expected to congregate. Additionally, Braidwood Public Information Booklets have been distributed to each of the recreational areas. These Booklets are also provided to facilities catering to transients such as motels.

Q:83 How will recreational areas be notified in the event of an emergency at Braidwood Station?

A:83 In the event of a protective action recommendation or a General Emergency, the sirens located in the recreational areas will be activated. After the sirens have been sounded, the county ESDA Coordinator will direct the activation of the public address systems

6/ It was determined that no public address capability was needed at these three areas because of their location and/or daily usage.

located at the recreational areas and provide the appropriate script. The public address systems will advise the visitors in the recreational area to evacuate the area and to listen to either WJOL 1340 AM or WLLI 96.7 FM for further information.

In addition to the Prompt Notification System warning, each recreational area will be contacted by telephone from a county or municipal EOC and instructed to evacuate the area. If telephone communication with the recreational area is not possible, the county or municipal EOC will dispatch a law enforcement or other responsible official to the area to ensure that the evacuation is being carried out. Any changes or additional instructions will be communicated to the recreational area through the public address system and by telephone.

Q:84 Does the IPRA contain provisions for sheltering or evacuating persons in recreational areas?

A.84 Because most of the recreational areas do not have sheltering capability, the recommended action will, in all cases, be to evacuate the area. The pre-scripted message for the public address system calls for evacuation as the protective action if either take shelter or evacuation is recommended.

Once the recreational areas are notified to evacuate, visitors in the areas will be instructed by the public address system to tune in one of the EBS radio stations for further instructions. In addition, the traffic and access control posts, listed in the IPRA and manned by local and State law enforcement officials, will ensure that all persons leaving the recreational area will proceed out of the EPZ in the proper direction. Traffic and access control posts will be located around the perimeter of the affected sectors to be evacuated. In addition, the municipal police will dispatch roving squad cars to provide security within their municipalities, and assist persons evacuating the EPZ.

Q:85 Does the IPRA contain provisions to ensure that requests for assistance will be responded to promptly?

A:85 Yes. Any requests for transportation assistance will be made through the municipal and county EOCs. The county ESDA Coordinators are specifically required by the IPRA to monitor the status of the transportation needs of the recreational areas and to coordinate with the regional school superintendents to provide transportation assistance. Requests for other types of assistance will be made to the municipal and county EOCs and will be handled in a manner similar to requests from schools.

Q:86 Are there any nursing homes in the EPZ?

A.86 Yes. The Royal Willow Nursing Care Center ("Royal Willow"), is the only nursing home in the Braidwood EPZ. In regard to Royal Willow, the State has undertaken substantial planning activities to ensure that adequate measures are in place under the IPRA to shelter or evacuate the patients and staff in the event of an emergency at the Braidwood Station.

Q:87 Would you describe those planning activities?

A:87 After determining that Royal Willow was the only nursing home in the EPZ, IESDA surveyed the facility to ascertain the number of patients and staff, the number of non-ambulatory patients, the available transportation and the transportation needs of the facility in the event evacuation were ordered. In addition, the Royal Willow facility was surveyed in order to prepare facility specific emergency instructions including ventilation and transportation checklists.

On July 16, 1985, a meeting was held with the Royal Willow Director to discuss the sheltering and evacuation of Royal Willow in the event of an emergency at Braidwood Station. An information package addressing the role and responsibilities of IESDA, the purpose of IPRA, and Braidwood Station facts was provided to the Director. Extra packages were provided for the staff's review. A copy of IPRA Vol. VII, SOP-10, Attachment E, "Royal Willow Nursing Care Center Sheltering, Evacuation

and Re-entry Instructions", was reviewed with the Director. These instructions provide detailed procedures to be followed by Royal Willow in the event of an emergency at Braidwood Station. A copy of IPRA Vol. VII, SOP-10, Attachment E is attached as Exhibit B. In addition, the State has provided dosimeters and potassium iodide tablets to Royal Willow.

Q:88 Has the State conducted any training sessions for the staff of Royal Willow?

A:88 Yes. Once the emergency instructions were developed and discussed with the Royal Willow Director, IESDA conducted an orientation program and later a training session at the Royal Willow facility which were attended by the Director and staff. On July 29, 1985, twenty-eight Royal Willow staff persons and the Director attended a presentation on IPRA in general and on the IPRA-Braidwood in particular. During the presentation IESDA discussed the Royal Willow staff role in response to an emergency at Braidwood Station, protective and parallel actions, and emergency worker training. A question and answer period followed the presentation. IESDA information packages were provided to the Royal Willow staff.

On September 23, 1985, IESDA conducted Operational Emergency Worker training and IDNS conducted Radiological Emergency Worker training for the Royal

Willow staff. (The subject matter covered by this training is discussed earlier in response to question 68). The Royal Willow staff will be invited to attend annual retraining sessions to refresh those who have previously received training and to provide initial training to new members of the staff.

Q:89 Has the State analyzed the transportation requirements of Royal Willow in the event of an evacuation recommendation?

A:89 The transportation needs of Royal Willow were assessed in light of the physical condition and number of patients at Royal Willow. The current resident population is 140 persons. Of these, 70 are ambulatory and 70 are non-ambulatory. However, only 2 of the non-ambulatory residents would require special transportation arrangements (i.e., ambulances) with the remainder transportable in regular cars or buses. The staff of Royal Willow consists of 63 persons. Of these, 30 persons are on the day shift, 25 persons are on the afternoon shift and 8 persons are on the night shift.

Based on this information, it was determined that the entire staff and patient population of Royal Willow could be evacuated using 3 buses and 2 ambulances, assuming no private vehicles are used. In the event of an evacuation, any needed transportation assistance would be provided through the Wilmington EOC. If the

resources available to the Wilmington EOC were insufficient, the Will County Regional School Superintendent will provide the buses from the pool of 605 buses available in Will County. If ambulances are needed, there are 15 ambulances located in the Braidwood EPZ, including 3 located in Wilmington, with an additional 37 ambulances available through mutual aid agreements. In light of these transportation resources, there will be an ample number of vehicles available to transport and evacuate all the residents and staff of Royal Willow in the event of an emergency at the Braidwood Station.

Q:90 How will Royal Willow be notified in the event of an emergency at Braidwood?

A:90 As discussed in the case of schools, in response to question 75, if an emergency situation exists the counties will notify the municipalities affected and the municipal EOCs will be activated. Personnel at the municipal EOC will notify personnel at the special facilities, including the Royal Willow Director, and inform them of the recommended protective action and brief them on the situation. The Royal Willow Director will be instructed to implement the appropriate provisions of the emergency instructions developed for Royal Willow. The Director will be instructed to place all requests for assistance through the Wilmington ESDA Coordinator.

If the recommended protective action is evacuation, the Royal Willow Director will be told the location of the congregate care shelter. The Director will also be asked whether any of the patients require Special Care Shelters. If so, the Director will be advised of the location of the Special Care Shelters able to provide the necessary medical attention.

Q:91 What actions will the Director of Royal Willow take in the event of a take shelter recommendation?

A:91 If a take shelter recommendation is made, the Royal Willow Director will complete the following tasks as required by the Royal Willow emergency instructions:

1. Instruct all staff, volunteers and nursing care center residents to report/remain indoors and account for all staff, volunteers and residents.
2. Shut off all intake fans, heaters and air conditioners. Close all windows, shades and drapes. Secure unattended doors.
3. Make staff assignments per Royal Willow Nursing Care Center Emergency Plan.
4. Assign a communicator at the switchboard for inquiries and rumor control.
5. Instruct the Royal Willow Nursing Care Center DCO to distribute dosimetry (instant-read dosimeter and TLD Card), radiation exposure records and KI to all emergency personnel and maintain a Dosimetry Control Log provided by IDNS.
6. If recommended by IDNS via the Wilmington ESDA Coordinator, administer KI tablets to emergency personnel and residents on a voluntary basis in accordance with label directions.

7. Call in additional staff, if needed.
8. Request assistance from the Wilmington ESDA Coordinator, if needed.
9. Report to the Wilmington ESDA Coordinator when all protective actions for take shelter are complete.

In addition, the Royal Willow Director will prepare for possible evacuation by performing the following tasks:

1. Determine the transportation resources required for an evacuation by implementing Checklist 3.1 (Evacuation Transportation Requirements). IPRA Vol. VII, SOP-10, Attachment E.
2. Prepare the following items for an evacuation:
 - a. Personal ID to be placed on each person if there is a need to divide residents into groups going either to a hospital, nursing home or other shelter;
 - b. Necessary drug supplies;
 - c. Personal care supplies;
 - d.. Medical history records.

Q:92 What actions will the Royal Willow Director take in the event of an evacuation recommendation?

A:92 If the Director receives a recommendation to evacuate, he will take the following actions as required in the Royal Willow emergency instructions:

1. If not already completed, complete the tasks required for a take shelter recommendation.
2. Provide traffic control by checking the outside traffic lanes that will be used to pick up residents and clearing all unauthorized vehicles.
3. Determine that the following items have been provided for:

- a. Place personal ID on each person if there is a need to divide residents into groups going either to a hospital, nursing home or other shelter;
 - b. Load drug supplies into the administrator's car or a designee's car;
 - c. Load personal care supplies into the nursing care center van or car;
 - d. Place all medical history records in the cars transporting residents going to the Special Care Shelter.
4. Contact the Wilmington ESDA Coordinator for assistance, as necessary.
 5. Secure the building and shut down the ventilation system as provided in the ventilation checklist. (Checklist 3.2.) IPRA Vol. VII, SOP-10, Attachment E.
 6. Report to the Wilmington ESDA Coordinator when staff, volunteers and nursing care center residents have been evacuated.

Q:93 Does the IPRA contain procedures for the Royal Willow Director to obtain assistance in the event of a take shelter or evacuation recommendation?

A:93 Yes. If the Royal Willow Director requires assistance to evacuate, he would contact the Wilmington ESDA Coordinator at the Wilmington EOC. Representatives of the fire and police departments, the Wilmington Superintendent of Schools, the Public Works Department and the Water Department will be located at the Wilmington EOC. If the immediate resources available to

the Wilmington ESDA Coordinator are not sufficient, the ESDA Coordinator will contact the Will County ESDA Coordinator for assistance.

Q:94 What conclusions have you drawn as to whether IPRA contains adequate provisions for shelter and evacuation of schools, recreational areas and nursing homes within the EPZ?

A:94 The provisions of IPRA governing sheltering and evacuation of individuals in nursing homes, recreational areas and schools within the EPZ permit the timely and effective sheltering and evacuation of such individuals.

EXHIBIT A
FOR INFORMATION ONLY

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BRACEVILLE COMMUNITY UNIT SCHOOL DISTRICT #75
SHELTERING AND EVACUATION INSTRUCTIONS

1.0 APPLICABILITY

- 1.1 These instructions are applicable to the Braceville District #75 School Superintendent (also the School Principal for the Braceville Elementary School).
- 1.2 These instructions shall be used by the Braceville District #75 School Superintendent to direct and implement a take shelter and/or evacuation protective action for the Braceville Elementary School.
- 1.3 These instructions may be used by the Braceville District #75 School Superintendent to shelter schools during a recommendation to prepare for protective actions (Section 2.1), if necessary.

2.0 INSTRUCTIONS

- 2.1 Braceville District #75 School Superintendent Receives Notification to Take Shelter
 - A. Upon notification of a recommendation to take shelter, call in additional staff, as needed.
 - B. Instruct all faculty, staff and students to report/remain indoors. Account for all faculty, staff and students.
 - C. Make staff assignments per School District Emergency Plan.
 - D. Shut off all intake fans, heaters and air conditioners. Close all windows, shades, and drapes. Secure unattended doors. (See Checklist 3.2.)
 - E. Assign a communicator at the switchboard for inquiries and rumor control.
 - F. Inform the Grundy County Regional Superintendent of Schools that the Braceville Elementary School is aware of the recommended protective actions.
 - G. Coordinate all requests for assistance with the Grundy County Regional Superintendent of Schools.
 - H. Inform the Grundy County Regional Superintendent of Schools and the Braceville ESDA Coordinator when the take shelter protective action is complete.

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- I. Prepare for a possible evacuation recommendation.
 1. Implement Checklist 3.1 to determine the number of buses required for evacuation.
 2. Place school bus drivers on call or standby, as the situation warrants.
 3. Report the availability of the school buses and drivers to the Grundy County Regional Superintendent of Schools.
- 2.2 Braceville District #75 School Superintendent Receives Notification to Evacuate
 - A. Complete Section 2.1.
 - B. Mobilize buses and drivers at the Braceville Elementary School. Review the evacuation routes and Congregate Care Shelter locations.
 - C. Inform the Grundy County Regional Superintendent of Schools that the Braceville Elementary School is aware of the recommended protective actions.
 - D. Provide the school bus drivers with the designated evacuation routes and Congregate Care Shelter locations.
 - E. Coordinate all requests for additional buses or assistance with the Grundy County Regional Superintendent of Schools.
 - F. Coordinate with the Grundy County Regional Superintendent of Schools to determine if assistance is required at the Congregate Care Shelters
 6. Inform the Grundy County Regional Superintendent of Schools and the Braceville ESDA Coordinator when all faculty, staff and students have been evacuated from the Braceville Elementary School.

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3.0 CHECKLISTS

3.1 Evacuation Transportation Requirements

3.2 Braceville Elementary School Ventilation Checklist

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CHECKLIST 3.1

EVACUATION TRANSPORTATION REQUIREMENTS

1. Total Faculty, Staff and Students _____
Special Education Students _____
2. Estimated number of Staff cars available _____
3. Number of Available Buses _____ Total Capacity _____
4. Number of Available Bus Drivers _____
5. Additional Bus Drivers Required _____
6. Additional Buses Required _____

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CHECKLIST 3.2

BRACEVILLE ELEMENTARY SCHOOL VENTILATION CHECKLIST

1. South Doors - Enter Double Doors, then on the right (East) there is a brown wooden door. Inside, an electric box on the South Wall (last one on the left/to the East). Shut off Main Panel 1-6, which will deactivate the following:

Unit Heaters on North Wall
Unit Heaters on North Wall Gym
Unit Heaters on South Wall Gym
Gym Vent Fan, Vent Fans 3 in East End
Unit Heaters on South Wall

2. Gym Doors - Enter Double Wooden Doors, then on the left (West) there is an outside Exit Door. Outside, walk across blacktopped area where buses are parked to the Metal Door on the East Side of the original building. Inside, Shut off panels on boxes # 1-3 followed by the six (6) switches below.

NOTE: Do not close the outside Exit Door from the gym behind you, or you will be unable to return because the blacktopped area is enclosed with a cyclone fence which is padlocked.

3. Boiler Room - Re-entry outside Exit Door from bus storage area as described above. Walk through double wooden gym doors (South) and turn right (West) and continue walking through short hallway to the drinking fountain on the left side of the hallway (South).

Just beyond the fountain is a door leading to another door. Inside the second door is the Main Shut off for the boiler on the North Wall of the Second Room. Electrical Box # 11 is your target.

NOTE: Fresh air louvers are open when boiler is operating. Sometimes the switch will close them. If not, shut & lock door going into the boiler room and place a "DO NOT ENTER" sign on the door facing the hallway.

4. Janitor Closet - Leave boiler room and continue West in short hall until it turns North (another right turn). Proceed walking North to the drinking fountain on the right side of the hallway (East). Just beyond the fountain is a door between the boys and girls restrooms. Inside is the electrical box located to the South. Shut off blower switch # 10 for boys restroom ventilation fan.

EXHIBIT B
FOR INFORMATION ONLY

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ROYAL WILLOW NURSING CARE CENTER
SHELTERING, EVACUATION AND RE-ENTRY INSTRUCTIONS

1.0 APPLICABILITY

- 1.1 These instructions shall be used by the Wilmington ESDA Coordinator to direct a take shelter and/or evacuation protective action recommendation for the Royal Willow Nursing Center.
- 1.2 These instructions shall be used by the Royal Willow Nursing Care Center Administrator to implement a take shelter and/or evacuation protective action recommendation for Royal Willow Nursing Care Center.
- 1.3 These instructions shall be used by the Wilmington ESDA Coordinator and the Royal Willow Nursing Care Center Administrator to implement the protective action of administering KI tablets to residents on a voluntary basis.
- 1.4 These instructions may be used by the Royal Willow Nursing Care Center Administrator to shelter the Royal Willow Nursing Care Center during a recommendation to prepare for protective actions (Section 2.2), if necessary.
- 1.5 These instructions shall be used by the Royal Willow Nursing Care Center Administrator for any re-entry recommendation for the Royal Willow Nursing Care Center.

2.0 INSTRUCTIONS

- 2.1 Wilmington ESDA Coordinator Receives a Take Shelter Protective Action Recommendation
 - A. Notify the Royal Willow Nursing Care Center Administrator of the take shelter protective action recommendation and the recommendation to administer KI tablets, if applicable. Direct the Royal Willow Nursing Care Center Administrator to implement Section 2.2 instructions.
 - B. Inform the Will County ESDA Coordinator that Royal Willow Nursing Care Center is aware of the recommended protective action to take shelter.
 - C. Coordinate all requests for assistance with the Will County ESDA Coordinator.
 - D. Inform the Will County ESDA Coordinator when all preparations or protective actions for take shelter are complete.

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- 2.2 Royal Willow Nursing Care Center Administrator Receives Notification to Take Shelter
- A. Upon notification from the Wilmington ESDA Coordinator, call in additional staff, if needed.
 - B. Instruct all staff, volunteers and nursing center residents to report/remain indoors. Account for all staff, volunteers and residents.
 - C. Make staff assignments per Royal Willow Nursing Care Center Emergency Plan.
 - D. Instruct the Royal Willow Nursing Care Center DCO to distribute dosimetry (instant-read dosimeter and TLD card), radiation exposure records and KI to all emergency personnel and maintain a Dosimetry Control Log provided by IDNS.
 - E. If recommended by IDNS via the Wilmington ESDA Coordinator, administer KI tablets to emergency personnel and residents on a voluntary basis in accordance with label directions.
 - F. Shut off all intake fans, heaters and air conditioners. Close all windows, shades and drapes. Secure unattended doors. (Refer to Checklist 3.2.)
 - G. Assign a communicator at the switchboard for inquiries and rumor control.
 - H. Request assistance from the Wilmington ESDA Coordinator, if needed.
 - I. Report to the Wilmington ESDA Coordinator when all protective actions for take shelter are complete.
 - J. Prepare for a possible evacuation recommendation.
 1. Determine the transportation resources required for an evacuation by implementing Checklist 3.1.
 2. Prepare the following items for an evacuation:
 - a. Personal ID to be placed on each person if there is a need to divide residents into groups going either to a hospital, nursing home or other shelter.
 - b. Necessary drug supplies.
 - c. Personal care supplies.
 - d. Medical history records.

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- 2.3 Wilmington ESDA Coordinator Receives an Evacuation Protective Action Recommendation
- A. Notify the Royal Willow Nursing Care Center Administrator of the evacuation protective action recommendation and the recommendation to administer KI tablets, if applicable. Inform the Administrator of the evacuation routes and Special Care Shelter location. Direct the Royal Willow Nursing Care Center Administrator to implement Section 2.4 instructions.
 - B. Inform the Will County ESDA Coordinator that Royal Willow Nursing Care Center is aware of the recommended protective action to evacuate.
 - C. Coordinate all requests for assistance with the Will County ESDA Coordinator.
 - D. Inform the Will County ESDA Coordinator when all staff, volunteers and residents have been evacuated.
- 2.4 Royal Willow Nursing Care Center Administrator Receives Notification to Evacuate
- A. Complete Section 2.2.
 - B. Provide traffic control by checking the outside traffic lanes that will be used to pick up residents and clearing all unauthorized vehicles.
 - C. Determine that the following items have been provided for:
 - 1. Place personal ID on each person if there is a need to divide residents into groups going either to a hospital, nursing home or other shelter.
 - 2. Load drug supplies into the administrator's car or a designee's car.
 - 3. Load personal care supplies into the nursing care center van or car.
 - 4. Place all medical history records in the cars transporting residents going to the Special Care Shelter.
 - D. Contact the Wilmington ESDA Coordinator for assistance, as necessary.
 - E. Secure the building and shut down the ventilation system. (Refer to Checklist 3.2.)
 - F. Report to the Wilmington ESDA Coordinator when staff, volunteers and nursing care center residents have been evacuated.

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- 2.5 Wilmington ESDA Coordinator Receives Re-entry Recommendation
- A. Notify the Royal Willow Nursing Care Center Administrator of the re-entry recommendation. Direct the Royal Willow Nursing Care Center Administrator to implement Section 2.6 instructions.
 - B. Inform the Will County ESDA Coordinator that the Royal Willow Nursing Care Center is aware of the re-entry recommendation.
 - C. Coordinate all requests for assistance with the Will County ESDA Coordinator.
 - D. Inform the Will County ESDA Coordinator when re-entry is complete.
- 2.6 Royal Willow Nursing Care Center Administrator Receives Notification to Re-enter
- A. Upon notification from the Wilmington ESDA Coordinator, account for all staff, volunteers and nursing care center residents.
 - B. Determine transportation needs for re-entry by implementing Checklist 3.1.
 - C. Contact the Wilmington ESDA Coordinator for assistance, as necessary.
 - D. Report to the Wilmington ESDA Coordinator when staff, volunteers and nursing care center residents have re-entered.
 - E. Instruct the Royal Willow Nursing Care Center DCO to collect all dosimetry, radiation exposure records from emergency personnel and forward all TLDs, radiation exposure records and a copy of the Dosimetry Control Log to the Wilmington ESDA Coordinator.

3.0 CHECKLISTS

3.1 Evacuation Transportation Requirements

3.2 Royal Willow Nursing Care Center Ventilation Checklist

CHECKLIST 3.1

EVACUATION TRANSPORTATION REQUIREMENTS

1. Number of Residents _____

Number of Non-ambulatory _____

(Note: The non-ambulatory will require special transportation consideration.)

Number of Staff _____

Number of Volunteers _____

TOTAL _____

2. Number of Available Autos:

Staff _____

Volunteers _____

Royal Willow _____

Nursing Care Center _____

TOTAL _____

(Note: A four door sedan can hold four or more passengers, two door can hold three.)

3. Number of Available Vans/Trucks:

Staff _____

Volunteer _____

Royal Willow _____

Nursing Care Center _____

TOTAL _____

(Note: 10 wheel chairs will fit into an average size van or pickup truck.)

4. Transportation Requirements:

Number of Autos/Vans _____

Number of Ambulances _____

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CHECKLIST 3.2 ROYAL WILLOW NURSING CARE CENTER

1. Close all windows, doors, fire doors and vents.
2. Shut off exhaust fans.
3. Turn off furnace or air conditioner.
4. Seal up openings in the building to minimize infiltration of airborne radioactivity.
5. Turn off electricy and/or gas, if necessary.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)
COMMONWEALTH EDISON COMPANY) Docket Nos. 50-456-OL
(Braidwood Station, Units 1 and 2)) 50-457-OL

CERTIFICATE OF SERVICE

I hereby certify that copies of the attached COMMONWEALTH EDISON'S TESTIMONIAL OF LAWRENCE D. BUTTERFIELD, JR., AND JANA S. FAIROW REGARDING CONTENTIONS 1(a) and 1(b) (EMERGENCY PLANNING) were served on the persons listed below by deposit in the United States mail, first-class postage prepaid, unless otherwise indicated, this 24th day of February, 1986.

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George L. Edgar
One of the Attorneys for
COMMONWEALTH EDISON COMPANY

Dated: February 24, 1986

1 MR. EDGAR: All right.

2 BY MR. EDGAR:

3 Q Ms. Fairrow, we have marked for identification
4 Applicant's Exhibits 3, 4 and 5, which are,
5 respectively, the Illinois Plan For Radiological
6 Accidents Volume 1, Illinois Plan For Radiological
7 Accidents Volume 7, and Illinois Plan For Radiological
8 Accidents Volume 7, Standard Operating Procedures.

9 Are you familiar with those documents?

10 A (WITNESS FAIROW) Yes, I am.

11 Q How did you come to be familiar with them?

12 A (WITNESS FAIROW) I was responsible for their
13 preparation.

14 Q Are the statements made in Applicant's Exhibits 3, 4 and
15 5 true and correct to the best of your information and
16 belief?

17 A (WITNESS FAIROW) Yes.

18 The SOPs have had phone numbers and names taken out
19 of them to protect confidentiality; but it has no effect
20 on the substance of the documents.

21 Q All right. Mr. Butterfield, are you familiar with
22 Applicant's 6, 7 and 8, which are, respectively,
23 Commonwealth Edison Company Generation Stations
24 Emergency Plan Revision 5, July, 1985, Generating
25 Stations Emergency Plan, Braidwood Annex, Revision 0,

1 October, 1984, and Generating Stations Emergency Plan,
2 Revision 1, Braidwood Annex, March, 1986?

3 Are you familiar with those documents?

4 A (WITNESS BUTTERFIELD) I am familiar with the first two;
5 the third one has just been produced and I have not seen
6 my copy yet.

7 Q All right. And how did you come to be familiar with
8 that?

9 A (WITNESS BUTTERFIELD) The generating station emergency
10 plans are updated and handled by my department or
11 departments reporting directly to me.

12 Q To the best of your information and belief, are the
13 statements made in those documents true and correct?

14 A (WITNESS BUTTERFIELD) Yes, they are; but I believe the
15 copies that you have filed with the Board today have
16 names and/or telephone numbers deleted from the
17 telephone directory to prevent -- protect the
18 confidentiality of it.

19 Q All right. Is Applicant's Exhibit 7 the document that
20 you referenced in your prepared written testimony,
21 Applicant's Exhibit 2?

22 A (WITNESS BUTTERFIELD) Would you repeat the title of 7,
23 please?

24 Q Generating -- Emergency Stations Emergency Plan,
25 Braidwood Annex, Revision 0, October 1984.

1 A (WITNESS BUTTERFIELD) Yes.

2 Q I take it Exhibit 8 is an update of Exhibit 7, of
3 course; is that correct?

4 A (WITNESS BUTTERFIELD) Yes.

5 MR. EDGAR: Your Honor, I would like to offer
6 into evidence Applicant's Exhibits 3 through 8.

7 JUDGE GROSSMAN: Ms. Rorem?

8 MS. ROREM: I have a question.

9 I have a copy of the revision, but I don't believe
10 that I ever received the original.

11 Is there a problem with that?

12 MR. EDGAR: We can get it for you.

13 MS. ROREM: Okay.

14 MR. EDGAR: I will note for the record that I
15 indicated, at the time of prefiling testimony, that I
16 was going to offer these exhibits.

17 JUDGE GROSSMAN: Okay.

18 Ms. Rorem, I take it you have no objection, then?

19 MS. ROREM: No, I have no objection.

20 I'm sorry.

21 JUDGE GROSSMAN: Staff?

22 MR. FLYNN: No objection.

23 JUDGE GROSSMAN: Admitted.

24 (Applicant's Exhibits Nos. 3, 4, 5, 6, 7
25 and 8 were admitted into evidence.)

1 MR. EDGAR: With that, your Honor, the
2 witnesses are available for cross examination.

3 JUDGE GROSSMAN: Ms. Rorem.

4 MS. ROREM: Could I have just a moment,
5 please?

6 (There followed a discussion
7 outside the record.)

8 JUDGE GROSSMAN: Did you want some time, Ms.
9 Rorem?

10 MS. ROREM: Just a couple of seconds, your
11 Honor.

12 MR. EDGAR: Just as a logistics matter, your
13 Honor, as the Board can see, this is a large volume of
14 documents, and if we can work out the arrangements, we
15 will be willing to package and mail that material, if it
16 suits the convenience of the Board and parties.

17 JUDGE GROSSMAN: Well, the Board has no
18 objection to it, and I am sure the Reporter has no
19 objection, either.

20 Ms. Rorem, Mr. Edgar offered to ship these
21 documents, take custody from the Reporter.

22 Do you have any objection to that?

23 MS. ROREM: No, I do not.

24 JUDGE GROSSMAN: Staff?

25 MR. FLYNN: No objection.

1 JUDGE COLE: I think we want to keep one copy
2 here during the hearing; right?

3 JUDGE GROSSMAN: This is after the hearing.

4 MR. EDGAR: We will keep all four here.

5 JUDGE COLE: Okay.

6 MR. EDGAR: But then at the end we will
7 package it up for you and we can work out where to send
8 it within the Commission offices.

9 JUDGE GROSSMAN: Okay. Fine. That's
10 agreeable, Mr. Edgar. Thank you.

11 JUDGE CALLIHAN: Mr. Edgar, do these in any
12 way, material way, differ from that sent to at least one
13 Member of the Board six months or so ago?

14 MR. EDGAR: No, sir, they don't.

15 There is one item, though, I would like to call to
16 your attention.

17 There were attachments to SOP 11 that were served
18 upon the Board and parties in November, that have to do
19 with re-entry messages; so you had the August set, there
20 was one addition to that in November having to do with
21 re-entry messages; and subject to that, it's the same.

22 JUDGE GROSSMAN: Is that connected to Exhibit
23 5 that you're referring to?

24 MR. EDGAR: Yes, sir

25 You are testing my memory on the numbers; but let

1 me verify that.

2 That's correct.

3 JUDGE GROSSMAN: Okay.

4 MR. EDGAR: It would be -- the item would be
5 an attachment to SOP 11.

6 JUDGE GROSSMAN: Okay.

7 MR. EDGAR: Applicant's Exhibit 5.

8 JUDGE CALLIHAN: I have a copy, if that has
9 any bearing on your logistics.

10 (Laughter.)

11 MS. ROREM: Okay. I am ready.

12 JUDGE GROSSMAN: You may proceed, Ms. Rorem.

13 CROSS EXAMINATION

14 BY MS. ROREM:

15 Q Ms. Fairrow, I would like to discuss first the issue of
16 the sirens, the warning sirens.

17 I wondered if you could please tell me whether --
18 if there is a loss of power to -- a loss of offsite
19 power, whether each and every one of these sirens has a
20 battery backup?

21 A (WITNESS BUTTERFIELD) I would answer that question,
22 because the design of the system is up to Commonwealth
23 Edison.

24 It is not backed up by battery power.

25 Q So that if there is a loss of offsite power, the sirens

1 will not operate?

2 A (WITNESS BUTTERFIELD) That is correct.

3 Q Okay. Could you please -- I guess I don't really care
4 which one of you answers the question, because you did
5 file joint testimony; so --

6 I would like to know about the audibility of those
7 sirens in summertime, when windows and doors are closed
8 and people may be indoors running air conditioners and
9 having televisions and so forth on.

10 Have you done any studies about the audibility?

11 MR. EDGAR: Objection on grounds of
12 relevance.

13 We don't see that falling into any of the offer of
14 proof items or Contention 1(b). There is no contention
15 as to the details of the siren system.

16 MS. ROREM: There is -- there is not
17 specifically anything about the sirens; but I think it
18 is a given in terms of the ability to evacuate safely
19 within the area both -- you are speaking of recreational
20 areas and considering responsibilities of individuals
21 within the EPZ, who may receive their first notification
22 by means of the siren warning.

23 JUDGE GROSSMAN: Ms. Rorem, could you point
24 to the portion of your reply with regard to the offer of
25 proof that this is relevant to?

1 MS. ROREM: I will have to find it here.

2 (Indicating.)

3 MR. TREBY: Is this what you are looking for?

4 (Indicating.)

5 MS. ROREM: I am looking for my response.

6 Thank you.

7 It's here someplace on the table.

8 MR. TREBY: You can use mine.

9 MS. ROREM: Thank you.

10 In my offer of proof, Issue 3 on Page 7 of my
11 response, Offer of Proof Issue 3 states, "Applicant must
12 demonstrate its capabilities to adequately inform
13 residential and transient populations within the EPZ in
14 the event of an emergency so as to enable the population
15 to effectively evacuate or shelter, including
16 development of the specific means and contents of such
17 communication."

18 JUDGE GROSSMAN: Okay.

19 Ms. Rorem, we limited what would be heard at this
20 hearing to the material facts that you indicated are
21 genuinely in issue.

22 MS. ROREM: Yes.

23 JUDGE GROSSMAN: And this does not appear to
24 be one of those facts.

25 You have nothing in there with regard to the

1 audibility of the sound system, so we will sustain that
2 objection; and let me say that whatever line of
3 questioning you raise is going to be limited, as we
4 indicated in the Board's order, to the material facts
5 that you indicated were in issue.

6 MS. ROREM: I understand. Okay.

7 And you are -- I guess I was assuming that the
8 audibility would be an important fact.

9 However, is it not true that Contention 1(b) --
10 now, are we not discussing 1(b) at this time?

11 JUDGE GROSSMAN: We are not discussing 1(b).

12 MR. EDGAR: Your Honor --

13 MS. ROREM: I haven't made that clear.

14 MR. EDGAR: May I indicate, the testimony,
15 direct testimony, addresses both Contentions.

16 JUDGE GROSSMAN: Oh, oh, it does?

17 MR. EDGAR: Yes, sir.

18 JUDGE GROSSMAN: I am sorry. Fine.

19 What is there in 1(b) that this is relevant to?

20 MS. ROREM: 1(b) has to do with the ability
21 -- with whether or not special facilities, that is,
22 nursing homes, schools, recreational areas, can be
23 effectively evacuated or protected in the event of an
24 emergency.

25 JUDGE GROSSMAN: Mr. Edgar?

1 MR. EDGAR: Yes, your Honor.

2 The Contention 1(b) deals with special facilities
3 and the specific measures in place for those facilities.

4 In none of the discovery was there ever mentioned
5 an issue of the siren system performance characteristics
6 and details.

7 This is well outside the scope of the contention.

8 JUDGE GROSSMAN: Ms. Rorem?

9 MS. ROREM: I don't believe that it is
10 outside the scope of the contention; and I will tell you
11 very many people who live within the EPZ will receive
12 their first notice of a problem by means of the warning
13 system. Some of these people are responsible, have
14 duties and responsibilities for implementation of the plan
15 as regards some special facilities; and in order for
16 these people -- you will not have each and every person
17 who is responsible notified immediately by telephone.
18 The -- the warning system is the first alert that many
19 people will have that they better call in to whomever
20 they need to contact, and so forth.

21 I believe that the audibility of the siren is an
22 issue under that contention.

23 MR. FLYNN: Your Honor, may I be heard in
24 support of the objection?

25 JUDGE GROSSMAN: Yes, Mr. Flynn. We are

1 going to call on you.

2 MR. FLYNN: Thank you.

3 The audibility of sirens is a highly technical
4 issue.

5 In the Sheer & Harris hearings, as I believe Ms.
6 Rorem is aware, the issue was explored in great length.

7 There is nothing in the wording of the contentions
8 or in the discovery materials that has put the Staff or
9 the Applicant on notice that this would be brought up.

10 JUDGE GROSSMAN: Well, Ms. Rorem, to the
11 extent that you can show that there is some different
12 effect on the special facilities because of the supposed
13 inaudibility of the system, we will allow your line of
14 questioning; but limited to Contention 1(b), to the
15 effect on special facilities. We will not consider it
16 in any broader context than that; so that you may
17 proceed with that line as limited thusly.

18 JUDGE GROSSMAN: Mr. Edgar?

19 MR. EDGAR: Yes.

20 May I ask for a clarification, too? Because I
21 think there is a distinction between the special
22 facilities on the one hand and the general public on the
23 other, within the context of the Plan; and I don't know
24 whether that distinction is helpful, but I am suggesting
25 that to the Board as well.

1 JUDGE GROSSMAN: Okay. Fine.

2 So we will allow the line of questioning to the
3 extent that it goes to the special facilities; but we
4 will not consider any of the evidence that you may
5 elicit with regard to the general area of adequacies of
6 the sound or of any other matter that you may bring up
7 that will pertain only to the special facilities, the
8 Contention 1(b); so you may proceed.

9 MS. ROREM: Thank you.

10 BY MS. ROREM:

11 Q Would you please tell me how many and what people or
12 what types of people who are members of the general
13 public are responsible for or who have any duties and
14 responsibilities under IPRA, to help -- to facilitate in
15 the evacuation and/or protective measures to be taken
16 with regard to special facilities?

17 A (WITNESS FAIROW) I am afraid I don't understand your
18 question.

19 Q Mr. Edgar just made an attempt to distinguish between
20 special facilities and the general public.

21 I am asking you if there are members of the general
22 public who are responsible, who have duties and
23 responsibilities under the Illinois Plan For
24 Radiological Accidents, or whatever it's called, IPRA,
25 who are members of the general public?

1 A (WITNESS FAIRCOW) If you are speaking of public
2 officials, of course, the officials are a small part of
3 the public.

4 The officials are notified separately. They don't
5 get their initial notification from the sirens. There
6 is a call list that they are on.

7 Q Are there any members of the general public who have
8 duties and responsibilities under IPRA?

9 MR. FLYNN: Your Honor, I object.

10 JUDGE GROSSMAN: I think that's a very broad
11 question, and I am not sure whether that's leading; but
12 I am sure the obligations and responsibilities of the
13 persons with regard to special facilities are laid out
14 in the Plan.

15 Now, are you asking for her to categorize or to
16 name all the persons who have some obligations with
17 regard to special facilities in the event of an
18 emergency?

19 MS. ROREM: What I am trying to get at -- and
20 I will probably attempt to get at it from a different
21 direction as well -- is the amount of time that it takes
22 to notify all of these people under the Plan, and the
23 fact that many of them, it is -- I believe it is relied
24 upon that they will be accessible and that some of them
25 will notify -- will be notified by means of the warning

1 system.

2 JUDGE GROSSMAN: Why don't you ask her who it
3 is that -- if there is anyone -- who is in some way
4 responsible for emergencies with regard to special
5 facilities who are to be notified by use of the siren?

6 Is that what your question is directed towards?

7 MS. ROREM: That's more specific; because I
8 think that that involves people who are left out of the
9 call list or whatever.

10 The call list assumes that each person will be
11 where he is supposed to be when he is supposed to be
12 there; that is, when there is an accident.

13 There must be people who will not be where they are
14 supposed to be, who will not be accessible, who will be
15 away from telephones, not possible to be reached; and
16 the way they will hear about this is through the warning
17 system if they are within the EPZ.

18 JUDGE GROSSMAN: Well, why don't you ask her
19 if that's the case.

20 BY MS. ROREM:

21 Q Is that the case?

22 JUDGE GROSSMAN: The question, if I
23 understand it, is:

24 Are there persons responsible for the emergency
25 evacuation, or whatever measures are necessary for the

1 special facilities, who might, in some circumstances,
2 have to be notified by use of the siren, either because
3 they are not accessible to other notification or
4 basically they are supposed to be relying upon the
5 siren?

6 A (WITNESS FAIROW) We don't rely on the sirens for our
7 contact people at the special facilities to be notified.
8 We have them on a telephone list.

9 As a backup, if we can't reach them by telephone,
10 an emergency response person would be sent to the
11 facility to inform them.

12 BY MS. ROREM:

13 Q I am not talking about people at the facilities.

14 There are people who are responsible for
15 implementation of the Plan as regards special
16 facilities, but they are not people who are at the
17 facilities.

18 Now, is it the case that some of these people might
19 receive their first warning by means of the warning
20 sirens, since they might be inaccessible to the
21 telephone?

22 JUDGE GROSSMAN: Ms. Rorem, I think you have
23 two questions there; one is: Are there persons who are
24 not resident at these special facilities who might have
25 to be notified by means of a siren rather than through

1 other communication in order to proceed with the
2 emergency planning for these special facilities?

3 A (WITNESS FAIROW) I think maybe there is two questions
4 there.

5 Are there people that don't reside at the facility;
6 and do we depend on the sirens to notify anybody?

7 JUDGE GROSSMAN: Fine.

8 I don't ask perfect questions, either.

9 (Laughter.)

10 Miss Fairow, so that if there are two questions
11 there, would you please answer both of them?

12 A (WITNESS FAIROW) Yes.

13 There are contact persons that do not live at the
14 special facilities, and we do not rely solely on the
15 sirens to notify them; but it's possible in any given
16 case that that may be how they -- that they do hear a
17 siren, and that is how they find out. If they are in a
18 car, for instance.

19 BY MS. ROREM:

20 Q Okay. I am having difficulty eliciting the specific
21 information I wish, so let me try once more.

22 Could you tell me, please, the chain of command
23 from the special facilities, from the schools, from --
24 from nursing homes, from recreational facilities, who
25 the people are through whom they receive their

1 information and instructions?

2 MR. EDGAR: Your Honor, I would like to
3 interpose here the fact that that's covered in the
4 direct testimony.

5 Granted we deal with the fiction here in
6 introducing testimony, but the witnesses have testified
7 as to the chain of command and flow of information in
8 the direct; and the question has really been asked and
9 answered.

10 JUDGE GROSSMAN: Well, we will allow this in
11 the way of background.

12 In general, Ms. Rorem wants to know about the chain
13 of command to the special facilities; I believe, and
14 could you, in general, answer that?

15 A (WITNESS FAIROW) Starting at the state level, the
16 state notifies the counties of a problem, and the
17 counties will notify municipalities.

18 Depending on whose jurisdiction the special
19 facility is in, it's the responsibility of either the
20 municipal ESDA coordinator or the county ESDA
21 coordinator to notify the listed contact person for the
22 special facility.

23 MS. ROREM: Okay.

24 BY MS. ROREM:

25 Q I think we -- I just got out one of the problems here.

1 I am not having problems with the people who are
2 contact people for the facility, I am talking about the
3 people at the municipal level.

4 Would you please define these people at the
5 municipal level?

6 You say "municipalities."

7 What specific people are you naming when you name
8 that?

9 A (WITNESS FAIROW) The municipal officials, such as
10 Mayor, ESDA coordinator, fire chief, police chief.

11 Q Okay. Now, the Mayor, police chief, fire chief and so
12 forth:

13 Will these people always be accessible by
14 telephone?

15 A (WITNESS FAIROW) In addition to having their telephone
16 numbers listed, we have their home and business phone
17 number.

18 We have an alternate for each official that can be
19 called if we cannot reach the primary official.

20 Many of them are available on pager or on radio,
21 also.

22 Q Do these people always let everyone know where they are
23 going, not only the Mayor, the police chief, the fire
24 chief, but their backups?

25 MR. EDGAR: I object.

1 That's two questions.

2 MS. ROREM: I will ask it --

3 MR. EDGAR: I would like to have one question
4 at a time.

5 Why don't you go slower and ask one question at a
6 time?

7 MS. ROREM: Excuse me. I guess -- all right.
8 I'm sorry. Excuse me.

9 BY MS. ROREM:

10 Q Are the primary people always accessible by phone?

11 MR. EDGAR: Objection.

12 Asked and answered.

13 That was the last question.

14 JUDGE GROSSMAN: That has already been
15 answered.

16 BY MS. ROREM:

17 Q Are the backup people always accessible by phone?

18 A (WITNESS FAIROW) Some of them are also available by
19 pager or radio.

20 Q Are all of these people always available by telephone,
21 pager or radio?

22 A (WITNESS FAIROW) I don't know that for sure.

23 Q So it may be the case that some of these municipal
24 people may need -- may hear -- get their first warning
25 of an accident by means of the siren system?

1 A (WITNESS FAIROW) It is possible.

2 Q So to the extent that they have duties and
3 responsibilities under IPRA, it is important that they
4 are notified; correct?

5 A (WITNESS FAIROW) Yes.

6 Q And if they are not accessible by telephone, by pager or
7 by radio, it is important that they are able to get
8 warning by means of the siren system; is this correct?

9 A (WITNESS FAIROW) It's correct; but the reason we
10 designate an alternate is in case we can't get ahold of
11 the primary official, so we aren't depending on the
12 sirens to notify officials.

13 JUDGE GROSSMAN: Well, Ms. Rorem, I would
14 like to ask one or two questions.

15 I assume now that when the fire chief and the
16 assistant fire chief go home, they don't close up the
17 fire station; is that correct?

18 WITNESS FAIROW: That's correct.

19 JUDGE GROSSMAN: In the absence of the chief
20 or the alternate, is someone else authorized to proceed
21 with the emergency plan or do you only go to two levels,
22 either the top man and the alternate, or in the absence
23 of the alternate, does someone else become an alternate?

24 WITNESS FAIROW: That would be worked out
25 within the department; but most of these firemen or fire

1 chiefs wear pagers so that they can be notified 24
2 hours, or if they work on a fire phone system.

3 JUDGE GROSSMAN: Okay.

4 Proceed Ms. Rorem.

5 BY MS. ROREM:

6 Q When we are talking about volunteer fire departments,
7 will any call go to a fire phone system if you cannot
8 reach the fire chief or his alternate?

9 A (WITNESS FAIROW) Yes, I believe there -- there is a
10 fire phone system -- at least one fire phone system --
11 in the EPZ that we would use.

12 Q Is there a designated person in each fire district or
13 municipality?

14 We are talking very small towns here.

15 Is there a designated person after the fire chief
16 and the alternate to the fire chief?

17 Is there a designated person or will you simply
18 enter the fire phone system and alert all the emergency
19 -- I mean all -- we have a volunteer fire department or
20 -- suddenly, will every emergency fire person get
21 notification --

22 MR. FLYNN: Objection.

23 BY MS. ROREM:

24 Q -- in the case of an emergency?

25 MR. FLYNN: Objection.

1 The question is compound.

2 JUDGE GROSSMAN: I am sorry, Mr. Flynn.

3 What is the objection?

4 MR. FLYNN: The question is compound.

5 There was more than one question there.

6 JUDGE GROSSMAN: Yes.

7 I believe part of it was a statement.

8 You know, what you state is not going to be
9 evidence here, Ms. Rorem.

10 MS. ROREM: Excuse me?

11 MR. EDGAR: I was going to interpose an
12 argumentative objection, but I will -- that's generally
13 been the case.

14 JUDGE GROSSMAN: So rephrase it and go to
15 single questions.

16 MS. ROREM: I'm sorry. Excuse me.

17 BY MS. ROREM:

18 Q Is there a designated person after the fire chief and
19 the fire chief's alternate when we are dealing or you
20 are dealing with volunteer fire departments?

21 A (WITNESS FAIROW) Do you mean designated as a second
22 alternate?

23 Q Yes.

24 A (WITNESS FAIROW) Not unless it's done within the fire
25 department.

1 We don't have a third person on our call list.

2 Q Could you please explain the mechanics of calling a fire
3 phone system?

4 A (WITNESS FAIRCOW) Generally, the way a fire phone
5 system works is: You dial a certain number, and it may
6 ring in five or ten homes of all the firemen in that
7 particular town or area; so you have a phone -- the same
8 number rings into several houses.

9 Q So that if you do not reach the fire chief or the fire
10 chief's alternate, you will use the fire phone system?

11 A (WITNESS FAIRCOW) It's used in some areas.

12 Q What will you do in the areas where you do not use the
13 fire phone system?

14 A (WITNESS FAIRCOW) Well --

15 MR. EDGAR: May I have a clarification on who
16 we mean by "you"?

17 You know, there are many actors in this Plan, and I
18 am having difficulty following that.

19 MS. ROREM: Excuse me.

20 I am using the term improperly.

21 BY MS. ROREM:

22 Q Will someone -- will the fire phone system be used or
23 what system will be used if there is no fire phone
24 system?

25 A (WITNESS FAIRCOW) As I said earlier, we start with the

1 phone, go to pager and a radio.

2 If -- if we can't get someone on those three
3 methods, if the area has a fire phone system, we may use
4 that.

5 Q You say you may use that.

6 Is there something else you might use instead?

7 A (WITNESS FAIROW) I -- I think here the -- the
8 emergency is going to take a period of time to develop.

9 It won't be an immediate that we have to get ahold
10 of officials.

11 If it takes a half an hour to get the fire chief, I
12 don't think it's really going to affect the response.

13 We start notifying officials early enough in the
14 process that we have enough time to get ahold of all of
15 them.

16 MS. ROREM: Could I have a moment, please,
17 your Honor?

18 JUDGE GROSSMAN: Sure.

19 Do you want to take a recess or do you want just a
20 few minutes?

21 MS. ROREM: No. I want to know if this is
22 the appropriate time to do something.

23 (There followed a discussion
24 outside the record.)

25 BY MS. ROREM:

1 Q Could you please tell me how long you think it would
2 take to reach the appropriate municipal officials in an
3 accident?

4 A (WITNESS FAIROW) That's really hard to say. It would
5 depend on the county or municipality.

6 But I want to add that a pager is used so that a
7 person can be reached 24 hours a day.

8 If they are not at their home, they wear a pager so
9 that if they are on the road they can be reached.

10 Q Are you saying, Miss Fairrow, that all of the persons who
11 have duties and responsibilities under IPRA will be
12 wearing pagers 24 hours a day?

13 A (WITNESS FAIROW) No, I am not saying that all of them
14 will. I don't know that definitely.

15 Q Are you saying that all of the municipal officials will?

16 A (WITNESS FAIROW) No.

17 Q So your answer to the question that -- you know, that
18 they would be -- that -- that some of them wear pagers,
19 doesn't cover those persons who are not wearing pagers
20 or who are not near a telephone?

21 A (WITNESS FAIROW) No.

22 Q Is this significant?

23 A But the primary officials that we are speaking of are
24 emergency oriented.

25 If -- they are on call to respond to a fire or an

1 emergency of any kind.

2 If they are aren't available, and if they have to
3 go out of town, they usually designate someone who will
4 act in their place while they are gone.

5 Q How do you know that they designate someone else who
6 will act in their place if they are gone?

7 A (WITNESS FAIROW) That's -- in my experience, that's
8 the way that emergency response personnel operate.

9 Q But you don't know specifically which officials will
10 designate someone to act in their place?

11 A (WITNESS FAIROW) No, I can't name them.

12 Q And you don't know specifically which municipal people
13 will be wearing pagers, do you?

14 A (WITNESS FAIROW) No, I don't.

15 Q Okay. So it may be the case that those officials or
16 their alternates may not hear of an accident through the
17 call system which you have described?

18 MR. EDGAR: I object.

19 That's not a question, that's phrased as an
20 affirmative statement.

21 JUDGE GROSSMAN: Well, she is asking whether
22 the witness agrees with that statement; and the witness
23 can answer that.

24 WITNESS FAIROW: Would you repeat your
25 statement?

1 BY MS. ROREM:

2 Q Is it the case that the municipal persons responsible
3 under the IPRA plan may not hear about an accident
4 through the call process, either by telephone or by
5 pager?

6 A (WITNESS FAIROW) It is possible.

7 Q It may become necessary, then, to use the fire phone
8 systems when you have not reached either the person or
9 his or her alternate; is this correct?

10 A (WITNESS FAIROW) Yes.

11 Q Which may mean, in some places, that five or ten homes
12 will receive a call about an emergency originating at
13 the Braidwood Station; is this correct?

14 A (WITNESS FAIROW) It is possible.

15 Q Is it the case that an attempt has been made to inform
16 municipalities that this may occur and it is necessary
17 to determine what person will be in charge or will act
18 as a responsible party?

19 MR. EDGAR: I object.

20 That's a compound question, it's two questions.

21 MS. ROREM: No, it's not.

22 Mr. EDGAR: Has the witness answered it?

23 We can have it read back.

24 JUDGE GROSSMAN: Can you read that back, Mr.
25 Reporter.

1 (The question was thereupon read
2 by the Reporter.)

3 JUDGE GROSSMAN: It seems like a proper
4 question to me.

5 We will allow that.

6 Do you understand the question?

7 WITNESS FAIROW: I am not -- no, I don't think
8 I understand.

9 JUDGE GROSSMAN: Why don't you rephrase it
10 then, Ms. Rorem.

11 BY MS. ROREM:

12 Q Has attempt been made to notify municipalities that this
13 situation might occur?

14 A (WITNESS FAIROW) We have had meetings with municipal
15 officials, including fire chiefs, and we have discussed
16 the use of the fire phone system with those officials.

17 Q Have you discussed -- have you had meetings with all
18 municipal officials?

19 Have you had meetings with officials in each
20 municipality within the EPZ?

21 A (WITNESS FAIROW) Yes; but not all use fire phones.

22 Q So you -- all right.

23 So in the cases where they do have fire phones, you
24 have discussed the use of the fire phone and it -- you
25 have discussed the use of the fire phone?

1 A (WITNESS FAIRCW) Yes.

2 Q Has it been agreed that the fire phone system will be
3 used when the fire chief or his alternate cannot be
4 reached?

5 A (WITNESS FAIRCW) We have discussed the use of the fire
6 phone system.

7 I think a variety of arrangements have been made
8 with -- with the officials.

9 I can't recall specifically if that particular
10 discussion occurred.

11 Q In the municipalities where the fire phone system will
12 be used, has it been discussed that five or ten people
13 may receive phone calls on the fire phone system?

14 A (WITNESS FAIRCW) I don't recall.

15 Q Okay. In the municipalities which do not have fire
16 phones, has a system been developed to notify those
17 municipal officials in the event that the first and
18 second officials cannot be contacted?

19 A (WITNESS FAIRCW) The purpose for designating an
20 alternate is so that we can reach one of them at all
21 times.

22 When we discuss designating an alternate with
23 officials, we tell them that is our purpose; so that we
24 have discussions about being able to contact either the
25 officials or their alternate on a 24-hour basis, and

1 they are aware that that is our purpose.

2 Q So are you saying that you are depending upon being able
3 to reach either the first or second official in any
4 emergency?

5 A (WITNESS FAIROW) That's correct.

6 Q Is it ever the case that both officials may be out of
7 town or inaccessible at the time of an emergency?

8 A (WITNESS FAIROW) I don't know.

9 JUDGE GROSSMAN: Excuse me, Ms. Fairow.

10 Is the alternate always a named person or is there
11 provision for someone else being designated as an
12 alternate when the named alternate is unavailable?

13 In other words, is that an office that is always
14 supposed to be filled?

15 WITNESS FAIROW: It is a named person. I
16 don't know that it is a designated office, but it is a
17 named person so that we have their home and business
18 numbers listed.

19 JUDGE GROSSMAN: Thank you.

20 MS. ROREM: I live in a small town and know
21 that it is often difficult to reach some of these
22 official people. That is why I am attempting to find
23 this out.

24 BY MS. ROREM:

25 Q Have you -- has anyone made it -- you said earlier that

1 it might be the case that neither the official nor his
2 designated alternate would be reachable by telephone,
3 pager or radio; so if there was an offsite loss of power
4 that precedes or causes a radiological emergency, is it
5 not true that there may be no way to notify these public
6 officials?

7 MR. EDGAR: Objection.

8 First, the questioner characterized the prior
9 testimony of the witness.

10 The witness' prior testimony speaks for itself, and
11 it's a matter of record.

12 Secondly -- and I will only raise this objection
13 once, because I know your Honor raised it in the last
14 session of hearings -- the question was phrased, "is it
15 not true."

16 That can be very confusing; and I trust that the
17 witness will be allowed to rephrase the answer so that
18 we remove the logical ambiguity created.

19 JUDGE GROSSMAN: Okay. With regard to the
20 first part of the objection, I don't think that the
21 paraphrasing here was improper. I believe the witness
22 did say that it's possible that that might occur; and so
23 we will allow that preface to the question.

24 But, perhaps, in view of at least the second
25 objection, why don't you rephrase the question, Ms.

1 Rorem, if you can preface it with a paraphrase of what
2 the witness has already said.

3 MS. ROREM: Is that the question, sir?

4 JUDGE GROSSMAN: It is possible, having said
5 that it is possible that such and such is so, would this
6 be likely or would this occur?

7 BY MS. ROREM:

8 Q Having said that it is possible that public officials or
9 their designates may not be reachable by telephone,
10 pager or radio, is it possible that, in the event of a
11 loss of offsite or offsite loss of power preceding or
12 causing an accident, that there may be no way to notify
13 officials who have responsibilities and duties under
14 IPRA?

15 A (WITNESS FAIROW) In an extreme case, it is possible.

16 A (WITNESS BUTTERFIELD) I would like to add that, for
17 your information, the telephone system does not depend
18 upon our offsite power to function, it will function in
19 a case of loss of offsite power, as you call it, the
20 power to your home; so I would expect that the telephone
21 system would still function.

22 MS. ROREM: Yes; but I am preceding that with
23 an inability to reach them by telephone.

24 JUDGE GROSSMAN: Is there a question pending?

25 The Board understands the context of this, Ms.

1 Rorem.

2 BY MS. ROREM:

3 Q Is it the case that any of the persons responsible on
4 the municipal level or state level may also be
5 responsible for actions or have responsibilities and
6 duties in evacuating or other -- let me start over
7 again. I got confused.

8 Do any municipal officials or state officials have
9 other duties and responsibilities as regards the
10 evacuation or protective measures to be taken at any
11 special facilities within the EPZ?

12 A (WITNESS FAIROW) I don't think I understand your
13 question.

14 JUDGE GROSSMAN: Other than what, Ms. Rorem?

15 MS. ROREM: (No Response.)

16 JUDGE GROSSMAN: You said: Do they have
17 responsibility, other responsibilities, with regard to
18 the special facilities?

19 MS. ROREM: No, no.

20 JUDGE GROSSMAN: But you haven't defined what
21 their -- what those other -- what the original
22 responsibilities are.

23 MS. ROREM: Some municipal officials have
24 responsibilities under IPRA. They are supposed to be at
25 the EOC and doing whatever it is they are supposed to be

1 doing there, depending on what their function is.

2 Do --

3 JUDGE GROSSMAN: Excuse me.

4 Is that correct, Ms. Fairrow?

5 Okay. That's a general statement. I guess we can
6 assume that's correct, yes.

7 Proceed.

8 BY MS. ROREM:

9 Q Do any of these people have other responsibilities; that
10 is, might they work at or run a nursing home or might
11 they be a school official responsible for helping to
12 evacuate school children or might they run a
13 recreational facility and have responsibilities with the
14 recreational facility?

15 A (WITNESS FAIROW) There are people who -- who have dual
16 roles, yes.

17 Q If they are persons who are supposed to be present at
18 the EOC, have you discussed with them the need for
19 assigning other persons, at whatever special facility it
20 is, to take on their responsibilities?

21 Has someone discussed this? Excuse me.

22 A (WITNESS FAIROW) If they are municipal or county
23 officials, they have an alternate listed who can act in
24 their place at the EOC if they need to go to the special
25 facility; and some special facilities have alternates

1 listed, also.

2 Q Have you discussed with them the fact that they cannot
3 carry on both duties at the same time?

4 A (WITNESS FAIRCROW) I don't recall specifically.

5 Q Do you know whether or not each and every person who is
6 in this situation is aware of the need to assign an
7 alternate at one location or the other?

8 A (WITNESS FAIRCROW) If they are an official and a contact
9 person for a special facility, we have talked to them
10 about both of their roles; but, as I said, I don't know
11 if we specifically said they needed to identify an
12 alternate contact person at the special facility.

13 We did indicate the need to identify an alternate
14 for their -- their public office.

15 Q Okay. So you have spoken with the responsible people in
16 each of the special facilities within the Emergency
17 Planning Zone?

18 A (WITNESS FAIRCROW) Yes. We did surveys of each special
19 facility.

20 Q Did you do these surveys with the complete knowledge and
21 cooperation of the responsible person or persons?

22 A (WITNESS FAIRCROW) I am not aware of any party that was
23 uncooperative.

24 Q Did they -- were they -- were each and every one of them
25 aware of what you were doing when you took the survey?

1 A (WITNESS FAIROW) We identify --

2 Q A survey, to me, indicates --

3 MR. EDGAR: Objection.

4 The witness was not allowed to complete her answer.

5 MS. ROREM: Excuse me. I'm sorry.

6 JUDGE GROSSMAN: Have you completed your
7 answer?

8 MS. ROREM: No.

9 WITNESS FAIROW: No.

10 JUDGE GROSSMAN: Would you please?

11 A (WITNESS FAIROW) We identified ourself as people from
12 Illinois ESDA, and that we were calling because of the
13 Braidwood Station EPZ, and we collected information,
14 such as the membership or enrollment at the certain
15 special facilities, so they were aware of why we were
16 calling.

17 MS. ROREM: Excuse me for interrupting.

18 I think it is because in your -- you gave an answer
19 to my question which wasn't really an answer.

20 Taking a survey, to me, does not indicate the same
21 thing as discussing with.

22 When one takes a survey, one elicits information
23 which is different than giving information or discussing
24 pertinent facts; so back in the question where I asked
25 whether you had discussed with each special facility

1 within the EPZ the necessity for designating a
2 responsible party, you responded with: You had "taken a
3 survey of each special facility."

4 I don't believe that's an answer to my question.

5 MR. EDGAR: I object to the question.

6 It's argumentative and it's not a question. It's
7 purely argumentative.

8 JUDGE GROSSMAN: Overruled.

9 I think she is just clarifying the question; and
10 perhaps you should respond to the clarified question as
11 to whether you discussed the matters or whether you
12 merely surveyed.

13 Do you understand the distinction that Ms. Rorem is
14 making?

15 WITNESS FAIROW: Yes.

16 JUDGE GROSSMAN: Could you please answer the
17 question, then?

18 A (WITNESS FAIROW) I didn't personally make the calls
19 with the survey; but if the people at the facility ask
20 us questions, we were -- I am sure we discussed anything
21 they wanted to.

22 I can't specifically say if we talked about naming
23 an alternate as the contact person.

24 BY MS. ROREM:

25 Q Could you tell me who did contact each of these special

1 facilities?

2 A (WITNESS FAIROW) Someone on our staff.

3 Q Was it different people or was it one person who did all
4 of this contacting?

5 A (WITNESS FAIROW) I believe it was one person.

6 Q Could you state who that person is?

7 MR. EDGAR: Objection.

8 Relevance.

9 JUDGE GROSSMAN: Overruled.

10 A (WITNESS FAIROW) I believe Art Scaccia did.

11 BY MS. ROEM:

12 Q Could you spell that name, please?

13 A (WITNESS FAIROW) S-C-A-C-C-I-A.

14 Q To what extent are you familiar with the discussions
15 that Mr. Scaccia had with each of these special
16 facilities?

17 A (WITNESS FAIROW) Beyond the items on the surveys, I
18 can't say specifically.

19 Q So you are not -- you do not know what he may have
20 discussed with them as regards duties and
21 responsibilities under IPRA that these people may have?

22 A (WITNESS FAIROW) Could you repeat the question?

23 Q You, personally, do not know or do you know what he
24 discussed with each of them regarding their duties and
25 responsibilities under IPRA?

1 A (WITNESS FAIRCOW) No.

2 Q Have you had any personal contact with these people?

3 A (WITNESS FAIRCOW) I have had some limited contact with
4 some of them.

5 Q Did you discuss duties and responsibilities of these
6 people under IPRA?

7 A (WITNESS FAIRCOW) Some of them I did.

8 Q Could you tell me which facilities you did discuss this
9 with?

10 A (WITNESS FAIRCOW) The director of Royal Willow Nursing
11 Home.

12 Q Were there any other facilities with whom you discussed
13 duties and responsibilities under IPRA?

14 A (WITNESS FAIRCOW) The Reed-Custer School District
15 Superintendent.

16 Q And that's all?

17 A (WITNESS FAIRCOW) That's all I can recall right now.

18 Q Okay. Are you aware of discussions concerning duties
19 and responsibilities of responsible persons in each of
20 these facilities with any other member of your staff?

21 A (WITNESS FAIRCOW) Would you repeat that question?

22 Q Are you aware of any other discussions that anyone on
23 your staff may have had with any of the special
24 facilities in the EPZ concerning duties and
25 responsibilities under the IPRA plan?

1 A (WITNESS FAIROW) Yes. We have met with different
2 schools and one of -- one of the senior citizens homes
3 about their responsibilities.

4 Q Could you tell me which schools, what schools you have
5 met with?

6 A (WITNESS FAIROW) In the testimony, I reference a
7 meeting with the Gardner-South Wilmington Citizens
8 Advisory Council.

9 Q Excuse me. I don't want to make you reiterate what you
10 have put in your testimony.

11 Are there any other schools with whom you or
12 members of your staff have had discussions regarding
13 duties and responsibilities?

14 A (WITNESS FAIROW) You mean other than in the testimony?

15 Q Correct.

16 A (WITNESS FAIROW) No.

17 Q Could you tell me what recreational facilities you or
18 members of your staff have -- with which recreational
19 facilities you or members of your staff have had
20 discussions regarding duties and responsibilities under
21 IPRA?

22 A (WITNESS FAIROW) I can't recall at the moment.

23 Q Have you had discussions with any recreational area
24 director or other responsible parties?

25 A (WITNESS FAIROW) We have had contact definitely with

1 those who serve a dual role as a public official.

2 Beyond that, I -- I am not sure at this time.

3 Q So you have had discussions with any recreational
4 facilities in which someone may be serving a dual role?

5 A (WITNESS FAIROW) I don't understand the question.

6 Q I am simply trying to clarify what you said.

7 Have you had discussions with each and every
8 recreational area or facility in which a responsible
9 party may have been serving dual roles?

10 A (WITNESS FAIROW) I don't know that we have had with
11 every one.

12 Q Can you tell me which ones you have had discussions
13 with, please?

14 A (WITNESS FAIROW) I can't recall the specific ones
15 right now.

16 Q Can you recall any with whom you have not had such
17 discussions?

18 A (WITNESS FAIROW) I -- I would rather not say without
19 looking at some records.

20 Q Okay. But you are saying you have not had discussions
21 with all of them?

22 A (WITNESS FAIROW) That's correct.

23 Q So there are some public officials who have dual roles
24 under IPRA who are not -- who have not been -- contacted
25 you regarding this dual role they serve?

1 WITNESS FAIRCOW: I don't understand that.

2 JUDGE GROSSMAN: Well, let's clarify the
3 prior question.

4 I believe the question was:

5 Have you had discussions with everyone who might
6 have a dual role? You said no.

7 Was that "you" taken to be a singular, or your
8 organization?

9 In other words, is it possible that everyone who
10 has a dual role might have been subject to discussion
11 with, or it's just that you, yourself, have not
12 discussed that with -- I am asking you, of course, I am
13 not telling you.

14 What's the answer to that question?

15 A (WITNESS FAIRCOW) We have spoken to -- to all the
16 public -- "we," as someone on my Staff or myself -- have
17 spoken to all public officials. Some of them have a
18 dual role.

19 We have not necessarily talked to everyone at a rec
20 facility -- recreational facility -- about their dual
21 role, if they have one.

22 BY MS. ROREM:

23 Q There is still one missing element.

24 Have you talked -- meaning you -- when I say "you,"
25 I -- I guess pretty much I am meaning you or your

1 organization -- have you discussed with the public
2 officials who have a dual role the dual role?

3 A (WITNESS FAIRCROW) I can't say specifically that the
4 discussions have come up.

5 We are aware -- and, of course, they are aware --
6 of their dual role.

7 Q So there may be public officials with whom you or your
8 staff have not discussed the dual role and how they will
9 fulfill all their obligations?

10 A (WITNESS FAIRCROW) That's a possibility.

11 MS. ROREM: Excuse me.

12 I would like to find something. It will take me a
13 second here.

14 JUDGE GROSSMAN: Are you switching to another
15 topic?

16 MS. ROREM: Slightly, but not completely.

17 JUDGE GROSSMAN: Why don't we take a break for
18 about five minutes now.

19 MS. ROREM: Okay. Thank you.

20 (Whereupon a recess was had, after which
21 the hearing resumed as follows:)

22 JUDGE GROSSMAN: Okay. We are back in
23 session.

24 Ms. Rorem.

25 BY MS. ROREM:

1 Q In your testimony, Miss Fairrow, on Page 60, you made the
2 correction, "Signs will be offered to each of the
3 recreational areas informing visitors of the purpose of
4 the sirens."

5 Could you please define for me the message which is
6 contained on those signs or will be contained on those
7 signs?

8 A (WITNESS FAIROW) It informs the people entering the
9 area that if they hear a siren, they should turn to one
10 of the EBS stations designated for the area and listen
11 to the radio station.

12 Q Does it state anything about the purpose of the sirens?

13 A (WITNESS BUTTERFIELD) I would like to answer that
14 question, since I am responsible for this position.

15 Signs are as Ms. Fairrow indicated and do not
16 indicate why specifically the signs are there; that is,
17 that you are in the Braidwood EPZ.

18 Q Do you mean -- could you speak up a bit? I am having a
19 hard time hearing both of you.

20 A (WITNESS BUTTERFIELD) Okay. Sorry.

21 The signs are -- as Miss Fairrow indicated, they
22 indicate that, if you hear a siren, tune to the EBS
23 radio stations. It does not indicate any further
24 information about why the sign is there or why the siren
25 is blowing.

1 Q Does it not state -- no, excuse me. I don't want to get
2 into that.

3 That's what I mean.

4 Does it not state that one is within the Braidwood
5 EPZ, because it is assumed that persons entering
6 recreational facilities will understand that they are
7 within the Braidwood EPZ?

8 A (WITNESS BUTTERFIELD) I am having a little problem with
9 my recollection, because I think I have been through
10 this before at the previous hearing; but, as I recall,
11 we indicated that the sirens are used for many purposes,
12 for many other kinds -- or can be used for other kinds
13 of emergencies; and so the signs that we have offered to
14 provide, which would simply be an emergency sign
15 indicating that if you hear the siren, to contact or to
16 turn on the radio to your EBS station.

17 Q So you are assuming that anyone entering a recreational
18 facility will do as he or she is instructed?

19 A (WITNESS BUTTERFIELD) Yes.

20 Q Do you think that there are emergencies which might
21 cause persons to respond with greater -- with a greater
22 sense of urgency than others?

23 A (WITNESS BUTTERFIELD) I can't answer that question.

24 Q Mr. Butterfield, could you please tell me what some of
25 the other emergencies are for which the siren system

1 will be used?

2 A (WITNESS BUTTERFIELD) Tornados.

3 Q Any others?

4 A (WITNESS BUTTERFIELD) Flooding.

5 Q Okay. If a person entering a recreational area in the
6 Emergency Planning Zone is not aware of the fact that he
7 is in the Braidwood EPZ, would he -- might it be the
8 case that he would assume that those sirens are for
9 weather-related warnings only?

10 A (WITNESS BUTTERFIELD) I can't answer that question.

11 JUDGE GROSSMAN: Do you mean you don't know?

12 A (WITNESS BUTTERFIELD) Judge, I can only go from my
13 personal feeling.

14 If I am in a recreational area and I hear a siren,
15 I would have to -- I would personally look to see if
16 there was a weather-related problem about to occur, that
17 I could tell.

18 If I heard the siren and I was in a recreational
19 area, for the most part, I would look for something or
20 somebody to give me some more information, if I didn't
21 hear or see the sign, or if I was unaware of it.

22 In all probability, in our case, in the EPZ, this
23 would be followed up by a verbal message, if it was
24 thought to be necessary by ESDA.

25 JUDGE GROSSMAN: Mr. Butterfield, my question

1 was only directed towards getting an answer from you,
2 not pursuing the prior answer.

3 You were asked a question and you said you can't
4 answer it.

5 Well, you are supposed to answer it.

6 If the answer is you don't know, tell us that.

7 If the answer is yes or no, of course, you will
8 tell us that, too.

9 A (WITNESS BUTTERFIELD) I am sorry, Judge.

10 JUDGE GROSSMAN: It was only a question of
11 phrasiology there.

12 A (WITNESS BUTTERFIELD) Thank you.

13 MS. ROREM: In fact, is the other answer he
14 gave not --

15 JUDGE GROSSMAN: Do you want to ask that
16 question again?

17 MS. ROREM: Well --

18 JUDGE GROSSMAN: No. The answer he gave is
19 on the record.

20 Are you satisfied with that answer?

21 MS. ROREM: Well, it brings up some other
22 things.

23 BY MS. ROREM:

24 Q I am not talking about if you didn't see the sign,
25 because since the sign gives no information about what

1 emergencies the siren system may be used for, it seems
2 somewhat irrelevant whether there is a sign or not; but
3 you premised that answer you gave on, "if I hadn't seen
4 the signs."

5 What additional information would the signs have
6 given you? I guess they would tell you the radio
7 station to call.

8 But they still wouldn't help you out in terms of
9 understanding what the emergency might be; correct?

10 A (WITNESS BUTTERFIELD) Yes.

11 Q If someone enters the Emergency Planning Zone, a
12 recreational area in the Emergency Planning Zone, and
13 sees the sign and is distant from a radio, that is,
14 hiking in a woods, or in a boat, and some distance from
15 his or her radio, if he or she has one, might he or she
16 not respond quickly if it was obvious that there was
17 nothing going wrong on the weather level?

18 A (WITNESS BUTTERFIELD) That is possible.

19 Q Do you think that, if the signs stated that it were the
20 Braidwood EPZ, that the sirens would carry an additional
21 meaning to persons who are away from their radios?

22 A (WITNESS BUTTERFIELD) In my opinion, no.

23 Q So if I am sitting in the middle of a lake and I hear
24 the warning sirens go off, I don't paddle any more
25 quickly to shore to get to my radio if I think that

1 there is an emergency at a nuclear station than if I
2 think there is a weather problem?

3 A (WITNESS BUTTERFIELD) In my opinion, no.

4 Q Is it true that the Plan, the IPRA plan, rests on the
5 assumption that persons in recreational facilities will
6 have radios?

7 WITNESS FAIROW: Would you repeat that again?

8 JUDGE GROSSMAN: Mr. Reporter, could you
9 repeat that question.

10 (The question was thereupon
11 read by the Reporter.)

12 A (WITNESS FAIROW) Well, I don't -- I don't think it
13 rests on that assumption, because most of the
14 recreational facility sirens have a PA capability on
15 them, so that the county official can activate the PA
16 system and broadcast a message indicating that the
17 problem is related to the Braidwood Station.

18 BY MS. ROREM:

19 Q Could you tell me specifically which recreational areas
20 have sirens which are equipped with this capability?

21 A (WITNESS FAIROW) It would be easier to tell you which
22 ones do not have it.

23 Q Fine.

24 Could you tell me which ones do not have it?

25 A (WITNESS FAIROW) All of the ones except Forsythe

1 Woods, Gottlieb Park District and the Island Park
2 District in Wilmington.

3 JUDGE COLE: Have them or do not have them?

4 A (WITNESS FAIROW) Those that I have named do not have
5 the PA capability on the sirens, but they are covered by
6 mechanical sirens.

7 BY MS. ROREM:

8 Q Okay. Can you tell me if there is some kind of override
9 feature, though, to these sirens, or will the messages
10 contained on them be coming from a central source only?

11 A (WITNESS BUTTERFIELD) One moment, please

12 (There followed a discussion
13 outside the record.)

14 A (WITNESS FAIROW) Primarily, activation of -- the PA
15 and the siren is activated from a central location.
16 Each county has the ability to activate the sirens in
17 their county.

18 BY MS. ROREM:

19 Q Okay. But the messages that would go across would be
20 from each county or would they be from a different
21 central location?

22 A (WITNESS FAIROW) Different from what?

23 Q From the counties.

24 In other words, as to recreational facilities in
25 Will County, are they -- do they receive messages from a

1 central Will County source, and do Kankakee recreational
2 areas receive messages from a Kankakee County source,
3 and do Grundy County recreational facilities receive
4 messages from Grundy County?

5 A (WITNESS FAIROW) It is as you described. Each county
6 has a capability of activating the sirens in their
7 county.

8 Q When they activate the sirens in their counties, does
9 the same message -- that's not what I meant.

10 What you answered didn't answer my question.

11 It's not a matter of activating the sirens, I am
12 talking about spoken messages over the -- a public
13 address system.

14 Each one is centralized in the counties; is this
15 correct?

16 A (WITNESS FAIROW) That's correct. Each county will be
17 giving their own message.

18 Q Okay. Will the same messages in all Will County
19 recreational areas -- will the message be the same in
20 all Will County recreational areas?

21 A (WITNESS FAIROW) Yes.

22 Q It's coming from one source only in Will County?

23 A (WITNESS FAIROW) Right. The general messages are
24 prescribed in SOP 6.

25 Q Yes.

1 A And they do say the same thing, generally, that the
2 official indentifies themselves and says that there is a
3 problem and the Governor has recommended that the
4 facility evacuate, and it advises people in their rec
5 facility to tune to the designated EBS stations.

6 Q Okay. I understand the prescribed messages. That's
7 not what I am trying to ask here.

8 Will the same person -- will it come from one
9 source or will there be different people directing
10 messages to different recreational areas?

11 A (WITNESS FAIROW) It is the county ESDA coordinator's
12 responsibility to provide those messages to the
13 recreational facilities.

14 Q That's not what I am asking.

15 Will one party -- if I speak into this microphone
16 -- I am a Will County person.

17 Will I be sending this message to that recreational
18 facility and this one over here and this one, or will a
19 different voice be sending a message to this one and to
20 this one and to this one?

21 A (WITNESS FAIROW) I believe it would be the one person.

22 Q Will these messages, in addition to any prescribed
23 information, be giving directions about how to evacuate?

24 A (WITNESS FAIROW) The purpose of the message isn't to
25 tell them how to evacuate, it's to tell them there is a

1 need to tune to the radio station.

2 When they tune to the radio station, they would get
3 specific information about evacuation.

4 Q So if a person in a recreational area in the EPZ does
5 not have have a radio, he does not receive information
6 about how to evacuate --

7 A (WITNESS FAIROW) Is there --

8 Q -- correct?

9 A (WITNESS FAIROW) Not necessarily.

10 There -- we provide public information booklets to
11 all recreational facilities, and they have them in their
12 clubhouse, or whatever building they may have there.

13 If people in the recreational facility go to that
14 location, they can be provided with information there.

15 Q So the recreational -- the -- excuse me.

16 The booklet which is -- has been entered into
17 evidence, is -- will be provided at recreational clubs?

18 A (WITNESS FAIROW) I believe it has been.

19 Q And this is the one to which you refer?

20 (Indicating.)

21 A (WITNESS FAIROW) The green public information booklet,
22 yes.

23 Q So that if a person does not have a radio, his ability
24 to evacuate is dependent upon the brochure which is --
25 has been entered into evidence in this proceeding?

1 A (WITNESS FAIRCW) He can get useful information from
2 the booklet.

3 Q I am not talking about useful information.

4 We were discussing whether or not a person who does
5 not have a radio has to depend or has no -- is given any
6 information about how to evacuate.

7 Is he then -- and you said no, he's -- he has the
8 booklet.

9 Is he then dependent upon the booklet to tell them
10 how to evacuate?

11 A (WITNESS FAIROW) The contact people designated at
12 recreational facilities -- most of them are located at
13 the facility. They would be there to assist an
14 evacuation.

15 If needed, the municipality or county, as --
16 whoever is responsible, would go there if there was a
17 need to assist people.

18 Q Are there any of these recreational facility which
19 contain areas which are inaccessible by car?

20 A (WITNESS FAIROW) I don't know.

21 Q If a person were in an area which was not inaccessible
22 -- which was inaccessible by car, and was out of an area
23 where he had easy contact with responsible persons at a
24 recreational facility, how would he receive information
25 about how to evacuate?

1 WITNESS FAIROW: Could I have the question
2 read back?

3 JUDGE GROSSMAN: Mr. Reporter.
4 (The question was thereupon
5 read by the Reporter.)

6 A (WITNESS FAIROW) If that person hears a siren, I would
7 assume he would be -- he would want to find out what the
8 problem was, in that he would seek a source of
9 information.

10 BY MS. ROEM:

11 Q How long might this take?

12 A (WITNESS FAIROW) I --

13 Q What's the -- what is the furthest inaccessible place in
14 any recreational facility within the EPZ?

15 A (WITNESS FAIROW) I don't know that.

16 Q You have done no studies on that?

17 A (WITNESS FAIROW) No.

18 Q You or your staff?

19 A (WITNESS FAIROW) No.

20 Q Do you know whether or not all recreational facilities
21 within the EPZ have some means of knowing where all
22 persons who enter the recreational facility have gone?

23 A (WITNESS FAIROW) I am aware that areas that have
24 overnight campers have a 24-hour person there.

25 Q But --

1 A (WITNESS FAIRCW) As to --

2 Q But there is no way to tell where they went?

3 JUDGE GROSSMAN: Ms. Rorem, could you let her
4 finish, please?

5 MS. ROREM: I'm sorry.

6 JUDGE GROSSMAN: Yes.

7 A (WITNESS FAIROW) And the ones that -- some of the
8 areas have trails; but I don't believe any of the -- the
9 areas keep track of whenever anyone goes walking around
10 the area, if they are off a trail or out of a camp
11 ground or something along those lines.

12 BY MS. ROREM:

13 Q So there may be people in inaccessible areas of
14 recreational facilities who do not have radios, and no
15 one knows that they are out there; is this correct?

16 A (WITNESS FAIROW) I suppose that's a possibility.

17 Q And they don't know that, necessarily, that there is a
18 nuclear plant in the area, do they?

19 A (WITNESS FAIROW) Not necessarily.

20 Q And if a loss of offsite power has prevented the warning
21 siren from working, they really have no contact with
22 anybody, have they?

23 A (WITNESS FAIROW) Well, I assume, if the area is not
24 accessible by car, they walked there, and I would also
25 assume that they could walk out if they had heard a

1 siren.

2 JUDGE GROSSMAN: Excuse me.

3 The question was: If there was a loss of power and
4 they could not hear the siren, would there be any way
5 that they be notified?

6 A (WITNESS FAIROW) No.

7 BY MS. ROREM:

8 Q Do any of these recreational areas or facilities contain
9 bodies of water?

10 A (WITNESS FAIROW) Yes.

11 Q What's the largest body of water in any of the
12 recreational facilities?

13 A (WITNESS FAIROW) I don't know the size.

14 Q So you don't have any idea of how long it might take
15 someone to row or whatever from one side, or the most
16 inaccessible side of a body of water, to an area where
17 he could get on foot or into a vehicle?

18 A (WITNESS FAIROW) That's right. I don't know.

19 Q So you don't really know how long it might take to
20 evacuate people who may be in inaccessible regions?

21 MR. FLYNN: Objection.

22 Evacuation times is not at issue.

23 MS. ROREM: I believe it is.

24 JUDGE GROSSMAN: Overruled.

25 WITNESS FAIROW: Was that a question?

1 JUDGE GROSSMAN: It wasn't phrased that way;
2 but you may take it as a question.

3 Do you want to read it back, please.

4 (The question was thereupon read by the
5 Reporter.)

6 A (WITNESS FAIROW) That's correct.

7 MS. ROREM: Excuse me.

8 I would like a moment.

9 (Whereupon a recess was had, after which
10 the hearing resumed as follows:)

11 MS. ROREM: Could I approach the witness,
12 please?

13 JUDGE GROSSMAN: Yes.

14 Are you going to be showing the witness some
15 document?

16 MS. ROREM: I'm going to be giving the
17 witness a copy of a document.

18 JUDGE GROSSMAN: And also to counsel?

19 MS. ROREM: Yes.

20 JUDGE COLE: Could you show it to the NRC
21 staff?

22 MS. ROREM: I gave them one.

23 I give each of you one.

24 (Indicating.)

25 Did I give you three?

1 I think we're short one copy. I need to know how
2 to proceed with this.

3 This is Pages 58 through 5-58 of the final
4 environmental statement related to the operation of
5 Braidwood Station Unit 1 and Appendix F, and I think
6 that's all.

7 I'd like to have this entered into evidence.

8 JUDGE GROSSMAN: Would you like to have it
9 marked?

10 MS. ROREM: Could you mark it for
11 identification?

12 JUDGE GROSSMAN: As what exhibit? Do you
13 recall if you've had any before?

14 MS. ROREM: I haven't had any.

15 JUDGE GROSSMAN: Okay.

16 MS. ROREM: I may have had one. I'm trying to
17 remember if we entered that --

18 JUDGE GROSSMAN: Mr. Edgar, do you recall
19 whether --

20 MR. EDGAR: I've been over the prior
21 transcript, and I didn't find any, your Honor, and I
22 looked.

23 JUDGE GROSSMAN: Why don't we have this
24 marked for identification as Intervenors' Exhibit 1,
25 unless we letter-mark any.

1 What is the usual in the NRC, Mr. Treby? Do you
2 use numbers for all of them?

3 MR. TREBY: Yes, your Honor.

4 JUDGE GROSSMAN: Okay, fine, Intervenors'
5 Exhibit 1.

6 (The document was thereupon marked
7 Intervenors' Exhibit No. 1 for
8 identification as of March 11, 1986.)

9 JUDGE GROSSMAN: Is there any reason why we
10 should designate this as Rorem Intervenors' Exhibit 1,
11 in view of the fact that we have another side to this
12 case?

13 I think maybe we'd better mark it Intervenors'
14 Exhibit 1, so we'll mark the others sequentially after
15 this and we won't run any risk of duplicating. So it's
16 Intervenors' Exhibit 1 for identification.

17 BY MS. ROREM:

18 Q On Page 5-58 of this Exhibit, Table 5-11, there is a
19 summary of environmental impacts and probabilities.

20 Could you please tell me which one listed here is
21 the -- which accident has the worst public health and
22 safety consequences?

23 MR. EDGAR: Objection; relevance. I fail to
24 see any tie between this and the contentions in
25 question.

1 This is a whole new area here, your Honor, that
2 goes into the question of environmental impacts of
3 accidents. There has been no contention in these
4 proceedings on this subject, which is a subject onto
5 itself.

6 JUDGE GROSSMAN: Yes.

7 Miss Rorem, could you explain the relevance of this
8 line of questioning to the admitted contention?

9 MS. ROREM: Miss Fairrow said earlier in her
10 testimony that it's assumed that any accident will be
11 slow developing, and I would -- that the plan or its
12 implementation depends upon that.

13 I think it's important to discuss what kind of
14 accidents we're talking about which may occur or which
15 may need to be planned for in terms of the issues that
16 are before us today.

17 JUDGE GROSSMAN: What does this exhibit have
18 to do with the rapidity of the accident occurring?

19 MS. ROREM: I'd like to discuss whether or
20 not any of these have to do with -- you know, whether or
21 not all of these will take place in accidents which are
22 slow developing or whether they are quick developing and
23 what the consequences might be.

24 I think it's important to establish whether or not
25 the plan is adequate if it only discusses or is based

1 upon slow-developing accidents.

2 MR. EDGAR: Your Honor --

3 JUDGE GROSSMAN: Mr. Edgar?

4 MR. EDGAR: That is not a correct
5 characterization of Miss Fairrow's testimony.

6 Aside from this, the Board is correct. The
7 information here does not address the rapidity of
8 accidents or the fundamental characteristics of the
9 accident phenomena.

10 We find nothing in any of the Contentions 1(a) or
11 1(b) that really throws a correct scope around this
12 information.

13 We all know that this particular appendix was
14 prepared in response to the Commission's policy
15 statement to require this type of analysis in the final
16 environmental statements.

17 There is no nexus here between this information and
18 the particular contentions. The contentions here deal
19 with public notification under the emergency plan and
20 special facilities.

21 Now we're launching into a broad inquiry into
22 accident analysis. There's nothing in the direct
23 testimony that addresses that question.

24 MS. ROREM: Miss -- excuse me.

25 JUDGE GROSSMAN: Miss Rorem?

1 MS. ROREM: Miss Fairrow stated, when we were
2 discussing the contacting of persons under the plan,
3 that if it takes a half an hour or so, there's really no
4 problem.

5 I think we need to establish whether or not there
6 are accidents which may occur which may take less than a
7 half hour to develop or in which the notification of
8 persons who have duties and responsibilities need take a
9 much shorter time in order to effect an evacuation of
10 special facilities within the EPZ.

11 MR. FLYNN: Your Honor, I would submit that
12 that's a direct challenge to the regulations,
13 particularly 10CFR, Section 50.47 E, which allows a
14 minimum of 15 minutes for the plant to notify State
15 officials and another 15 minutes for the State officials
16 to disseminate information to the public. That's
17 covered by the regulations.

18 JUDGE GROSSMAN: Miss Rorem, is there
19 something in this exhibit that indicates the evacuation
20 time or notification time should be less than the half
21 hour or so which the witness has indicated would
22 probably be available in an accident?

23 MS. ROREM: I think this exhibit describes
24 accidents which may be much more quickly developing and
25 which the half hour or so which she has described it

1 taking may not be enough. I would like --

2 JUDGE GROSSMAN: If that's the purpose of the
3 exhibit and the questioning on it, you may proceed.

4 Mr. Flynn, do you have something further on this?

5 MR. FLYNN: Yes, your Honor. I would like to
6 reiterate what Mr. Edgar has already said.

7 The chart which appears on Page 5-58 talks about
8 probabilities in terms of return frequencies. It has no
9 information whatsoever about the speed with which any
10 given accident develops. Indeed, there is -- this chart
11 does not address individual types of accidents.

12 The other thing I'd like to point out is that on
13 the following page, F1, the first sentence of the third
14 paragraph says, "Significant atmospheric releases of
15 radioactivity would in general be preceded by one or
16 more hours of warning time," which directly contradicts
17 what Miss Rorem just said.

18 JUDGE GROSSMAN: Excuse me.

19 It appears to me that you are correct, Mr. Flynn,
20 with regard to the chart having nothing to do with the
21 rapidity of accidents.

22 I was observing what was in the remainder of the
23 exhibit. There does appear to be some scenarios that
24 deal with the rapidity of accidents, so I was allowing
25 the line of questioning on that basis.

1 But if there is a pending question with regard to
2 the chart, I really don't see any relevance as far as
3 that goes but I'll let you develop your line of
4 questioning, Miss Rorem.

5 MS. ROREM: I could do it from another
6 direction if I need to. I simply wanted to use
7 documents with which everyone was familiar in terms of
8 this.

9 I'm aware of the fact that this is a -- this chart
10 doesn't serve the purpose to which I am going to put it.

11 JUDGE GROSSMAN: Okay.

12 Now, Mr. Edgar, I didn't mean to cut you off. Do
13 you have anything further?

14 MR. EDGAR: You have our objection to the
15 line of questioning, your Honor.

16 I also would indicate that the whole structure of
17 50.47 and Appendix B is -- has an underlayment which is
18 based on an accident-type scenario or set of judgments
19 which are reflected in NUREG-0396, which is referenced
20 in the first footnote to Appendix E.

21 The whole question of accident scenarios and how
22 they underlie the regulatory requirements for emergency
23 planning has already been decided by the Commission.

24 Now we're going to get into an area which
25 essentially goes at the underlayment of the Commission's

1 regulations.

2 You have our objection. I just want to be sure
3 it's clear.

4 JUDGE GROSSMAN: Okay. It's well taken that
5 we're not going to allow an attack on the Commission's
6 regulations, but certainly we will allow Miss Rorem to
7 proceed along with this line of questioning with the
8 understanding that she's pursuing this consonant with
9 what the regulations state.

10 MS. ROREM: That's what I'm attempting to do.
11 I am not in any way challenging the regulations.

12 JUDGE GROSSMAN: Okay. Whatever may have
13 been your original question, why don't we start afresh
14 and pose your first question.

15 BY MS. ROREM:

16 Q Miss Fairow, could you please describe for what kind of
17 accidents IPRA plans?

18 A (WITNESS FAIROW) Generally for accidents in nuclear
19 power plants.

20 Q Okay. Is it a fact or is it true that there is a range
21 of accidents for which this plan is designed?

22 A (WITNESS FAIROW) Accidents are classified into the
23 four classifications described in our testimony.

24 Q Does the plan assume that a radiological accident will
25 be slow developing?

1 A (WITNESS FAIROW) There is a provision in the plan for
2 notification in the case of a general emergency as the
3 initiating condition.

4 That is to get notification faster to the counties.
5 Notification goes directly from the utility to the
6 counties and to the State simultaneously, as opposed to
7 in the case of the three other classifications, the
8 utility notifies the State and then the State notifies
9 the counties.

10 JUDGE GROSSMAN: Was that a complete answer
11 to your question, Miss Rorem?

12 If it is, that's fine. Proceed.

13 MS. ROREM: Not really, but that's okay
14 because -- that's fine.

15 BY MS. ROREM:

16 Q Does the plan -- I'm trying to rephrase it.

17 Does the plan generally -- does the plan state
18 anywhere in it or do the SOPs state anywhere in them
19 that it is assumed that radiological accidents will be
20 slow developing?

21 A (WITNESS FAIROW) I don't believe so.

22 Q Does any testimony which you have filed or do any
23 arguments of Applicant's counsel state that accidents
24 will be slow developing?

25 MR. EDGAR: Objection. How can arguments of

1 Applicant's counsel be relevant?

2 MS. ROREM: That's true. Excuse me.

3 MR. EDGAR: I don't even know what the
4 reference is.

5 MS. ROREM: I'm sorry.

6 JUDGE GROSSMAN: You withdraw that question?

7 MS. ROREM: I withdraw that question. That
8 was stupid.

9 I'm sort of at a loss because I have various
10 documents which say that, and I assumed that you would
11 say that.

12 Of course, I'm familiar with whatever it is that
13 says that. So if I can have a moment to find --

14 JUDGE GROSSMAN: Certainly.

15 MS. ROREM: -- where that is --

16 JUDGE GROSSMAN: Do you want a few moments or
17 do you want us to take a recess while you gather your
18 documents?

19 MS. ROREM: Maybe that would be good.

20 Could I ask a procedural question here?

21 JUDGE GROSSMAN: Sure.

22 MS. ROREM: I know this is out of line, but
23 we haven't established any ground rules for lunch or
24 breaks or what time we'll be finishing in the evenings.

25 Can we do that so I have a general idea of how to

1 organize?

2 JUDGE GROSSMAN: Let's go off the record for
3 this discussion.

4 (There followed a discussion outside the
5 record.)

6 JUDGE GROSSMAN: Back on the record.

7 We've decided we're running basically a
8 9:00-to-4:45 session each day with a break for lunch
9 starting at about 12:00 and ending at about 1:15, so
10 today we're breaking at 11:50 and we'll be back at
11 approximately five after 1:00. We're adjourned.

12 (Whereupon, the hearing was continued to
13 the hour of 1:05 p.m.)

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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:
In the Matter of: :
: Docket No. 50-456 OL
COMMONWEALTH EDISON COMPANY : 50-457 OL
:
(Braidwood Station, Units 1 and 2) :
:
----- x

Will County Court House
Courtroom #405
14 West Jefferson Street
Joliet, Illinois 60431
Tuesday, March 11, 1986

The hearing in the above-entitled matter reconvened
at 1:05 p.m.

PRESENT:

As before.

JUDGE GROSSMAN: Okay. Mr. Edgar?

MR. EDGAR: Yes. Mr. Butterfield has a brief
statement to make to correct an item in the transcript
this morning.

WITNESS BUTTERFIELD: Earlier today a
question was asked about what would happen if we lost
power to the siren system. I indicated if you lost
off-site power to the siren system, it would not

1 function.

2 I have been corrected in that the electronic sirens
3 which also have the PA capability are, in fact,
4 battery-powered, and should we lose off-site power,
5 those sirens and their PA capability would still be
6 functional.

7 JUDGE GROSSMAN: These are battery backups,
8 are they?

9 WITNESS BUTTERFIELD: Actually, they are
10 powered by the batteries all the time, as I understand
11 it, and the batteries are kept charged by the AC power.

12 JUDGE GROSSMAN: Are these the sirens that
13 are in place all over or are these just some of those
14 sirens?

15 WITNESS BUTTERFIELD: As we testified this
16 morning, all but three of the recreational areas are
17 covered by these electronic sirens.

18 JUDGE GROSSMAN: Miss Rorem.

19 BY MS. ROREM:

20 Q Could you tell us which three recreational areas are not
21 covered by them?

22 Are those the ones you stated this morning?

23 A (WITNESS BUTTERFIELD) These are the ones that Miss
24 Fairrow indicated this morning, that's correct.

25 Q Those are the only ones that have the battery backup?

1 JUDGE GROSSMAN: Those are the the only ones
2 that do not have the battery backup.

3 MS. ROREM: I don't mean those three. The
4 ones in the recreational areas are the only ones which
5 have the battery backup.

6 JUDGE GROSSMAN: By the way, they're not
7 battery backups. They run on batteries that are
8 continuously being charged.

9 MS. ROREM: Right.

10 JUDGE GROSSMAN: But these three other ones
11 do not have that system.

12 MS. ROREM: Right. I'm sorry. I was mixing
13 my articles.

14 BY MS. ROREM:

15 Q The other --

16 JUDGE CCLE: Nonrecreation areas?

17 BY MS. ROREM:

18 Q The other nonrecreation areas have systems which are not
19 operated -- are not battery-powered and which do not
20 have a battery backup?

21 A (WITNESS BUTTERFIELD) As a general statement, that is
22 correct.

23 However, the electronic sirens with -- the
24 battery-powered electronic sirens with PA capability
25 broadcast over areas which include all the recreational

1 areas except for those three and some of the surrounding
2 areas associated with them. They are primarily set up
3 to cover recreational areas, however.

4 MS. ROREM: Okay.

5 Can I go on?

6 JUDGE GROSSMAN: Continue.

7 MS. ROREM: Okay.

8 BY MS. ROREM:

9 Q Miss Fairrow, I'm not stating this exactly, but in
10 response to a question which I asked earlier, you
11 testified that in the event that you could not reach
12 some of the municipal officials or their alternates,
13 that if it took half an hour or so, it was okay because
14 an accident would be slow developing.

15 Is this correct? Did you testify to that in that
16 way?

17 A (WITNESS FAIROW) Yes, I did.

18 Q Okay. Are there some accidents which could occur which
19 are fast-developing accidents?

20 A (WITNESS FAIROW) Yes, that's a possibility.

21 Q Could you please describe for me what events might begin
22 an accident that would be fast developing?

23 A (WITNESS FAIROW) I'm not familiar with on-site
24 activities enough to answer that question.

25 Q Mr. Butterfield, could you describe for me some

1 accidents -- or what might begin an accident that would
2 be fast developing?

3 A (WITNESS BUTTERFIELD) I am not qualified in the area
4 of accident analysis of this type.

5 What our plan calls for is a series of types of
6 accidents that can occur; and it has, as we've indicated
7 previously, the four levels of unusual event through
8 general emergency, which are really related to the
9 off-site consequences and not to the speed at which they
10 develop.

11 So from the point of view of emergency planning, we
12 do not evaluate accidents from their speed -- speed of
13 development.

14 Q Are off-site consequences ever affected by the speed
15 with which accidents develop?

16 A (WITNESS BUTTERFIELD) In my opinion, not to any great
17 extent.

18 MS. ROREM: Could you read my question back
19 to me?

20 Because I want -- I'd like to hear what I asked
21 again because I'm not -- his answer doesn't make sense
22 to me.

23 (The question was thereupon read by the
24 reporter.)

25 BY MS. ROREM:

1 Q Mr. Butterfield, do you still stand by your answer?

2 A (WITNESS BUTTERFIELD) Yes.

3 JUDGE GROSSMAN: Mr. Butterfield, why is that
4 the case?

5 WITNESS BUTTERFIELD: The off-site activities
6 include sheltering and/or evacuation.

7 As I understand accidents to occur, given a
8 significant off-site release, personnel, in my opinion,
9 would be evacuated if that is required in a time frame
10 such that the extent or the severity of the accident is
11 not a significant input to the accident.

12 JUDGE GROSSMAN: Miss Rorem was talking about
13 the rapidity of the accident, not the extent of the
14 accident, and asking whether the actions -- the off-site
15 consequences might not be different, depending on the
16 rapidity of the accident.

17 I don't want to rephrase her question for her.

18 WITNESS BUTTERFIELD: If you will permit me,
19 sir --

20 JUDGE GROSSMAN: Yes.

21 WITNESS BUTTERFIELD: -- maybe I can expand
22 it a little bit and satisfy both of you.

23 The consequences of the accident, as I interpret
24 it, are depending on how long someone is in an area of
25 radioactivity of one form or another.

1 As I understand accidents and how they are presumed
2 to work or to disperse radioactivity, the severity of
3 the accident does not cause such a change in the release
4 that the people who were to be evacuated would be
5 significantly affected as we implemented the evacuation
6 program through IPRA.

7 I don't know if I've helped you, and I'm
8 struggling, so if you can help me --

9 MS. ROREM: He's not answering it. That's
10 not the question.

11 JUDGE CALLIHAN: Mr. Butterfield, how do you
12 interpret Miss Rorem's question when she uses such terms
13 as "speed of the accident"?

14 WITNESS BUTTERFIELD: I interpreted her
15 question to be: If the accident occurs at Time Zero and
16 that the radioactivity were to reach the people quickly
17 -- like within 15 minutes, for instance -- what would be
18 the effect on those people as compared to an accident
19 which started at Time Zero and the radioactivity did not
20 reach the people for, say, three hours?

21 JUDGE CALLIHAN: You're talking about the
22 time delay in the effect of the accident, not the
23 accident itself; is that correct?

24 WITNESS BUTTERFIELD: Yes.

25 JUDGE CALLIHAN: I think there's a little

1 confusion here of terminology, and I'd like to
2 straighten it up.

3 WITNESS BUTTERFIELD: I could use some help,
4 I think, sir.

5 JUDGE CALLIHAN: Are you speaking in terms of
6 the effect of accidents rather than the accidents
7 themselves?

8 WITNESS BUTTERFIELD: Yes.

9 JUDGE CALLIHAN: So you're interested in that
10 context?

11 WITNESS BUTTERFIELD: That's correct.

12 JUDGE CALLIHAN: I think I understand it.

13 WITNESS BUTTERFIELD: Maybe I need the
14 question over again, if that's not the correct question.

15 JUDGE CALLIHAN: Miss Rorem's question?

16 WITNESS BUTTERFIELD: Yes.

17 MS. ROREM: Now you've confused me
18 thoroughly.

19 I don't really see -- I guess part of what I am
20 going for is the question of the delay time, but I don't
21 understand why the answer, whether we're talking about
22 delay time or talking about the accident -- I don't
23 understand why the answer would be as he answered it.

24 If that is the case, if there is -- let's assume
25 the plant is operating and it's a mile from here and

1 it's a big accident and it's going to hit us in 15
2 minutes.

3 According to his answer, it doesn't really make any
4 difference whether we move now or move in three hours.

5 I think that -- I'm just astounded by the answer
6 because it isn't at all what I would have expected in
7 either event of questioning.

8 Why develop evacuation plans if time elements are
9 not an important and integral part?

10 JUDGE CALLIHAN: You might help us a bit,
11 Miss Rorem, if you told us what you mean by "speed of
12 the accident." I think those are your words.

13 You put your own words back in, whatever your
14 phrase is, and tell us what you mean by that.

15 MS. ROREM: Okay. I'm assuming that an
16 accident begins and radiological consequences occur very
17 quickly to off-site areas.

18 JUDGE CALLIHAN: The speed of the -- quote,
19 unquote, "the speed of the effect," not of the accident
20 itself; is that true?

21 MS. ROREM: Yes.

22 JUDGE GROSSMAN: I believe Miss Rorem and the
23 witness are both on the same wavelength as far as the
24 question is concerned; but I think they have some
25 problems in understanding -- or at least Miss Rorem does

1 -- in understanding the answer, as I confess I have,
2 also.

3 Mr. Butterfield, why shouldn't it make any -- why
4 wouldn't it make any difference as to the measures you
5 take whether the off-site effects occur within 15
6 minutes or within three hours, assuming that you can't
7 take the same action within 15 minutes that you can
8 within three hours that might be required, or isn't that
9 a possibility?

10 WITNESS BUTTERFIELD: Let me answer the last
11 part first.

12 We can take action -- we do take action within 15
13 minutes of the determination that an accident has
14 occurred, in accordance with our plan. That occurs no
15 matter what the level of the accident is.

16 I guess what I'm trying to say is that if the
17 accident occurs and there is an immediate release, there
18 is a finite period of time from the time of the release
19 until it reaches a significant -- or a population
20 off-site. It does not happen instantaneously.

21 The doses I would expect to see off-site in any
22 reasonable kind of an accident, even a serious one, in
23 my mind, are -- would not make a significant difference
24 to the health and safety of the public if they were
25 notified in 15 minutes or in 45 minutes.

1 The "three-hour" thing perhaps is a bad choice of
2 words. What I was trying to get at was under normal
3 mode by which we would notify people or if it were done,
4 you know, in the first 15 minutes.

5 If, in fact, it is a significant accident and there
6 is an off-site release immediately, then it would
7 probably go to a general emergency, in which case we
8 would notify the State and counties together; and this
9 faster speed of putting together the program, putting it
10 into effect, would take place.

11 JUDGE GROSSMAN: But then it is important
12 that you have speed in implementing the plan in the case
13 of the radioactivity going off-site quicker?

14 WITNESS BUTTERFIELD: It is certainly
15 important to minimize the exposure of people. I do not
16 question that at all.

17 I thought I had tried to indicate that, in my
18 opinion, it would not make a significant difference in
19 the health and safety of the public in terms of what I
20 consider to be the normal time to implement IPRA.

21 JUDGE GROSSMAN: So what you're saying is
22 that under all conditions, you think your plan is
23 adequate?

24 WITNESS BUTTERFIELD: Yes, sir.

25 JUDGE GROSSMAN: Notwithstanding that there

1 might be some difference in the necessity to evacuate in
2 a hurry or to take other protective measures in a hurry
3 under one scenario rather than under another one?

4 WITNESS BUTTERFIELD: Yes.

5 JUDGE CALLIHAN: Maybe it would help a little
6 bit, Mr. Butterfield, if we backed up a mite and said
7 first: What sort of radiation would you expect to be
8 released from the site in the event of some malfunction?

9 What kinds of radiation might -- let's go back even
10 further.

11 What kind of radiation might be produced in a
12 malfunction of some kind?

13 WITNESS BUTTERFIELD: There would be gaseous
14 as well as particulate radioactivity produced.

15 The ones that are usually thought of are the
16 radioiodines, as I recall, the strontiums and a few of
17 those types. Some will be in gaseous form; some will be
18 in particulate form.

19 They would be dispersed to the public as a --
20 through the -- downwind of the station through dispersal
21 of a radioactive plume.

22 I do not see a significant problem with direct
23 radiation from the plant outside the fence boundary.

24 JUDGE CALLIHAN: That last important remark
25 -- nonetheless, let me back up just a bit and say: You

1 have been addressing radioactive materials.

2 What sort of radiation comes from these radioactive
3 materials?

4 WITNESS BUTTERFIELD: They would be primarily
5 beta-gamma. There could be some alphas.

6 That's not my area of expertise.

7 JUDGE CALLIHAN: But the source of the
8 radiation, you have said, are the particulates?

9 WITNESS BUTTERFIELD: And it could be in
10 gaseous form, also.

11 JUDGE CALLIHAN: And gas?

12 WITNESS BUTTERFIELD: Yes.

13 JUDGE CALLIHAN: Now, how are those materials
14 transferred from their source, wherever it might be, to
15 a population?

16 WITNESS BUTTERFIELD: They would be
17 transferred in a cloud or in a plume.

18 JUDGE CALLIHAN: Upon what factors would that
19 time of transfer depend?

20 WITNESS BUTTERFIELD: It would depend upon
21 the time that they were released from the plant, which
22 would assume some kind of a break in either containment
23 or other modes -- paths of release out of the plant. It
24 would depend upon the wind direction and speed.

25 JUDGE CALLIHAN: And those are at least some,

1 if not most, of the factors which enter into this delay
2 between something happening way down deep in the site
3 and somebody out here off-site being possibly subjected
4 to radioactivity from those particulates or gas?

5 WITNESS BUTTERFIELD: Yes, sir.

6 JUDGE CALLIHAN: Thank you.

7 JUDGE GROSSMAN: Miss Rorem?

8 MS. ROREM: Thank you.

9 BY MS. ROREM:

10 Q Could you please describe for me how an accident might
11 begin that would be fast acting?

12 Who would notice -- excuse me for making a compound
13 question here, but I need to get through to you what it
14 is I'm trying to say. You can answer part it.

15 I need to know who will take note of the fact that
16 a situation is developing where an -- a very rapidly
17 occurring accident is ongoing.

18 Who is the person at the nuclear plant who will
19 first notice that something is going to happen?

20 A (WITNESS BUTTERFIELD) The plant operators in the
21 control room are generally the first people to be aware
22 that there is a malfunction occurring.

23 Our procedures, our operational procedures, are set
24 up to handle this.

25 Q I know your operational procedures are set up. I have

1 your plan -- you know, the IPRA plan and GSEP, but I
2 want you to walk through some of this with me, please.

3 A (WITNESS BUTTERFIELD) Certainly.

4 Q The plant operators notice this.

5 Is there one or are there more than one who are
6 responsible for reporting it to someone else?

7 A (WITNESS BUTTERFIELD) Each unit has a unit operator,
8 who is watching his set of control boards. There is a
9 center desk operator watching other control boards.
10 There is, I believe, always a foreman in the control
11 room, watching over those others.

12 There is another, typically, degreed engineer in
13 the control room. There are roving plant operators,
14 other people on the site in the plant.

15 The typical control room has literally hundreds of
16 alarms for everything from radioactivity to temperatures
17 to pressures, whatever.

18 If something goes wrong which is a precursor to an
19 accident, there are some alarms that occur. They take
20 those alarms -- the operator, the control board
21 operator, would be the first one to take those alarms
22 and try and follow and see what's happening and go to
23 his abnormal procedures --

24 Q Okay.

25 A (WITNESS BUTTERFIELD) -- or emergency procedures.

1 They work as a team in the control room.

2 Q I'm aware of that. I'm going after something here.

3 When this first control room operator notices that
4 something is happening, escalating rapidly, how long
5 does it take him to go through the procedures which he
6 will attempt?

7 A (WITNESS BUTTERFIELD) There are numerous procedures,
8 and the ones we have are what we call "symptom-based
9 procedures."

10 He can be doing one of these procedures for -- I'm
11 not trained in them, but for 10 minutes or so, perhaps,
12 before he would discover that he was into an accident
13 situation, depending -- he has certain criteria to meet
14 in terms of that.

15 At the time that any of these types of events are
16 occurring, he has a lot of help coming in to him to help
17 evaluate this thing.

18 Q Excuse me. I'm not asking that. I just asked one
19 question. That's all I really wanted you to answer,
20 okay?

21 So 10 minutes into his notice --

22 MR. EDGAR: I'm going to object to that.

23 The witness is doing the very best he can to
24 respond to this line of questioning. If it's
25 open-ended, he said, "Help me."

1 I think he's trying to do the best he can, and I
2 don't appreciate that last remark. I don't think it's
3 fair.

4 MS. ROREM: Excuse me, but because I know
5 where I'm going, I wish him to only answer the question
6 I asked.

7 MR. EDGAR: Then I'll object to the question
8 on the grounds that it was argumentative.

9 I think the witness is doing the best he can.

10 JUDGE GROSSMAN: Well, okay.

11 Miss Rorem, I didn't find anything really
12 objectionable here except for the fact that we seem to
13 be wandering away from what the subject is, and so I'd
14 like you to shorten it up, if you can --

15 MS. ROREM: Okay. What I'm trying to do --

16 JUDGE GROSSMAN: -- especially since we're
17 entering areas which are not within the expertise of the
18 witnesses to the actual mechanics of the operation of
19 the plant during an accident.

20 MS. ROREM: But the witness --

21 JUDGE GROSSMAN: Continue.

22 MS. ROREM: -- has stated that he is familiar
23 with and responsible for the GSEP, which, to me, is part
24 and parcel of understanding the time element between an
25 accident beginning to happen and various things

1 occurring.

2 I am trying to -- I don't want to digress on this,
3 and I don't want to -- I don't want the witness to be
4 argumentative in terms of saying that people are helping
5 him out and so forth. That is not the issue.

6 Who is doing this is not the issue. I'm going
7 after the time element: How much time occurs from the
8 beginning of an accident starting to occur and all of
9 the chain of command happening?

10 This is what I would like to find out.

11 JUDGE GROSSMAN: We've already gotten one
12 answer to that, which is that it could be 10 minutes.
13 Now, if you're not satisfied with that --

14 MS. ROREM: I was quite satisfied with that,
15 and then Mr. Edgar -- and I didn't want him to talk
16 further because then I had another question. The "10
17 minutes" was fine. I didn't need the rest of his
18 response. Then Mr. Edgar --

19 JUDGE GROSSMAN: Fine. Why don't you
20 continue?

21 MS. ROREM: Excuse me. I'm sorry. I don't
22 mean to be rude.

23 BY MS. ROREM:

24 Q After he's gone -- Mr. Butterfield, after he's gone
25 through this 10 minutes of the things he does, what does

1 he do then?

2 A (WITNESS BUTTERFIELD) He continues to try and bring
3 the plant under control. He -- the operator continues
4 -- that's his function. By law he has to do that.

5 Other people in the control room, such as the shift
6 technical adviser or the foreman or the shift engineer,
7 will evaluate the information that he has and perform
8 the necessary functions in determining if he, in fact,
9 has an accident that is reportable and how it -- what it
10 should be classified as.

11 Q How long does it take the shift technical engineer -- is
12 that it?

13 A (WITNESS BUTTERFIELD) Shift technical adviser.

14 Q -- the shift technical adviser to determine whether he
15 has an accident that's reportable?

16 A (WITNESS BUTTERFIELD) Based on real-world experiences,
17 we don't have a lot of experience in this field. We do
18 not have a lot of these activities.

19 Most things that we report take hours, perhaps,
20 before we determine that they may be reportable. What
21 we're talking about here, I assume, is a very serious
22 and significant event that is occurring rapidly.

23 It would be pure conjecture on my part to even try
24 to answer it. That's not my area of expertise, and I
25 don't know the answer.

1 Q Okay. Mr. Butterfield, thank you.

2 Since it is an important part of the licensing of
3 this plant to see that the emergency plans and the
4 public information provided as part of that comply with
5 the regulations, I would feel that a witness offered by
6 Commonwealth Edison, the Applicant, would be familiar
7 with the timing element since it is even specified in
8 the Code of Federal Regulations.

9 My interest in this is in terms of the
10 applicability to the ability to safely inform and
11 evacuate the public, the special facilities and so
12 forth.

13 So I'm kind of handicapped by the fact that you are
14 not familiar with -- you're the witness offered, but
15 you're not familiar with the time elements which may be
16 occurring in the event of an accident.

17 MR. EDGAR: Your Honor, I'd like to raise an
18 issue here that there is no requirement whatever in the
19 Code of Federal Regulations that establishes a time
20 within which any accident sequence must be responded to
21 or brought under control.

22 MS. ROREM: I didn't say that.

23 MR. EDGAR: The 15-minute notification is
24 addressed in Mr. Butterfield's testimony, and that's
25 part of emergency planning.

1 I think we're having two concepts overlapped here,
2 and it's going to cause continuing confusion.

3 JUDGE GROSSMAN: Mr. Edgar's observation is
4 also mine, as far as that goes.

5 Now, if you have something in the regulations that
6 you want to point this to --

7 MS. ROREM: No. Excuse me. That is the
8 thing to which I was referring.

9 I'm trying to pull these together, because it's
10 very easy to talk about notification at the
11 determination of an accident, but when is it determined
12 that there is an accident occurring?

13 I believe an accident can begin to occur and isn't
14 even determined or called an accident until far later.

15 In terms of public notification, it's extremely
16 important, I believe, that these two things mesh and
17 that we don't have an accident occurring which is fast
18 developing and, therefore, not planned for and whereby
19 -- I'm not -- I am not arguing either with the
20 regulations or --

21 JUDGE GROSSMAN: Well, it seems to me as
22 though you're trying to draft a regulation, Miss Rorem.

23 (Laughter.)

24 MS. ROREM: I'm not.

25 JUDGE GROSSMAN: I don't think you can expect

1 that a witness on emergency planning is going to be the
2 nuclear engineer who knows everything about nuclear
3 accidents.

4 We have a restricted area that we're going to be
5 trying here, and it's been pretty much defined in the
6 contentions and the discovery and the prefilled
7 testimony.

8 I think we're wandering far afield now. I think we
9 just have to work within the framework of the
10 requirements 50.47 and Appendix A to that and
11 NUREG-0654.

12 MS. ROREM: Okay.

13 JUDGE GROSSMAN: Let's confine it to that.

14 MS. ROREM: Okay, fine.

15 You brought up NUREG-0654. I consider that a very
16 important document.

17 On Page 17, Table 2, "Guidance on Initiation and
18 Duration of Release," there are figures given. It
19 discusses -- it doesn't discuss; it lays out the fact of
20 the time from the initiating event.

21 Now, I don't see "initiating event" as being the
22 time when an accident is declared. "The time from the
23 initiating event to the start of an atmospheric release
24 could be from .5 hours to one day."

25 Because it says that, I am concerned with Miss

1 Fairow's characterization of the time it takes to notify
2 some municipal officials -- if it takes half an hour, it
3 doesn't matter because it's assumed to be a
4 slow-developing accident -- to mean that the short end
5 of that time from the initiating event to the start of a
6 release as being somewhat unimportant.

7 I'm sorry. I'm not very good at getting out what
8 I'm trying to get at.

9 I don't -- the plan -- the IPRA plan seems to
10 negate any fast-developing accidents in terms of its
11 real implementation.

12 MR. FLYNN: Your Honor --

13 JUDGE GROSSMAN: Well, Miss Rorem, I'm not
14 sure that's a fair characterization of the testimony.

15 I believe you did get some admission or some
16 concession that it wouldn't be that severe if there were
17 a half an hour's delay; but I'm not sure that that's
18 what the whole plan was based on, which appears to be
19 the way you're characterizing it now.

20 MS. ROREM: Okay.

21 JUDGE GROSSMAN: Now, if you want to pursue
22 the question with Mr. Butterfield as to whether the
23 implementation of the plan should take place within that
24 first half hour, proceed with that; but I don't think we
25 have to go into the nuclear engineering of the plant to

1 do that.

2 MS. ROREM: I'm not trying to go into the
3 nuclear engineering.

4 I'm trying to understand -- I don't think I'm the
5 one that's throwing around the confusing phrases. It
6 gets difficult when someone uses the term "accident" and
7 the Applicant may mean it's not an accident until it's
8 declared an accident.

9 I want to know about that time from an initiating
10 event until it's declared an accident, because that time
11 can be crucial for people who are in the Emergency
12 Planning Zone.

13 JUDGE GROSSMAN: Well, Mr. Butterfield, are
14 you familiar with Table 2 on Page 17?

15 WITNESS BUTTERFIELD: No, sir.

16 JUDGE GROSSMAN: Do you have NUREG-0654 in
17 front of you?

18 WITNESS BUTTERFIELD: No, sir.

19 JUDGE GROSSMAN: The reporter can note that I
20 have handed Mr. Butterfield a copy of that.

21 JUDGE GROSSMAN: Now, it seems as though we
22 have a Descartes or Bishop Berkeley kind of argument
23 here as to whether an accident is an accident until
24 someone perceives it.

25 Perhaps we ought to take a recess now and let the

1 witnesses familiarize themselves again with NUREG-0654.

2 Would you like a break, Mr. Butterfield?

3 WITNESS BUTTERFIELD: Please.

4 JUDGE GROSSMAN: Fine. Why don't we take a
5 10-minute recess?

6 (Whereupon, a recess was had, after which
7 the hearing was resumed as follows:)

8 JUDGE GROSSMAN: We're ready to resume.

9 Did we end with a question or -- no. I believe we
10 just handed NUREG-0654 to the witnesses to refamiliarize
11 themselves with it.

12 Miss Rorem?

13 BY MS. ROREM:

14 Q You have looked, then, at Page 17, Table-2, at the
15 bottom?

16 A (WITNESS BUTTERFIELD) Yes.

17 Q And this is titled "Guidance on Initiation and Duration
18 of Release"?

19 Mr. Butterfield --

20 A (WITNESS BUTTERFIELD) Yes?

21 Q -- is this titled "Guidance on Initiation and Duration
22 of Release"?

23 A (WITNESS BUTTERFIELD) Yes.

24 Q Did you use this document in developing your plan
25 on-site?

1 A (WITNESS BUTTERFIELD) Yes.

2 Q And there are four items mentioned on the left side of
3 this table, are there not --

4 A (WITNESS BUTTERFIELD) Yes.

5 Q -- are there?

6 Excuse me. I'm not trying to get confusing with
7 words here.

8 (Laughter.)

9 And don't all four of these items listed -- the
10 time from initiating event to start of atmospheric
11 release and the time period over which radioactive
12 material may be continuously released and the time at
13 which a major portion of release may occur and the
14 travel time for release to exposure point -- don't they
15 all begin with .5 hours, except for the second item
16 under the last one?

17 In other words, isn't the time element on each of
18 these categories 0.5 hours to one day or 0.5 hours to
19 several days or 0.5 hours to -- is this not the case --
20 is this the case?

21 A (WITNESS BUTTERFIELD) If I may try to answer what I
22 think you're asking me, this information is used in the
23 development of the source terms, which is the analytical
24 evaluation of this radioactive dispersion or cloud or
25 radioactivity that is sent out to the public.

1 It is used to develop those numbers, which are then
2 used in our program and our generating station's
3 emergency plan to decide what levels -- what types of
4 accidents at what points are considered to be the
5 different classifications, such as unusual event, alert,
6 site and general emergency.

7 This guidance is used in helping to develop that
8 input.

9 Q Okay. But it does state something as a fact: that the
10 time from the initiating event to the start of a release
11 could be from 0.5 hours to one day, regardless of how
12 this is going to be used?

13 A (WITNESS BUTTERFIELD) You call it "a fact"; I call it
14 "an assumption."

15 It's an assumption used in the development of our
16 models. It may or may not be based on fact. It is a
17 given guidance document which we must follow.

18 Q In what way have you followed it if you are not familiar
19 with the time elements between an initiating event and a
20 declaration of an emergency?

21 MR. EDGAR: Objection. That's
22 mischaracterizing the witness' testimony. There's an
23 implicit statement in the question that is not in the
24 record.

25 The witness' testimony speaks for itself in regard

1 to notification.

2 JUDGE GROSSMAN: Well, the witness is an
3 expert; and if he thinks that the question isn't a
4 proper characterization, he can say that.

5 You can answer the question.

6 Would you like it repeated in?

7 WITNESS BUTTERFIELD: Please.

8 (The question was thereupon read by the
9 Reporter.)

10 A (WITNESS BUTTERFIELD) I am not one of the people that
11 does the technical analysis for developing the source
12 terms, so I do not know how they feed this information
13 into the methodology that they used to develop our, as
14 we call them, "source terms."

15 BY MS. ROREM:

16 Q If you call this table "an assumption," what would you
17 call "a fact" about the time in each of these four
18 categories?

19 MR. FLYNN: Objection; relevancy, and it's
20 beyond the competence of the witness. We're getting far
21 afield here.

22 She's asking the witness to rejustify the planning
23 basis.

24 JUDGE GROSSMAN: Sustained.

25 Miss Rorem, why can't you accept the fact that -- I

1 don't want to use that word.

2 (Laughter.)

3 Why can't you accept it as an assumption for your
4 line of questioning?

5 MS. ROREM: I guess I can, but I think that
6 Mr. Butterfield's characterizing it as "an assumption"
7 rather than a fact is somewhat important in that it
8 seems to be a dismissible element if it is not a fact;
9 it's just an assumption.

10 JUDGE GROSSMAN: I think all Mr. Butterfield
11 is saying is that he's not the person who went from fact
12 to assumption; that's not within his expertise.

13 There were numerous people who had high technical
14 expertise who had input into arriving at these
15 assumptions, and I don't think we're going to spend the
16 time of hearing going into that.

17 Let's accept the assumptions the way they're stated
18 in the NUREG-0654 and then ask our questions based on
19 that.

20 MS. ROREM: Okay.

21 I think what I have a problem with is the fact that
22 -- is that I have assumed that if Mr. Butterfield is
23 responsible for GSEP, that he should be responsible for
24 the planning basis, not in terms of having developed it
25 but in terms of having used it.

1 If he is not, then I wish he would tell me what
2 person is responsible for that information.

3 JUDGE GROSSMAN: I think Mr. Butterfield has
4 indicated that he is responsible for accepting the
5 assumptions in NUREG-0654 and formulating the plan on
6 that basis, along with other matters that have gone into
7 it.

8 I don't think -- if you feel that that's not the
9 case, you can ask him further on that; but let's not get
10 into the basis for the assumptions in NUREG-0654.

11 MS. ROREM: That isn't what I was getting at.
12 I was trying to understand how these assumptions were
13 used in developing GSEP.

14 WITNESS BUTTERFIELD: This information is
15 used to develop source terms, which are used in our
16 overall assessment of types of accidents as shown in,
17 for instance, the Braidwood Table 5-1, things like that,
18 which we use then to develop the points at which we
19 would notify the State at the various levels.

20 MS. ROREM: Okay.

21 BY MS. ROREM:

22 Q Are there accidents that can -- are there accidents
23 which can develop which would develop with the rapidity
24 which these assumptions seem to suggest?

25 A (WITNESS BUTTERFIELD) I believe it is possible.

1 Q Okay. How much time would it take under GSEP from an
2 initiating event until a person is notified at another
3 level to take it on to the State?

4 This is why I'm going for the timing. I want to
5 understand from the time an event happens.

6 A (WITNESS BUTTERFIELD) Let me try and go through it
7 again and see if I can fill in the blanks I seem to have
8 created.

9 I have indicated that, in my opinion, it might take
10 as much as 10 minutes or so from the initiating event --
11 the first alarm on a control board, given that it is a
12 significant event, a serious breach of a pipe or
13 whatever is what I guess we'll call "a serious event" --
14 until an operator might get far enough into his or her
15 emergency operating procedures to know that he had a
16 significant accident.

17 At the time of the first alarm, other people will
18 be there to observe and pick up whatever duties they
19 feel they must take on.

20 I would estimate it would -- it is my judgment it
21 could take as much as 15 minutes from the initiating
22 event before the additional technical support in the
23 control room could have -- would have come to a decision
24 point to classify it as a significant accident and
25 initiate the NARS phone call, the Nuclear Accident

1 Reporting System phone call. That is just my judgment.

2 And from there, everything is documented. We must
3 then call the State within 15 minutes after that
4 notification, and it would go from there.

5 Does that help?

6 Q Okay. If you've notified the State -- yes, it does.
7 Thank you very much.

8 Could it take more time than that 10 minutes from
9 the initiating event in a serious emergency?

10 A (WITNESS BUTTERFIELD) Yes, it could take more than
11 that.

12 Q Okay.

13 A This is my judgment based on myself playing "what if."

14 You must realize that our procedures were set up as
15 system -- symptom based. That's the latest type of
16 systems we have, type of programs -- of procedures.

17 So our goal is to get the plant under control. You
18 can go through a lot of these procedure steps and have
19 everything under control and, when you look back on it,
20 it could have been a very serious accident.

21 The fact that it is a serious accident from where
22 it ends up -- let's say, for instance, a loss-of-coolant
23 accident -- it may not affect the public at all because
24 there are other things that have to occur before it
25 affects the public.

1 However, once we determine that we had this serious
2 accident, we would notify the State and, in fact, the
3 notification would indicate that we have a problem;
4 there is no immediate impact -- it would probably say
5 "no immediate impact on the public" and, therefore,
6 there would be no notification.

7 Q Okay. But there are events which could take place where
8 you wouldn't notify that there's no immediate danger to
9 the public that there would be an immediate danger to
10 the public; correct?

11 A (WITNESS BUTTERFIELD) That is possible.

12 Q Okay. The difference in this 10-minute interval could
13 have to do with the number of symptoms you were having
14 or the kind of symptoms?

15 A (WITNESS BUTTERFIELD) Yes.

16 Q Would they have to do also with judgment calls and
17 believing instruments and so forth?

18 A (WITNESS BUTTERFIELD) The operators are trained to go
19 through the procedures and to believe their instruments.
20 There are always more than one instrument for I guess I
21 would call them "major indicators" in the plan.

22 Q You've given 15 minutes as an amount of time before the
23 NARS phone call is made.

24 Not from the initiating event, right, but from the
25 15 minutes from the initiating event until --

1 A (WITNESS BUTTERFIELD) Yes, 15 minutes from the
2 initiating event, the classification of the accident.

3 Then there could be as much as another 15 minutes
4 until we call -- we make the NARS phone call.

5 Q Okay. Who is it that makes the NARS phone call and is
6 that -- who is it that makes the NARS phone call?

7 A (WITNESS BUTTERFIELD) It is typically the manager of
8 the plant or his designee, so it would depend upon the
9 time of day and who is there.

10 Q Okay. So we have here a half an hour from the
11 initiating event to the phone call to the State of
12 Illinois or, if this is a serious event, you bypass
13 that?

14 A (WITNESS BUTTERFIELD) If it is a general emergency,
15 the highest classification would be simultaneous to the
16 State and the counties.

17 Q Okay. And what happens then?

18 A (WITNESS FAIROW) In the event of a general emergency
19 being the initiating condition, when the State gets the
20 call and the County gets the call, it's the dispatchers
21 that would get the call; and then they would initiate a
22 notification list.

23 The State notification list includes State response
24 personnel within Illinois ESDA, Department of Nuclear
25 Safety and other State agencies.

1 At the county level, the counties would notify
2 municipal dispatchers and County officials.

3 Q What is it exactly they are notified?

4 Are they notified that it's a general emergency?
5 At this point -- at what point -- at this point has
6 evacuation been declared; that it's important to
7 evacuate?

8 A (WITNESS FAIROW) In not all cases. It would again
9 depend upon an analysis by the utility and a
10 confirmatory accident assessment by the Department of
11 Nuclear Safety.

12 Q And how long would this take?

13 What's the least amount of time this can take?

14 A (WITNESS FAIROW) I could answer that better: It would
15 be within 15 minutes.

16 Q Within 15 minutes of their phone call -- of that phone
17 call?

18 A (WITNESS FAIROW) Right.

19 Q So we're now 45 minutes past the initiating event: 15
20 minutes for the event to be classified, 15 minutes for
21 the NARS phone call and then 15 minutes to perhaps
22 declare that an evacuation will take place -- or to
23 decide what action will be taking place?

24 Is that a better characterization?

25 A (WITNESS FAIROW) The utility could come up with a

1 recommendation, which would go out over NARS.

2 Regardless of whether there's a protective action
3 recommendation, it's going to go out over the -- on the
4 NARS form to activate prompt notification.

5 If there is no protective action recommendation, a
6 for-information-only message will go out, which
7 indicates that the public should stay tuned to the radio
8 station.

9 Q Okay. But that will go out regardless, to get onto the
10 radio stations, before or simultaneous with a
11 decision-making process going on about whether to ask
12 for protective action or to evacuate, correct, or
13 whatever?

14 A (WITNESS FAIROW) That's correct.

15 At a general emergency, public notification will
16 occur whether there has been a protective action
17 recommendation or not.

18 It will just -- the sirens will be sounded and a
19 for-information-only message will be provided to the EBS
20 stations.

21 Q The sirens will go off at the same time the message will
22 go to the EBS stations?

23 A (WITNESS FAIROW) Right.

24 Q How -- what is the delay time in the stations being able
25 to broadcast their message?

1 A (WITNESS FAIROW) It would be the amount of time to
2 receive messages and to record them and then commence
3 rebroadcasting.

4 Q How long does this take? In other words -- wait a
5 minute.

6 Does the NARS phone call go directly to the radio
7 stations or does that go to the county and then the
8 county has to turn around and send the specific message
9 to be broadcast to each of the radio stations?

10 Is this correct?

11 A (WITNESS FAIROW) The county receives notification from
12 the utility. The counties then call the EBS station.
13 They're sister stations, so one phone call gets both.

14 Q One phone call gets both stations?

15 A (WITNESS FAIROW) AM and FM.

16 Q Okay. And then they have to read the specific script
17 that is pertinent to the situation?

18 A (WITNESS FAIROW) If they haven't got a protective
19 action recommendation yet, they simply read the
20 for-information-only message.

21 Then when they get a protective action
22 recommendation, they follow up, reactivate EBS and
23 broadcast the specific message.

24 Q Okay. If the -- all right.

25 I don't see how they can have -- if this is

1 simultaneous happening with the sirens being -- okay.

2 The sirens are not activated until the county
3 activates them; correct?

4 A (WITNESS FAIROW) That's correct.

5 Q So when the phone call is made, the county
6 simultaneously starts the sirens and makes a phone call
7 to the EBS stations to get that on the air; correct?

8 A (WITNESS FAIROW) Correct.

9 Q So there is at least several minutes between the sirens
10 going off and the message coming on the air; right?

11 And the first message would almost necessarily be,
12 "Stay tuned for further response"; right?

13 "For further information"; excuse me.

14 A (WITNESS FAIROW) That would depend if protective
15 actions had been recommended yet. If no --

16 Q Would protective actions have been recommended in the
17 NARS phone call?

18 A (WITNESS FAIROW) Possibly. There could have been just
19 a general emergency with notification to the public for
20 information only.

21 Q We're assuming that. Let's assume that that's what is
22 going on. Let's assume that it's a general emergency.

23 So that first phone call -- when it happens and the
24 protective action is recommended, the sirens go off and
25 the message that goes to the stations is to broadcast

1 this protective action recommendation; correct?

2 A (WITNESS FAIROW) Would you repeat that?

3 I don't quite understand.

4 Q Okay. We're assuming a general emergency, so we're
5 assuming an event in which it's important to take as
6 immediate action as possible.

7 So when the call goes to -- when the sirens go off,
8 the recommendation is already happening and the first
9 message that will be broadcast on the EBS stations is
10 whatever protective action is recommended; correct?

11 A (WITNESS FAIROW) That's correct, if there is a
12 protective action recommendation.

13 If there's not one recommended, it's just going to
14 be a for-information-only message.

15 Q Okay. There might be a general emergency in which no
16 protective action would be recommended; correct?

17 A (WITNESS FAIROW) That's possible for any part of the
18 EPZ.

19 For instance, Kankakee -- if the wind is blowing in
20 a certain direction, Kankakee County won't be affected
21 by any protective actions, but they will broadcast their
22 for-information-only message.

23 JUDGE GROSSMAN: Miss Rorem, are we still on
24 Contention 1(b) or are we on another contention or not
25 on any contention at all?

1 Now, if the whole purpose of this questioning is
2 the effect that the emergency plan is not put into
3 effect on a timely basis and that affects the entire
4 emergency plan but is not directed towards the special
5 facilities, I think it's really not within the scope of
6 what we're supposed to be hearing.

7 MS. ROREM: No.

8 JUDGE GROSSMAN: If there is something
9 peculiar about the special facilities, well, that's
10 another story.

11 MS. ROREM: Yes.

12 JUDGE GROSSMAN: Okay. I'll take your word
13 for that. You may proceed, then.

14 MS. ROREM: I am dealing with special
15 facilities. It may apply as well to the rest of the --
16 that is not what I'm going for.

17 JUDGE GROSSMAN: No, no, no. I'm not
18 accepting that.

19 MS. ROREM: I know that.

20 I'm saying it may seem that way, but I am directing
21 this toward the specifics.

22 MR. EDGAR: I would raise a question as to
23 the materiality of the whole line of cross examination.
24 It gets into the communication systems which are
25 established in the plan.

1 But the whole question of timeliness of
2 notification is addressed in Appendix E in specific
3 terms, Appendix E of 10CFR, Part 50.

4 We're going through a summation of all of these
5 estimated times for other events, and they're not
6 material. We're getting back into challenging the
7 planning basis and challenging the regulations.

8 It is not only going beyond the contentions, but
9 it's getting back in the area of challenging the
10 planning basis.

11 JUDGE GROSSMAN: Well, it seems that way to
12 me, also, but we'll allow Miss Rorem some more leeway.

13 But she ought to connect it up with her contention
14 fairly soon.

15 MS. ROREM: Thank you. I'm sorry. I'm not
16 as direct as I would like to be.

17 BY MS. ROREM:

18 Q So what we have here is that it's a minimum of 30
19 minutes plus the time to activate the sirens and get the
20 EBS messages taped and broadcast; say, 35 minutes from
21 an initiating event, minimum, before the public and the
22 public in recreation areas will be aware of an
23 emergency?

24 MR. FLYNN: Your Honor, I object to that as a
25 mischaracterization of the witness' testimony.

1 The series of questions that we've just gone
2 through asked the witness to assume that there was no
3 recommendation by the utility as to sheltering or
4 evacuation.

5 Now the question talks about in all circumstances
6 it might be a minimum of 35 minutes, and that wasn't the
7 witness' testimony.

8 JUDGE GROSSMAN: Miss Rorem, can you clarify
9 your question?

10 MS. ROREM: Well, yeah, because that's
11 assuming that the -- I'm assuming that the utility does
12 make a recommendation on protective action for the 15
13 plus 15, which adds up to 30. If they didn't, it would
14 add up to even more.

15 So I'm assuming a bare minimum. I'm assuming a
16 situation where the situation is so bad, so severe, that
17 the utility does think it is important to recommend a
18 protective action. So that 30 minutes --

19 JUDGE GROSSMAN: That's the basis for your
20 question?

21 MS. ROREM: Yes.

22 JUDGE GROSSMAN: Okay, fine. Proceed.

23 MS. ROREM: I don't think I got an answer to
24 that question.

25 WITNESS FAIROW: I don't remember the

1 question.

2 BY MS. ROREM:

3 Q What I'm asking is: Then it's a minimum, given that the
4 utility recommends protective action be taken, of the 15
5 minutes from the initiating event to classification of
6 the emergency and 15 minutes to the NARS phone call plus
7 enough time for messages to be recorded before the
8 public is aware of an accident?

9 That's the minimum of time; is that correct?

10 JUDGE GROSSMAN: Is your question that there
11 may be that minimum time in certain accidents or that in
12 all accidents there is that minimum time?

13 MS. ROREM: No.

14 I'm asking if the shortest amount of time that will
15 really happen between an initiating event of a serious
16 accident and the notification of the public is on the
17 order of 35 minutes.

18 A (WITNESS FAIROW) I don't know that I could say it is a
19 minimum, because it might not take the utility 15
20 minutes to notify the State and counties. There's some
21 leeway in there.

22 It's 15 as a maximum for them to notify the State
23 and counties.

24 BY MS. ROREM:

25 Q Okay. So what would you say the minimum would be?

1 A (WITNESS FAIROW) I can't make that judgment. It
2 depends on a lot of factors.

3 Q Okay. Mr. Butterfield, could you make an estimate of
4 the minimum amount of time from an initiating event to
5 the notification of the public?

6 A (WITNESS BUTTERFIELD) The minimum amount of time would
7 be based on -- I would suppose could be as short as
8 perhaps 20, 25 minutes, assuming that our people in the
9 control room made the evaluation, wrote up the
10 information and notified the public -- or notified the
11 State and counties quickly, you know, like at the
12 15-minute time interval and made the proper
13 recommendations -- or made the evacuation
14 recommendations and the city -- or the counties turned
15 it around.

16 So it could be as short as, say, 20 minutes; and as
17 you indicated before in your way of going up to 35
18 minutes as a value, it could be longer.

19 The minimum, I would think, would be 20 to 25
20 minutes.

21 Q Okay. And this could take a much longer time --

22 A (WITNESS BUTTERFIELD) Certainly.

23 Q -- even in a very serious emergency, a general
24 emergency?

25 It could take longer?

1 A (WITNESS BUTTERFIELD) It could take longer, but I
2 believe a few minutes ago we were talking about 15
3 minutes for Commonwealth to determine the accident
4 classification and up to 15 minutes to notify the
5 public, so there's 30 minutes.

6 Q To notify the counties?

7 A (WITNESS BUTTERFIELD) Excuse me. I apologize. I
8 mean, to notify the counties and the State.

9 Given that severity of an accident, I would assume
10 that they would turn it around very quickly. Whether
11 it's 1 minute, 2 minutes, 5 minutes or 10 minutes, I'm
12 not qualified to tell.

13 Q Okay. So if someone is in a recreational facility
14 several miles from the plant, they are in an area where
15 -- okay.

16 What is the recommended action in all recreational
17 areas?

18 A (WITNESS FAIROW) In the case of take shelter or
19 evacuate, we recommend that people in recreational areas
20 evacuate, because most recreational areas don't have
21 adequate shelters.

22 Q What if the recommendation is take shelter?

23 A (WITNESS FAIROW) We inform them to evacuate.

24 Q I mean, in other words, any protective action is taken
25 at the level of evacuate in recreational facilities; is

1 that correct?

2 A (WITNESS FAIROW) If --

3 Q I mean, you don't take shelter in any recreational area;
4 you simply evacuate?

5 JUDGE GROSSMAN: Excuse me. I don't think
6 the witness' answer was recorded.

7 A (WITNESS FAIROW) That's correct. In the case of an
8 evacuation or a take-shelter recommendation, we advise
9 recreational areas to evacuate.

10 MS. ROREM: Okay.

11 BY MS. ROREM:

12 Q And this is broadcast on the PA system, the siren
13 system, so that persons in the recreational area know
14 that they are to evacuate immediately?

15 A (WITNESS FAIROW) That's true. The mobile -- the
16 electronic siren PA pre-scriptive messages advise the
17 populations in the recreational areas to evacuate.

18 Q Okay. Now, how -- all right. They have -- okay.

19 How long does it take -- no.

20 Who is it who will read this message over the
21 voice-activated PA systems?

22 A (WITNESS FAIROW) As I indicated earlier, it would be
23 the responsibility of the county ESDA coordinator.

24 Q Will this be happening simultaneous with the calling of
25 the radio stations to read the message to be broadcast

1 over the EBS stations?

2 A (WITNESS FAIROW) The alert tone would be emitted from
3 the sirens first, and then the PA message would follow.

4 Q When would it follow?

5 In other words, when the county ESDA people are
6 making their calls to the stations, do they then make
7 calls to get these messages across the voice-activated
8 PA systems or do they do it simultaneously?

9 A (WITNESS FAIROW) It wouldn't necessarily be the same
10 person calling the EBS station.

11 The county board chairman can call the EBS station.
12 Meanwhile, the ESDA coordinator could be making the
13 announcements over the PA on the sirens.

14 So it can take place simultaneously.

15 Q But it's the county ESDA coordinator who is notified
16 first from the NARS call?

17 A (WITNESS FAIROW) It is the county dispatcher, the
18 24-hour dispatcher, that gets the initial notification.

19 Q The dispatcher then has to call the county ESDA
20 coordinator and other people on the list, so that may
21 actually take some time before the county is notified.

22 We missed some timing in there, right, a few
23 minutes here?

24 How long does it take the county dispatcher to get
25 hold of the ESDA coordinator and the county board

1 chairman or whoever?

2 MR. EDGAR: Your Honor, I object to this line
3 of questioning. We're back wandering around in the
4 general public notification area, and there's nothing
5 here on special facilities. We're not sticking with the
6 contention.

7 MS. ROREM: Excuse me.

8 I'm trying to determine how long it is before the
9 persons who are residing in a -- or taking temporary
10 residence in a recreational facility are notified over
11 the voice-activated PA systems, and I think it's
12 important to find out how long it takes for the county
13 dispatcher to get hold of the county ESDA coordinator.

14 JUDGE GROSSMAN: Okay. Continue, Miss Rorem.

15 WITNESS FAIROW: Would you repeat your
16 question?

17 BY MS. ROREM:

18 Q How long does it take for the county dispatcher to get
19 hold of the county ESDA coordinator?

20 A (WITNESS FAIROW) They would try initially by
21 telephone; and being unable to reach the person by
22 telephone, they would use a pager, unless they knew that
23 they were on pager and away from a telephone.

24 Q So it would be within several minutes?

25 A (WITNESS FAIROW) Yes.

1 Q Does the county ESDA coordinator then call the county
2 board person or does the dispatcher go on and call that
3 person next?

4 A (WITNESS FAIROW) The ESDA coordinator has the option.

5 If he wants to call the board chairman directly, he
6 can do that; or if he instructs the dispatcher to do so,
7 so that he can get on to other activities, that's a
8 possibility, also.

9 Q Okay. So it is -- what he would be doing is either
10 calling the county board person or calling the EBS
11 stations; correct?

12 We're talking about the ESDA coordinator.

13 A (WITNESS FAIROW) Yes.

14 Q Okay. So that either -- so that the EBS stations will
15 have the message before the voice-activated PA systems
16 in the recreational areas?

17 A (WITNESS FAIROW) That's a possibility, but I don't
18 know if it will always be the case.

19 Q Okay. In this phone call system, those are made on
20 dedicated phone lines, is this correct, the calls from
21 the nuclear plant?

22 A (WITNESS FAIROW) To the State and counties?

23 Q Yes.

24 A (WITNESS FAIROW) Yes. They're made over the NARS
25 line.

1 Q Have there ever been any failures of these phone lines?

2 A (WITNESS BUTTERFIELD) Yes, of portions of them, yes.

3 Q And what is done in the event that the phone lines do
4 not work properly?

5 A (WITNESS BUTTERFIELD) We use outside lines, commercial
6 lines.

7 Q What happens if there is a general emergency and no
8 action has been recommended by the utility?

9 A (WITNESS BUTTERFIELD) This a question for the utility
10 or the State?

11 Q Utility.

12 A (WITNESS BUTTERFIELD) In the event that we -- well,
13 during any accident or implementation of our GSEP
14 program, we initiate a NARS call at the classification
15 of the program. We initiate a NARS call at any
16 reclassification of the action -- I should have said
17 "any reclassification of the accident."

18 If nothing is changed, we update at least once an
19 hour so people know what's going on. But in this time,
20 if there's no change, then there is not necessarily any
21 activity with the State.

22 Now, given the accident scenario that we're working
23 on, the State may bring people into our plants or into
24 our off-site facilities; and we may, in fact, activate
25 our off-site facilities, depending upon the accident

1 scenario that is developing.

2 Q Okay. Let's assume that you've immediately -- you've
3 classified it very early on as a general emergency and
4 you have not asked for any -- you haven't recommended
5 any protective action. You've called the State.

6 Unless there is a change in the classification, do
7 you then not make any recommendations?

8 In other words -- I'm sorry. I'm not expressing
9 this as lucidly as I would like to.

10 If there is no change in classification of the
11 accident, might you still go ahead and recall the State
12 and say, "We recommend this action or that action"?

13 A (WITNESS BUTTERFIELD) The State, through the
14 Department of Nuclear Safety, has access, constant
15 access -- or continual access to plant parameters, plant
16 information. They will be in touch with us about this
17 information to see what is going on and what is
18 developing.

19 Q Okay. Go ahead.

20 A (WITNESS BUTTERFIELD) That's it.

21 Q Is there ever a case where the -- where you will make a
22 recommendation -- where the utility will make a
23 recommendation for a protective action and the State
24 will not desire that such protective action be taken?

25 A (WITNESS BUTTERFIELD) That is certainly a possibility.

1 We recommend protective actions to the State.

2 Q Okay. But if you put it in the hands of the State, then
3 it goes through whatever channels it needs to at the
4 State before actions are recommended?

5 In other words, the public is not notified?

6 A (WITNESS BUTTERFIELD) That's correct.

7 Q And special facilities are not notified?

8 A (WITNESS BUTTERFIELD) That's correct.

9 Q Could there ever be an accident that would have rapid
10 consequences where you would not recommend a protective
11 action?

12 A (WITNESS BUTTERFIELD) I believe that is highly
13 possible. That would be the most likely event, I
14 believe.

15 Given a serious accident -- the accident itself
16 does not require that we evacuate the public.

17 Q I realize that.

18 A (WITNESS BUTTERFIELD) So I hope you see where I'm
19 coming from. Just classifying an accident doesn't mean
20 that we need to evacuate anyone, but we do need to tell
21 the State.

22 Q Let's assume the worst possible accident that could
23 happen, okay?

24 What would that be?

25 What would you say that the -- what would you say

1 the accident itself would be?

2 MR. EDGAR: Objection. You're asking a
3 question for the worst possible accident.

4 The plan has classifications in it. What is the
5 worth of that question?

6 You could speculate endlessly.

7 JUDGE GROSSMAN: Miss Rorem, I don't think
8 you're connecting up your questioning with the
9 contentions that are in the case, and I don't see any
10 purpose to pursuing this same area that you're pursuing.

11 Now, you've established some time before which
12 notification might not be given to the public.

13 What further are you going to get from this line of
14 questioning?

15 I don't personally see how that is directed towards
16 special facilities or the other subparts of your
17 contention here.

18 MS. ROREM: I'm sorry. I guess I'm not
19 getting the information that I think I should be getting
20 because I'm not always getting a direct answer to a
21 question that I desire to get.

22 I think this is very important in terms of the
23 ability to evacuate recreational areas specifically in
24 terms of --

25 JUDGE GROSSMAN: Any differently than

1 protective action with regard to nonrecreational areas?

2 If we've established that it takes a half an hour
3 or how much other time you might have suggested to begin
4 the protective action, that applies equally, from what
5 I've heard, to recreational areas or nonrecreational
6 areas.

7 MS. ROREM: I think it's more important
8 because in recreational areas, people are often without
9 vehicles, on foot, in inaccessible areas and without
10 contact with persons who might direct them to what
11 specific action they might take.

12 JUDGE GROSSMAN: Okay.

13 But you've already established your time frame, and
14 I don't see what else you hope to derive from this.

15 We can't keep going back into the time limits that
16 were suggested in NUREG-0654. We can't keep going back
17 into the background of that and inquiring into what kind
18 of accident was in mind when these guidelines were
19 developed.

20 MS. ROREM: Okay. I guess what I'm -- I'm
21 not questioning the basis for the guidelines.

22 What I'm questioning is I'm saying: Okay. They
23 assume that an accident could happen, where in half an
24 hour, you might have radiological consequences to the
25 public.

1 I'm talking about recreational areas where the
2 public is not easily evacuated and in half an hour they
3 will receive their first notification.

4 Under the same circumstances, they may also be
5 receiving the radiological consequences of an accident.

6 JUDGE GROSSMAN: Miss Rorem, if you have a
7 scenario in mind -- this is an expert witness. It's an
8 adverse witness.

9 If you have a scenario in mind, why don't you
10 suggest it to the witness, find out whether that's a
11 possibility, and then tie it up to your recreational or
12 other special facility, rather than starting from the
13 background of NUREG-0654?

14 Rather than extracting the whole gamut of scenarios
15 from the witness, suggest a scenario that might have
16 been thought of and tie it in from there, or else we're
17 going to sit here for a few weeks.

18 MS. ROREM: I'm sorry. I guess I assumed
19 that when I asked earlier -- I think it was before we
20 recessed for lunch -- about serious accidents, I assumed
21 that the witnesses were familiar with serious accidents.

22 BY MS. ROREM:

23 Q Is there an accident which could occur which would have
24 radiological consequences within half an hour -- in half
25 an hour?

1 MR. EDGAR: Objection. The board just
2 directed her to come up with a scenario, a specific
3 scenario, and she is violating the board's direction.

4 MS. ROREM: I'm not trying to. I don't
5 really care what the initiating event is. I don't
6 really care what the accident is.

7 I just want to know if there are any. I didn't ask
8 him to tell me one.

9 JUDGE GROSSMAN: Okay. That's fine. We'll
10 allow that question.

11 A (WITNESS BUTTERFIELD) There are postulated accidents
12 that could occur which could result in off-site doses
13 within a half an hour.

14 BY MS. ROREM:

15 Q And persons in recreational areas might not hear about
16 this until half an hour into the time following the
17 initiating event?

18 A (WITNESS BUTTERFIELD) Yes.

19 Q Thank you.

20 Miss Fairrow, could you please tell me how many
21 phone lines there are into the schools that are in the
22 Emergency Planning Zone for Braidwood -- excuse me. I'm
23 going into a new area of questioning.

24 JUDGE GROSSMAN: Excuse me for a second.

25 Do you have a question?

1 JUDGE CALLIHAN: Yes. I apologize, Miss
2 Rorem.

3 Before we get away from this, what's the distance
4 from the site to the nearest recreational area?

5 WITNESS FAIROW: I know there's one about
6 three miles away.

7 JUDGE CALLIHAN: Miss Rorem's question about
8 this half-hour business had to do with exposure in a
9 recreational area.

10 Your response, Mr. Butterfield, I think was more
11 general than that.

12 WITNESS BUTTERFIELD: Yes.

13 JUDGE CALLIHAN: Now, in view of the three
14 miles, do you still stick to your half hour?

15 WITNESS BUTTERFIELD: The half hour dealt
16 with the time, as I recall, that they would be notified
17 or they would --

18 JUDGE CALLIHAN: No. Her question was about
19 being exposed.

20 WITNESS BUTTERFIELD: Oh, that would be the
21 minimum time.

22 It would more likely be longer than that because of
23 the time it would take to get there and if it's
24 downwind. It might not be downwind.

25 JUDGE CALLIHAN: Thank you.

1 Another question: You said to us earlier quite
2 correctly and without challenge that exposure to
3 individuals here and yonder is through airborne
4 particulates and gases.

5 WITNESS BUTTERFIELD: Yes, sir.

6 JUDGE CALLIHAN: Do you determine
7 concentrations of radionuclides in the atmosphere
8 anywhere around Braidwood?

9 WITNESS BUTTERFIELD: Yes, sir.

10 JUDGE CALLIHAN: Where, for instance?

11 WITNESS BUTTERFIELD: We have numerous
12 sampling stations where we take samples on a routine
13 basis. In the event of an incident, we would dispatch
14 teams to take samples.

15 JUDGE CALLIHAN: Where is the readout for
16 those?

17 Who learns about those first?

18 WITNESS BUTTERFIELD: For the ones that are
19 taken routinely, we would have to pull those samples and
20 have our contractor analyze them.

21 He would be the first one, unless we decided to
22 pull them ourselves and do them in either our
23 laboratories at one of our sites or in our emergency
24 off-site facility if we had the capability.

25 The samples that we would take with our roving

1 teams -- and, by the way, the State would have roving
2 teams but obviously not probably within the first half
3 hour -- the people taking the samples there would count
4 them and have some gross concept of what was going on;
5 maybe not the nuclide concentrations.

6 JUDGE CALLIHAN: Do you have any
7 continuous-flow monitors?

8 WITNESS BUTTERFIELD: In the routine ones,
9 yes. Those are continuous-flow monitors that we pull
10 samples on every week or so.

11 JUDGE CALLIHAN: What do you mean by "pull
12 samples"?

13 WITNESS BUTTERFIELD: We take cartridges and
14 also --

15 JUDGE CALLIHAN: Filter paper-type things?

16 WITNESS BUTTERFIELD: Yes.

17 JUDGE CALLIHAN: You don't have anything
18 directly?

19 WITNESS BUTTERFIELD: Off-site?

20 JUDGE CALLIHAN: No; anyplace.

21 WITNESS BUTTERFIELD: No. We have them in
22 the stacks. Also, the State of Illinois will have it
23 eventually.

24 JUDGE CALLIHAN: Do you attach any
25 significance to readings with regard to this exposure

1 bit?

2 Do you attach any significance to the readings from
3 the stack monitors?

4 WITNESS BUTTERFIELD: Yes, sir.

5 In fact, those are fed into programs that we have
6 -- well, we have a procedure that we use to estimate the
7 off-site dose consequences, and we're developing a
8 computerized program methodology which will allow them
9 to do a more accurate assessment from the control room.

10 JUDGE CALLIHAN: Using words that have
11 appeared here before, in case of an extreme accident or
12 serious accident, if there's no airborne particulate
13 matter, is there concern to the public?

14 WITNESS BUTTERFIELD: No, sir.

15 JUDGE CALLIHAN: Would not the presence or
16 absence -- I'll be specific.

17 Would not the presence of radionuclides in the
18 atmosphere be some measure of potential exposure to the
19 population?

20 WITNESS BUTTERFIELD: Yes, sir.

21 JUDGE CALLIHAN: Would that not be a
22 significant point of departure in this time bit we've
23 been discussing, rather than when an accident occurred?

24 WITNESS BUTTERFIELD: Yes, sir.

25 JUDGE CALLIHAN: In view of that, is there

1 anything that either of you witnesses has said in
2 response to Intervenors' question that would be modified
3 if your time base were established at the detection --
4 the time of detection of airborne particulates rather
5 than some time of an accident?

6 WITNESS BUTTERFIELD: Yes, sir.

7 Our whole program is based around the effect on the
8 public; and when we get an accident, in all probability,
9 there will be no off-site release, none found and
10 perhaps none anticipated, depending upon the accident.

11 One of the upgrades, if you will, is when we go
12 from where we have no foreseeable release to where we
13 may expect to have a release; and if so, if we
14 anticipate that we may have a release, that is another
15 point at which we would notify the State and might, in
16 fact, itself be a recommendation for shelter or
17 something.

18 This whole thing builds, and so this -- when we
19 actually have the release, we would expect that to be
20 quite a ways down the line of an accident scenario.

21 JUDGE CALLIHAN: You perhaps answered this,
22 and I apologize for going back to it.

23 Where did you say your continuous airflow stack, et
24 al., monitors read out?

25 WITNESS BUTTERFIELD: Ours read out in the

1 control rooms.

2 JUDGE CALLIHAN: In the control rooms?

3 WITNESS BUTTERFIELD: Yes, sir, and
4 eventually the State's will read out in Springfield
5 IDNS.

6 JUDGE CALLIHAN: Thank you very much.

7 JUDGE GROSSMAN: Excuse me.

8 What is the fastest that a radioactive cloud or
9 plume can travel three miles?

10 WITNESS BUTTERFIELD: Well, I've seen wind
11 speeds here of 60 miles an hour, but I'm not an
12 environmentalist. I don't go through those
13 calculations.

14 I assume it can get there rather rapidly under
15 conditions of high wind flow, high speeds, high wind
16 speeds.

17 But it will also be dispersed very rapidly and the
18 concentrations would be very low -- would be lower than
19 if it was a slower wind speed.

20 JUDGE CALLIHAN: Thank you, Miss Rorem.
21 Sorry I interrupted you.

22 MS. ROREM: For the Board's information,
23 though, I would like to clarify something she said.

24 The Chicago Beagle Club is between zero and one
25 miles from the facility. The South Wilmington

1 Sportsmen's Club is two to three miles. The Braidwood
2 Recreation Club is two to three miles, et cetera.

3 JUDGE GROSSMAN: Miss Rorem, I would think
4 that she probably knows that and it may have slipped her
5 mind if that was included in the answer to the questions
6 that she gave.

7 Now, if you have other information, why don't you
8 ask her directly whether that's so?

9 Because what you're testifying to is not on the
10 record.

11 MS. ROREM: Okay.

12 JUDGE GROSSMAN: You're not a witness.

13 MS. ROREM: Fine. Excuse me.

14 BY MS. ROREM:

15 Q Miss Fairrow, are you aware that there are facilities
16 that are closer than three miles in distance?

17 A (WITNESS FAIROW) Yes. After I did answer the question
18 -- I said I knew one was within three miles -- then
19 several others came to mind that are also within three
20 miles.

21 Q Could you clarify this, please, for the record?

22 A (WITNESS FAIROW) Yes. The Godley Park District is in
23 Godley, and Godley is within the two-mile radius.

24 Braidwood Recreational Club is in the -- on the
25 edge of the town of Braidwood, which is within two

1 miles.

2 The Chicago Beagle Club is also in that area.

3 Beyond those, I can't recall any. There could be
4 others.

5 Q There could be others. Thank you.

6 Miss Fairrow, could you please tell me how many --
7 whether you are familiar with how many phone lines there
8 are into each of the schools within the EPZ?

9 A (WITNESS FAIROW) I am not aware of the exact number in
10 each and every school within the EPZ.

11 Q Are you -- do you know the number of any of them?

12 A (WITNESS FAIROW) Yes, I do.

13 Q And which ones are those or which one?

14 A (WITNESS FAIROW) There is one phone line into Essex
15 Elementary School.

16 Q Okay. And there may be others as well that have only
17 one phone line into them?

18 A (WITNESS FAIROW) There could be, but I am not aware.

19 Q Okay. Do the schools with one phone line have any other
20 communication capacity?

21 A (WITNESS FAIROW) If you're speaking of ways to become
22 informed of a protective action recommendation, as my
23 testimony points out, if a school or any special
24 facility cannot be reached by telephone, a
25 representative of the county or municipality will go to

1 that facility to inform the facility of an action to be
2 taken.

3 Q When -- after a school has been called, do you see that
4 there would be any use of the phone lines into or out of
5 the schools?

6 A (WITNESS FAIROW) The telephones would be used by the
7 officials of the school to call out for assistance if
8 they needed that assistance.

9 Q Okay. Is there a chance that any of these phone lines,
10 if there is only one into a school, may be tied up by
11 incoming calls?

12 A (WITNESS FAIROW) That is a possibility, but it is the
13 school official's responsibility to get the people off
14 the phone as soon as possible so that he can make his
15 outgoing calls if he needs assistance.

16 Q And what have parents who live in the EPZ been told
17 about evacuating or what will they be told about
18 evacuating that would prevent them from calling the
19 schools?

20 A (WITNESS FAIROW) This, again, is covered in our
21 testimony.

22 In the EBS messages, we encourage persons not to
23 call or go to schools. In the public information
24 booklet, it informs readers not to go to these locations
25 because the people -- the students in schools are being

1 taken care of and that connections might be missed.

2 Also, to deter people from going to these places,
3 we have traffic and access control posts that prevent
4 people from entering an affected area.

5 Q They physically prevent people from entering an area?

6 That's a question.

7 A (WITNESS FAIROW) They are located in specific areas to
8 prevent the flow of traffic inside of an affected area
9 and to assist people out of an affected area.

10 Q Okay. Do parents have reason to believe that their
11 children will be -- that the total responsibility for
12 the care of their children will be taken by the schools?

13 Is there something in the EBS messages that tells
14 them that their children will be totally cared for?

15 A (WITNESS FAIROW) It says that there is no need to go
16 to the schools; and I think as an emergency at a power
17 plant, as in any other type of emergencies, the school
18 officials have a certain responsibility for those
19 children.

20 Q Are all of the school officials aware of this
21 responsibility?

22 A (WITNESS FAIROW) Yes.

23 Q Every schoolteacher in the Emergency Planning Zone is
24 aware of his or her responsibilities?

25 A (WITNESS FAIROW) We conduct meetings and training and

1 invite superintendents and school officials. We will go
2 to schools and give sessions to teachers if the
3 officials request it.

4 Beyond that, it's the responsibility of the school
5 officials to inform their teachers of their
6 responsibilities.

7 Q Are these teachers legally bound to follow their duties
8 and responsibilities under IPRA?

9 A (WITNESS FAIROW) I think that's something that is
10 within school rules. As far as if a superintendent
11 requires teachers to stay or if he allows certain ones
12 to go, that's an internal thing with the school.

13 Q But it doesn't have any legal basis?

14 A (WITNESS FAIROW) We don't have specific instructions
15 for teachers in our procedures. It's for
16 superintendents and principals.

17 Q Are there any schools which do not have principals
18 on-site?

19 A (WITNESS FAIROW) Some of the school districts have
20 superintendents that double as principals, so some do
21 not have principals per se.

22 Q And will the phone lines be tied up with calls -- will
23 the phone line being used to make calls to the
24 superintendent if he is acting as principal?

25 A (WITNESS FAIROW) I didn't understand that question.

1 Q If the principal is not on the school premises, is it
2 the case that the phone may be in use while a teacher
3 attempts to phone the superintendent in his capacity as
4 principal?

5 A (WITNESS FAIROW) If you're saying that a teacher is
6 now tying up a phone line and that teacher is trying to
7 contact the principal, who is for some reason in a
8 different location -- is that your question?

9 Q No.

10 Are there schools which have no principal on-site?

11 A (WITNESS FAIROW) I don't recall. There could be. I
12 would have to check that.

13 Q If there are, could the phone line be tied up by a
14 teacher attempting to reach the superintendent in his
15 role as principal of the school or reaching some other
16 party who is acting as principal?

17 A (WITNESS FAIROW) You're asking if the phone can be
18 tied up?

19 Q Yes.

20 A (WITNESS FAIROW) Yes, that -- that's possible.

21 Q And at the same time, there may be a need for calls to
22 other parties in order to implement the plan; is this
23 correct?

24 A (WITNESS FAIROW) Other parties such as?

25 Q Such as -- all right.

1 What person or persons or numbers are the schools
2 requested to call if they need assistance in evacuating
3 and/or taking protective action?

4 A (WITNESS FAIROW) The schools would call the municipal
5 EOC.

6 Q Okay. So would it -- could it be possible that a phone
7 call to the municipal EOC might need to be made at the
8 same time that a phone call would need to be made to the
9 off-site principal or superintendent of schools?

10 A (WITNESS FAIROW) That's possible, but I don't see any
11 reason why they both couldn't be made within a short
12 amount of time.

13 Q Are there any other phone calls that might need to be
14 made either from the school or to the school by persons
15 who have duties and responsibilities under IPRA?

16 A (WITNESS FAIROW) Activities at the school would be
17 handled by school personnel and through people in the
18 municipal EOC, so there would be no one else that would
19 actually need to be a contact.

20 Q Okay. Do any of the schools have radio capability?

21 A (WITNESS FAIROW) Yes. A number of schools have radio
22 capability with their buses.

23 Q But they don't have radio capability to some other
24 source?

25 A (WITNESS FAIROW) I really don't know right offhand.

1 Q Okay. Do all of the school buses in the EPZ have radio
2 capability?

3 A (WITNESS FAIROW) Most of them have either two-way
4 radio or CB radio.

5 Q Do all of them have either two-way radio or CB radio?

6 A (WITNESS FAIROW) I don't know offhand.

7 Q So there might be school buses being used for evacuation
8 of a sector or sectors of the EPZ which would not have
9 radio capability?

10 A (WITNESS FAIROW) That's a possibility.

11 Q Okay. What will happen if the wind changes and the
12 evacuation route for the buses needs to be changed?

13 A (WITNESS FAIROW) That evaluation would be made in
14 cooperation with the Department of Nuclear Safety.

15 Q And how will any school buses which do not have radio
16 capability be notified?

17 A (WITNESS FAIROW) Well, it depends when the
18 determination is made.

19 If they're en route, chances are there are more
20 than one bus going -- traveling together. If that's the
21 case, then one of the buses with the radios in that
22 group would be notified and the bus without a radio
23 could follow.

24 The majority of buses do have radios. It's a small
25 amount that do not, and there could be -- it could be

1 all of them, but I would have to check that information
2 out.

3 Q So you don't know specifically of any school districts
4 or school facilities that have buses that do not have
5 radios?

6 A (WITNESS FAIROW) I don't know of any specifically. I
7 would have to check the information.

8 Q Are there any of these municipalities or areas or small
9 schools anywhere who would be evacuating by bus where
10 there would only be one bus leaving the area?

11 A (WITNESS FAIROW) That's possible.

12 Q So a bus might be leaving a town and there would be no
13 bus to follow to give that bus directions having to do
14 with a change in wind and, therefore, a change in --
15 shift in plans for evacuation direction?

16 WITNESS FAIROW: Could I have that question
17 read back?

18 JUDGE COLE: That assumes that bus doesn't
19 have a radio; right, Mrs. Rorem?

20 MS. ROREM: Yes.

21 (The question was thereupon read by the
22 Reporter.)

23 A (WITNESS FAIROW) There is the possibility.

24 BY MS. ROREM:

25 Q If a school bus is being evacuated, it may become

1 contaminated, is this correct, with radioactive fallout?

2 A (WITNESS FAIROW) There is the possibility.

3 Q How do you plan to decontaminate any school buses?

4 A (WITNESS FAIROW) There are procedures developed by the
5 Department of Nuclear Safety for decontamination of
6 equipment and vehicles.

7 Q Where would -- where would decontamination sites be when
8 you're talking about school buses?

9 A (WITNESS FAIROW) It would depend where it was
10 determined that they would need to be set up. At a
11 Congregate Care Shelter, it's possible -- it's a
12 possibility. That's -- DNS would make that
13 determination.

14 Q Would make the determination about --

15 A (WITNESS FAIROW) Where the buses would be
16 decontaminated.

17 Q Where the buses would be decontaminated?

18 A (WITNESS FAIROW) Right.

19 Q Would there be any -- so you don't know whether there
20 would be any checkpoints along an evacuation route?

21 MR. EDGAR: Objection. I fail to see how
22 that's relevant to any matter in issue.

23 I can't find it within the offer of proof under
24 1(a) or 1(b), the question of decontamination.

25 MS. ROEM: I think this has to do with the

1 ability to orderly evacuate special facilities; that is,
2 schools, et cetera, et cetera.

3 JUDGE GROSSMAN: I believe that's the case.
4 We'll overrule the objection.

5 I think now is an appropriate time to take a break.
6 So we'll take 10 minutes.

7 (Whereupon, a recess was had, after which
8 the hearing was resumed as follows:)

9 JUDGE GROSSMAN: Fine.

10 We're back on the record.

11 Mr. Edgar.

12 MR. EDGAR: Yes.

13 Mr. Butterfield has a correction to make to one of
14 his prior statements.

15 Mr. Butterfield.

16 WITNESS BUTTERFIELD: My staff has pointed out
17 to me if I were to carefully look at the GSEP and the
18 requirements for general emergency, there is a minimum
19 statement that we would make to the state on a general
20 emergency, and that would be to shelter 0 to 2 and 2 to
21 5 miles and prepare 5 to 10 miles. That would be our
22 minimum recommendation at the general emergency level,
23 regardless -- well, given the fact if there is no
24 radiation being released from the site.

25 Before I indicated there would be none, so I

1 apologize.

2 JUDGE GROSSMAN: Fine.

3 Ms. Rorem, was your question directed towards
4 contaminating the buses at the time of the evacuation or
5 after the evacuation?

6 MS. ROREM: Contaminating them?

7 JUDGE GROSSMAN: Did I say contaminating them?

8 MS. ROREM: Yes.

9 JUDGE GROSSMAN: Decontaminating them.

10 Maybe we ought to break at 3:20.

11 (Laughter.)

12 MS. ROREM: Could you restate that?

13 I'm sorry. I lost it.

14 JUDGE GROSSMAN: Well, was your question
15 directed towards decontamination after the evacuation
16 has taken place or were you considering the possibility
17 of decontaminating the buses during the evacuation?

18 If you don't see how that is possible --

19 MS. ROREM: I'm concerned with the -- with
20 whether or not there will be -- I'm concerned with after
21 evacuating; but if something is seriously contaminated
22 in its reaching its ultimate destination, is there going
23 to be some central location where -- a checkpoint for
24 which buses will pass to find out if they are
25 contaminated before they proceed to whatever the

1 Congregate Care Center to which they are driving is.

2 JUDGE GROSSMAN: Well, I'm not sure I
3 understand that, but we'll allow you your first
4 question, anyway.

5 I will say this:

6 If you are concerned now about decontamination
7 after the evacuation has taken place, that is outside
8 the scope of Contention 1(b), so we're not going to
9 consider that.

10 You may proceed with your question.

11 MS. ROREM: What I'm concerned about is that
12 if a vehicle is seriously contaminated, will it be
13 allowed into a safe area, and if it is not or it might
14 not be, this would seriously interfere with an orderly
15 evacuation.

16 JUDGE GROSSMAN: Fine.

17 Why don't you direct your questions to the witness
18 and we'll decide whether any further questions are in
19 order.

20 Proceed.

21 If you have a pending question, why don't you ask
22 another one --

23 MS. ROREM: Okay.

24 JUDGE GROSSMAN: -- or do you want that one
25 read back to you?

1 MS. ROREM: Yes, that would be a good idea.
2 That would be fine.

3 I'm sorry.

4 JUDGE GROSSMAN: Fine.

5 Why don't you pose another question.

6 (Laughter.)

7 MS. ROREM: Okay.

8 BY MS. ROREM:

9 Q I think I asked first how do you decontaminate school
10 buses, and you responded, Ms. Fairrow, that was the
11 Department of Nuclear Safety.

12 A (WITNESS FAIROW) Correct, that's their responsibility.

13 Q Will there be checkpoints at which buses will be
14 monitored for radioactive contamination before they
15 enter a safe area?

16 A (WITNESS FAIROW) DNS monitors the EPZ continually.
17 They have representatives in the county EOC's and they
18 know which evacuation routes buses will be taking.

19 If they believe that a bus -- a contaminated bus
20 may be entering a -- an area that is not contaminated,
21 they will take the appropriate steps to -- to
22 decontaminate when necessary.

23 Q Can you tell me what these steps are?

24 A (WITNESS FAIROW) I do not know what the specific
25 procedures of the Department of Nuclear Safety are.

1 Q Would this take place at some place other than a
2 Congregant Care Center?

3 A (WITNESS FAIROW) I don't know, but I suppose the
4 possibility is there.

5 Q Do you know whether decontamination may in any way
6 affect the evacuation process?

7 A (WITNESS FAIROW) I don't believe it would.

8 In most cases, evacuation will take place before
9 any contamination is present.

10 Q But not necessarily?

11 A (WITNESS FAIROW) But not necessarily.

12 Q So that it may be that a contaminated school bus would
13 be evacuated from the EPZ?

14 A (WITNESS FAIROW) There is that possibility.

15 Q And there is the possibility that that school bus may be
16 refused entry into the EPZ -- I mean, into the area
17 where -- which contains the Congregant Care Center?

18 MR. EDGAR: Objection.

19 Your Honor, we're now into the area of activities
20 in the host community outside the EPZ. That question
21 hit that point.

22 Ms. Rorem had Issue 8 in these proceedings under
23 the offer of proof, Contention 1(a), and she dropped
24 that.

25 We're now wandering well outside the bounds of an

1 admitted contention here.

2 JUDGE GROSSMAN: I believe we're on
3 Contention 1(b) --

4 MS. ROREM: Yes.

5 JUDGE GROSSMAN: -- and it is with regards to
6 the evacuation, and I don't believe the evacuation has
7 been completed here. That's my understanding; and so it
8 appears to be within the scope, Mr. Edgar.

9 MR. EDGAR: The last question, your Honor,
10 talked about after leaving the EPZ. That was the last
11 question. We're outside the EPZ now.

12 MS. ROREM: Excuse me.

13 I don't see where, just because we are outside the
14 EPZ, the evacuation process is complete.

15 They don't drop people at the 10-mile boundary.

16 JUDGE GROSSMAN: I am inclined to agree with
17 Ms. Rorem that we haven't completed the evacuation here,
18 whether or not we have reached the border of the EPZ,
19 and so it appears to be within the scope of the
20 contention.

21 There is a pending question.

22 WITNESS FAIROW: Could I have the question
23 repeated?

24 JUDGE GROSSMAN: Please.

25 (The question was thereupon read by the

1 Reporter.)

2 A (WITNESS FAIROW) The DNS makes the determination where
3 decontamination needs to be performed.

4 A contaminated bus may drive into -- or into an
5 area that is not affected or outside of the affected
6 area.

7 (Indicating.)

8 Did I answer your question?

9 BY MS. ROREM:

10 Q But it may be stopped or -- and contaminated before
11 entering a safe area?

12 A (WITNESS FAIROW) I really don't know what DNS
13 procedures are specific to decontamination. I can't
14 fully answer your question.

15 JUDGE GROSSMAN: Mr. Butterfield, I take it
16 you are not familiar with that area?

17 WITNESS BUTTERFIELD: No, sir.

18 BY MS. ROREM:

19 Q Might it be the case that if there is a place where they
20 are decontaminating school buses before they enter a
21 safe area, where Congregant Care Centers will take care
22 of the children, that you would have a backup of buses
23 waiting to be contaminated?

24 A (WITNESS FAIROW) I'm not sure I understand that
25 question.

1 Q Let's assume that there may be more than one school bus
2 which is contaminated and they are going to the same
3 town; that is, they are going to Kankakee or they are
4 going to Pontiac or whatever.

5 Is it possible that they may be backed up awaiting
6 decontamination before entering a safe area?

7 MR. BUTTERFIELD: May I try to answer that
8 for you?

9 A (WITNESS BUTTERFIELD) In handling decontamination of
10 contaminated objects, people or otherwise, buses,
11 whatever, there are certain procedures you follow.

12 The first thing you would do would be to make sure
13 that the people are safe. Therefore, you would get them
14 out of the contaminated area.

15 The buses would go to some location. There are
16 ways of getting the people off the buses without getting
17 them contaminated, assuming it was the external part of
18 the bus that's contaminated, which I believe is a
19 reasonable assumption.

20 Once you get the people off the buses, it doesn't
21 really matter where or how you decontaminate them.

22 It would -- it would probably take them to a
23 central location in a given vicinity and arrange to do
24 that, such as they could collect the waste from that
25 without contaminating the rest of the countryside.

1 So I don't believe it's a problem. You will get
2 the people out, you would take care of them, then you
3 would take care of the buses.

4 There would be no reason to hold the people on the
5 buses while you did this.

6 (Indicating.)

7 BY MS. ROREM:

8 Q Would you perhaps hold the people on the buses while you
9 took the time to determine whether or not they were
10 contaminated?

11 A (WITNESS BUTTERFIELD) Whether the buses were
12 contaminated?

13 Q Yes.

14 A (WITNESS BUTTERFIELD) Probably not.

15 You would probably make -- if you had reason to
16 believe that they were contaminated, you would make that
17 assumption and get them off the buses and then worry
18 about the buses afterwards.

19 Q So you don't take any specific precautions in entering a
20 safe area with a bus that might be contaminated?

21 A (WITNESS BUTTERFIELD) I am not --

22 Q I'm talking -- excuse me. That wasn't very well
23 phrased.

24 I'm talking about precautions to insure that the
25 contamination on the outside of the bus does not further

1 contaminate the safe area into which it is driving.

2 A (WITNESS BUTTERFIELD) I don't know, because as Ms.
3 Fairow pointed out, we are not privy to or we have not
4 studied the IDNS procedures; but I was trying to tell
5 you how I would do it as a reasonable person to meet the
6 desired goal, so I can't answer that question.

7 MS. ROREM: Excuse me.

8 Mr. Grossman, I seem to have a problem in that I
9 assumed that since Applicant has the burden of proof,
10 that any of the areas which I raised as issues would be
11 covered adequately or understood by the witnesses which
12 the Applicant brought.

13 JUDGE GROSSMAN: Mr. Edgar, could you have
14 someone here in the morning who is familiar with the
15 area of decontamination who could answer the question
16 with regard to evacuation?

17 MR. EDGAR: I can look into that, your Honor.
18 I'll make every effort to do so.

19 JUDGE GROSSMAN: Would you, please.

20 MR. EDGAR: But I will do so; I'll promise
21 that.

22 You know, I hope to get some time this afternoon to
23 look into it.

24 MS. ROREM: Okay.

25 MR. EDGAR: The other thing:

1 I don't want the response to be left right there.

2 Whereas Applicants have the burden of proof,
3 Applicants are not obligated to respond to each and
4 every issue that Intervenor raises.

5 That assumes that each is material, relevant and
6 worthy of significant relief.

7 JUDGE GROSSMAN: Well, you are certainly not
8 omnipotent, Mr. Edgar, so you couldn't possibly
9 anticipate every possible issue that might come up under
10 the contention.

11 The most you can do is try to supply a witness who
12 is knowledgeable --

13 MR. EDGAR: Right.

14 JUDGE GROSSMAN: -- and that's fine.

15 Thank you.

16 Continue.

17 MS. ROREM: Because of this, there's a whole
18 area of questioning that I will leave until tomorrow,
19 and come back to either with someone else or hit the
20 points with which these witnesses would be familiar.

21 MR. EDGAR: May I make a suggestion that may
22 help speed things along?

23 Mr. Schauts will take over for me. I'll go check
24 on the matter right now. The questioning will continue.

25 JUDGE GROSSMAN: That's fine.

1 In another area.

2 You can't --

3 MS. ROREM: Yes.

4 JUDGE GROSSMAN: -- certainly in this area.

5 BY MS. ROREM:

6 Q Ms. Fairow, what is there in the EBS messages, which the
7 public receives at the time of an accident, or the
8 brochures which Edison has distributed already which
9 would prevent members of the public from attempting to
10 enter recreational areas to help evacuate members of
11 their family or friends?

12 A (WITNESS FAIROW) In the brochure, it says that -- it
13 informs people not to go to campgrounds, et cetera,
14 because those people are being provided for, and
15 connections may be missed if -- if the public attempts
16 to go there to find someone --

17 Q Can you explain --

18 A -- and --

19 Q Excuse me.

20 JUDGE GROSSMAN: Excuse me.

21 Is that an accurate paraphrase of what it says
22 there?

23 It was my impression that it said that it wasn't
24 necessary to go there, but not to have the people -- not
25 that the people should not go there, but perhaps I'm

1 wrong about that.

2 Could we get it correct on the record as to what it
3 actually does say?

4 WITNESS FAIROW: Can I --

5 MS. ROREM: I had two of them.

6 WITNESS FAIROW: The paragraph in Section 3 of
7 the public information brochure says, "Gather the people
8 in your home together. If you have children or others
9 at schools, hospitals, overnight campgrounds or nursing
10 homes, do not try to pick them up. These facilities
11 will be following their own evacuation procedures and
12 you will probably miss connections."

13 BY MS. ROREM:

14 Q What about campgrounds that aren't overnight
15 campgrounds, parks and so forth:

16 Do you feel those are covered by this information?

17 A (WITNESS FAIROW) I believe that a person would assume
18 it would mean any type of campground, overnight or day
19 camp.

20 Q Does the sentence -- or half-a-sentence, "These
21 facilities will be following their own evacuation
22 procedures," assure a member of the public that these
23 people are being completely and adequately cared for?

24 A (WITNESS FAIROW) It should, yes.

25 Q It assures, then, that someone else is taking complete

1 responsibility for their evacuation, does it?

2 Excuse me. That's not a sentence.

3 A (WITNESS FAIROW) It should assure them that their
4 children are being taken care of.

5 Q Does it assure members of the public that such people
6 are being completely and adequately cared for and
7 evacuated?

8 A (WITNESS FAIROW) I can't speak for every member of the
9 public, but I think it would assure a reasonable person.

10 Q Are there members of the public who are present in
11 recreational areas on foot only?

12 A (WITNESS FAIROW) Yes, there are some who may be in
13 recreational areas on foot.

14 Q When you say "some," are you aware of any numbers of
15 people?

16 A (WITNESS FAIROW) When we surveyed the recreational
17 areas, we asked for an estimate of the number they may
18 have on foot or being dropped off without a vehicle.

19 Q And will there always be vehicles to help evacuate these
20 people present at the recreational facility?

21 A (WITNESS FAIROW) The contact person at the recreational
22 facility can call the county or municipal EOC and
23 request assistance, and a bus will be provided to
24 evacuate those people that are on foot.

25 Q Which may take some time to arrive; is this correct?

1 A (WITNESS FAIROW) It would depend where the bus is
2 coming from.

3 Q And if a member of the public who lives several miles
4 from a park or recreational area has dropped his or her
5 children off at the recreational area, is -- does it
6 assure -- does this, in the -- in the brochure which you
7 quoted, assure that person that his or her children will
8 be evacuated more quickly if he waits for a bus to
9 arrive to pick them up than if the person himself goes
10 to pick the children up?

11 A (WITNESS FAIROW) I -- the brochure doesn't address the
12 speed at which they will be evacuated by public
13 officials or the speed at which they could be picked up
14 by their -- by the parents.

15 Q But if a parent is aware of the fact that there are not
16 enough vehicles in a recreational areas -- area at most
17 times and the parent drops children off at the
18 recreational facility, would the parent feel that it was
19 his responsibility to pick the children up since he can
20 arrive there more expeditiously than a requested
21 emergency vehicle from some other place?

22 MR. SCHMUTZ: Objection.

23 Your Honor, I believe she's asking the witness to
24 testify what the parent would feel.

25 I don't see how it's possible at all for her to

1 testify as to that.

2 JUDGE GROSSMAN: Well, it's all based on
3 estimates, so that's overruled.

4 Let the witness answer the question.

5 She's asking your opinion as to whether that would
6 be more likely.

7 A (WITNESS FAIROW) I'm sure that a parent's first thought
8 would be to go after their child; but they are also
9 informed in their EBS messages not to enter an affected
10 area, so --

11 BY MS. ROREM:

12 Q But if they are already in an affected area, does this
13 pertain?

14 A (WITNESS FAIROW) They -- they should not go to the
15 recreational area, as the brochure says, to pick people
16 up because they are being taken care of.

17 We can provide that information.

18 Beyond that --

19 Q If -- from where would a vehicle be coming to pick a
20 child up -- to pick up transients on foot in a
21 recreational area? From what distance might it be
22 coming?

23 A It may be coming from the closest municipality.

24 Any --

25 Q The closest municipality?

1 A (WITNESS FAIROW) A bus from the district -- school
2 district in -- if the recreational facility is in a
3 rural area, the bus may be coming as close as from the
4 closest municipality.

5 Q If I -- I have to get specific with this, because it's
6 the best example I know.

7 If I dropped my children off at the South
8 Wi' ington Sportsmans Club, which is two miles north of
9 me, and I receive -- hear the warning sirens and know
10 that my children are at that facility on foot, I may
11 also know that there are no buses in my town.

12 Is it sensible, on the basis of this information,
13 for me to think that my child is safer standing and
14 waiting at the recreational facility than if I were to
15 go and pick him up and take him out of the area?

16 A (WITNESS FAIROW) In that particular instance, it's
17 probably not sensible for you -- it would not be
18 sensible for you to let your child wait; but with --
19 with the prior notification systems we have and systems
20 to notify recreational facilities, mobilize buses, in
21 enough time --

22 Q Are you telling me that --

23 JUDGE GROSSMAN: Would you let the witness
24 answer --

25 MS. ROREM: I'm sorry.

1 JUDGE GROSSMAN: -- the question, please.

2 A (WITNESS FAIROW) -- then chances are that a bus could
3 be at a recreational facility in as much time as a
4 parent could with that preplanning built in.

5 BY MS. ROEM:

6 Q Is -- are you telling me that the -- the recreational
7 facility will know before I know that there is an
8 emergency?

9 A (WITNESS FAIROW) It is possible for an official to
10 notify that recreational area prior to a Protective
11 Action Recommendation.

12 The -- they couldn't be notified to -- you know, in
13 the case of a -- for information only, they would be
14 called, or there's a possibility that they would know,
15 before the public, that they would need to evacuate
16 or -- or take some kind of action.

17 They -- the county may call them and say, "Send
18 your people home before there's a protection action."

19 Q But at this point in time, I have heard the sirens go
20 off --

21 A (WITNESS FAIROW) Uh-huh.

22 Q -- and I have heard the EBS message that says,
23 "Shelter." You know, "Stay where you are," et cetera.

24 I am missing the time element there.

25 Will my siren go off after the recreational

1 facility has been notified that there's an emergency --

2 A (WITNESS FAIROW) If --

3 Q -- or will it be --

4 A (WITNESS FAIROW) If there is enough lead time and
5 officials are aware of a large population at a
6 recreational facility, they can take the initiative to
7 notify that facility prior to any protective actions for
8 the public.

9 Q Oh, I'm not talking about protective actions. I'm
10 talking about the sirens going on.

11 Now, this is different than protective actions.

12 The sirens may be sounded when there is not a
13 protective action recommended yet; is this correct?

14 A (WITNESS FAIROW) That's correct. They could be blown
15 for an information-only message.

16 Q And the information only would say, "This is for
17 information only."

18 At that point, am I -- is it -- is it expected that
19 parents will not or other members of the public will not
20 jump in their cars and run up to the recreational
21 facility to evacuate their children or is that perfectly
22 all right?

23 A (WITNESS FAIROW) If there's no protective actions
24 recommended, then you won't be getting a message saying,
25 "Don't go to these facilities," so there are no

1 instructions not to.

2 At that point, the majority of the population is
3 not going to be taking an action. No population will be
4 taking an action.

5 Q I will.

6 If a protective action has been called for, how
7 much sooner would a recreational area receive that
8 information than the EBS emergency on the radio or
9 television?

10 A (WITNESS FAIROW) There's not a requirement that they
11 would find out about it any sooner, but there's a
12 possibility that they may.

13 Q So that it is possible or it is -- since I'm not
14 supposed to tie up the phone lines finding out whether
15 or not they've known before I knew, I can only assume
16 that they are knowing at the same time I am.

17 Therefore, given the circumstances, should I assume
18 or is it unreasonable that I would assume I can get up
19 there and evacuate my children faster than a bus can
20 come from a farther location than me to evacuate them?

21 A (WITNESS FAIROW) It's not unreasonable for you to
22 assume that.

23 Q So there -- there may be many members of the public who
24 have dropped their children or other members of their
25 family off at parks or recreational areas which will

1 assume that they can effect a quicker evacuation than
2 can the officials or -- or the people at the
3 recreational area?

4 A (WITNESS FAIROW) They may assume that; but in addition
5 to the -- the warning in the EBS and in the booklet, we
6 will have traffic and access patrol -- control posts
7 advising them that their children are being taken care
8 of and that they should meet them at a Congregant Care
9 Shelter.

10 Q Would you please tell me how the children are being
11 taken care of?

12 A (WITNESS FAIROW) If they do not have transportation out
13 of the recreational area, they will -- the person in
14 charge of the recreational area will call a county or
15 municipal EOC and request transportation assistance.

16 Counties or municipalities will provide that
17 transportation assistance to the recreational area.

18 Q This doesn't answer my question.

19 How are my children being cared for at the
20 recreational facility as I am stopped a half-a-mile away
21 from it with no bus in sight?

22 A (WITNESS FAIROW) They are being assisted in evacuating
23 the area and they are --

24 Q Where are these children? What are they doing?

25 A (WITNESS FAIROW) I assume at a recreational area. They

1 are playing ball or swimming.

2 Q After the sirens go off, they are playing ball or
3 swimming?

4 A (WITNESS FAIROW) No. Before the sirens go off.

5 Then they are assembled to get on the buses by the
6 people that work in the area.

7 Q The buses are not there yet.

8 What are my children doing? How are they being
9 cared for?

10 A (WITNESS FAIROW) The people at the recreational area
11 are with them and they are waiting with them for the
12 bus.

13 JUDGE GROSSMAN: Excuse me.

14 I have one or two questions that may clarify the
15 area.

16 Is it a given that persons who are going to the
17 recreational areas in order to pick up their children
18 will be ordered away from, in an opposite direction, if
19 they do take their cars there to pick their children up?

20 WITNESS FAIROW: They will be advised to -- to
21 meet their -- with their children at a Congregant Care
22 Shelter.

23 JUDGE GROSSMAN: When you say "advised," does
24 that mean they will be ordered or will it be suggested
25 to them?

1 WITNESS FAIROW: That's hard to say.

2 I -- I think it would depend on the officials in
3 that area.

4 JUDGE GROSSMAN: Now, is it also a given that
5 it would always be improper for a parent to go in the
6 direction of a recreational facility rather than
7 evacuate the EPZ himself or herself?

8 WITNESS FAIROW: You mean pick up their child
9 and then evacuate?

10 JUDGE GROSSMAN: Yes.

11 WITNESS FAIROW: If they are -- if they don't
12 have to enter an affected area, if they are coming from
13 within, it's not unreasonable that they couldn't stop by
14 and pick their child up.

15 But the children would be taken care of regardless
16 of if the parent picked them up.

17 JUDGE GROSSMAN: Well, on the basis of the
18 numbers that you have determined in your survey, does it
19 appear detrimental to the emergency plan for most of the
20 parents who have children in the recreational area to
21 attempt to go to the recreational areas to retrieve
22 their children?

23 WITNESS FAIROW: The greatest problem it would
24 cause would be the traffic problem of all those people
25 trying to get in there at the same time or trying to get

1 buses in to evacuate.

2 JUDGE GROSSMAN: That's why I prefaced my
3 question.

4 On the basis of the numbers that you have seen in
5 the survey, is there any ballpark number that you come
6 up with that would suggest that there either is or is
7 not a problem?

8 WITNESS FAIROW: I think that would vary from
9 facility to facility because of the number of -- of
10 children there that are dropped off to swim or whatever.

11 I -- I don't have any of those percentages in my
12 head. I would have to look them up.

13 JUDGE GROSSMAN: Continue.

14 MS. ROREM: Thank you.

15 MR. EDGAR: Your Honor, could I just
16 interject an information note in response to your
17 previous request?

18 JUDGE GROSSMAN: Yes, certainly.

19 MR. EDGAR: We have present here today Mr.
20 Eugene C. Fields from the Illinois Department of Nuclear
21 Safety, who would be able and willing to take the stand
22 to join the panel and answer questions concerning the
23 effect of contamination on evacuations and the like, and
24 then we would want to excuse him when the line of
25 questioning is complete.

1 JUDGE GROSSMAN: Would you like to then return
2 to the prior area and question him or would you want to
3 continue here for a few minutes? What's your
4 preference, Ms. Rorem?

5 MS. ROREM: I'll -- this is a fine time to do
6 that --

7 JUDGE GROSSMAN: I'm sorry. I didn't hear
8 you.

9 MS. ROREM: -- but I would like -- this is an
10 acceptable time to do it, because I was -- the point was
11 made. I was going to change my questioning.

12 However, I would prefer that he take the stand by
13 himself, since Ms. Fairrow and Mr. Butterfield have
14 claimed that they do not know anything about this.

15 JUDGE GROSSMAN: Well, I understand the offer
16 is that he will take the stand, and you can question
17 him, and then when you have exhausted that line of
18 questioning with him, you can return to the current
19 panel --

20 MR. EDGAR: Yes.

21 JUDGE GROSSMAN: -- and follow up, if that's
22 necessary.

23 Is my understanding correct?

24 MR. EDGAR: Yes, that's right.

25 You know, I would want to do a two-minute direct of

1 Mr. Fields on his qualifications and what he might be
2 able to say here, and then he would be available to
3 answer questions.

4 JUDGE GROSSMAN: Is that agreeable?

5 MS. ROREM: That's acceptable.

6 JUDGE GROSSMAN: We'll do that right now then?

7 MS. ROREM: Certainly.

8 JUDGE GROSSMAN: Fine.

9 MR. BUTTERFIELD: Judge, I will sit back over
10 here, then.

11 JUDGE GROSSMAN: Fine. Thank you.

12 MR. EDGAR: Would Mr. Eugene C. Fields take
13 the stand.

14 JUDGE GROSSMAN: Sir, would you raise your
15 right hand.

16 (The witness was thereupon duly sworn.)

17 EUGENE C. FIELD

18 called as a witness by counsel for the Applicant, having been
19 first duly sworn by the Chairman, was examined and testified
20 as follows:

21 DIRECT EXAMINATION

22 BY MR. EDGAR:

23 Q Could you state your name and business address for the
24 record?

25 A My name is Eugene C. Field. My business address is the

1 Illinois Department of Nuclear Safety, 1035 Outer Park
2 Drive, Springfield, Illinois.

3 Q And could you provide a brief statement of your
4 professional qualifications, both working experience and
5 educational background?

6 A I'm a registered radiologic technologist and a
7 registered nuclear medicine technologist with 10 years
8 experience in the medical field.

9 In addition, I have a bachelor of science degree in
10 health arts.

11 I've been employed by the Illinois Department of
12 Nuclear Safety for the last four-and-a-half years, the
13 last two of which have been in the Division of Emergency
14 Planning.

15 Q Could you describe how, if at all, in your opinion, the
16 contamination of school buses would affect the progress
17 of an evacuation?

18 A We would not stop any school buses that were going
19 through a checkpoint to a Congregate Care Center because
20 of any contamination problem.

21 That type of monitoring and decontamination efforts
22 would take place after the individuals were secure --
23 were dropped off at the Congregate Care Shelter.

24 Q And how would the Illinois Department of Nuclear Safety
25 handle completion of the evacuation in the unloading of

1 people from those buses?

2 A If we suspected that there was possibly a contamination
3 problem, what would be done is that someone would meet
4 that bus, as -- when it arrived at the Congregate Care
5 Shelter, monitor that bus very quickly to see if there
6 was a contamination problem.

7 The reason we would do that, obviously, is it would
8 probably get some better idea if we had people
9 contamination problem. That would take place very
10 quickly.

11 If we suspected that the bus, indeed, is
12 contaminated, we would segregate the bus in a holding
13 area; and once the immediate effects of the whole
14 situation are under control, we could start an orderly
15 decontamination of that equipment and possibly other
16 equipment.

17 Q And what would you do vis-a-vis unloading of passengers
18 in the bus?

19 A As I say, we would do a quick survey just to see if
20 contamination of the external vehicle was present. Once
21 we have done that, we would have an orderly deloading of
22 the bus into the decontamination area.

23 If we suspect that people are contaminated, the
24 first thing that would be done is the Illinois
25 Department of Nuclear Safety would register those people

1 and perform a radiological monitoring survey on them to
2 see if, in fact, they are.

3 MR. EDGAR: Okay. That's all we have.

4 JUDGE GROSSMAN: Do you have any follow-ups
5 on that?

6 MS. ROREM: Yes.

7 May I talk with Mr. Wright for a moment?

8 JUDGE GROSSMAN: Certainly.

9 MR. EDGAR: Your Honor, I don't want to
10 belabor the point, but I raised a previous objection,
11 you know, along this whole line of questioning.

12 It's our view that the question of the
13 decontamination procedure goes beyond the contention.

14 The Board advised us the matter carried through the
15 completion of the evacuation; and we're trying to be
16 consistent with that element of the Board's ruling.

17 JUDGE GROSSMAN: Well, I believe I've
18 indicated that, to the extent that the evacuation is
19 completed, then the decontamination is outside the
20 scope.

21 MS. ROREM: Could I ask you a question, then?

22 When do you consider the evacuation is completed as
23 regards people?

24 JUDGE GROSSMAN: Well, certainly after the
25 children or the other persons are off the bus in the

1 Congregate Care Centers, that their evacuation is
2 completed.

3 MS. ROREM: Okay.

4 JUDGE GROSSMAN: Is there any alternative?

5 MS. ROREM: Well, yes.

6 I -- I had some concerns about decontamination of
7 people and whether they would be segregated from others
8 or, you know, in the Congregate Care Shelter and what
9 would happen with these people; how -- how parents, et
10 cetera, would be informed about where their children
11 would be and so forth.

12 JUDGE GROSSMAN: Well, I was talking about
13 the buses now.

14 MS. ROREM: I know; but I wanted to know
15 about the people, because you were discussing the -- I
16 think the --

17 JUDGE GROSSMAN: Well --

18 MR. EDGAR: Your Honor, if we go that far
19 into the question of what is involved at the Congregate
20 Care Center, then we're really beyond the question of
21 the evacuation procedure and we're into Issue 8, which
22 she has dropped from the offer of proof.

23 JUDGE GROSSMAN: Are we up to that yet?

24 MR. EDGAR: That's what she said she wanted
25 to go toward.

1 JUDGE GROSSMAN: Yes; but have you gone to
2 that?

3 MS. ROREM: No, I'm not there yet.

4 JUDGE GROSSMAN: We'll address it when we are
5 there.

6 BY MS. ROREM:

7 Q Could you tell me how long you've been working on plans
8 like this with the Department of Nuclear Safety?

9 A Myself personally?

10 Q Excuse me?

11 A Myself personally?

12 Q Yes, you personally.

13 A About two years.

14 Q Okay. Does the Department of Nuclear Safety have a plan
15 that is in written form?

16 A The responsibilities of the Department of Nuclear Safety
17 are outlined in IPRA, which is Volume 1 of the state
18 volume, which is here today. Our duties are outlined
19 there in Chapter 5.

20 Q Is that the entire plan which -- I mean, is there
21 anything else which the Department of Nuclear Safety
22 follows as either guidelines or specific information?

23 A We have a lot of information that we use for guidelines.
24 We have standard operating procedures of our own and, of
25 course, we use federal guidance in certain other

1 activities.

2 Q If -- where is it possible to obtain a copy of your
3 standard operating procedures in instances like this?

4 MR. EDGAR: Objection.

5 That's a matter for discovery. We're long since
6 past that.

7 I see no relevance or materiality.

8 JUDGE GROSSMAN: Yes, Ms. Rorem.

9 MS. ROREM: I was going to say this man just
10 came up here and the Department of Nuclear Safety was
11 just brought up as a -- today, so I thought I'd ask.

12 JUDGE GROSSMAN: Could you repeat the
13 question, Mr. Reporter.

14 (The question was thereupon read by the
15 Reporter.)

16 JUDGE GROSSMAN: Overruled. You may answer
17 the question.

18 A Okay. I'm not completely sure of how -- how the -- you
19 go about the process; but, obviously, we have copies of
20 the -- both the plan and the procedures in our offices;
21 and even the guidelines of the department policy, which
22 I'm not sure if those -- those materials are available
23 for review.

24 BY MS. ROREM:

25 Q Are there Braidwood-specific standard operating

1 procedures?

2 A The Department of Nuclear Safety does not have
3 Braidwood-specific department procedures except for
4 things like logistical -- naturally, with the logistics
5 to move people up to this area.

6 You know, depending on which station is involved,
7 there are procedures for some of the things that are
8 done in confirmatory accident assessment.

9 For example, naturally it would be site specific to
10 any specific one of the nuclear plants.

11 But in general, given the topic that I would be
12 called upon here to talk about here today, in the area
13 of decontamination -- that is, general decontamination
14 procedures and whatever -- that's general across the
15 board for all the nuclear stations here in Illinois.

16 Q Okay. If a bus is contaminated, when and where does the
17 quick survey of the bus to determine whether it's
18 contaminated take place?

19 A Upon its arrival at the Congregate Care Shelter.

20 Q Do you hold all -- if you have seven or eight buses, you
21 wait to unload them until you've determined whether or
22 not the buses are contaminated?

23 A No. I didn't say that.

24 What I said was that we do a very cursory survey
25 after it arrives at the Congregate Care Shelter. Then

1 those people are allowed to disembark.

2 Q How long does it take to do a quick survey of each bus?

3 A Probably no more than a minute.

4 Q Okay. If it -- if it is -- if a bus is contaminated,
5 does it take any longer?

6 A If a bus would be contaminated, what we would want to
7 do -- to know at that point is, yes or no: Is a bus
8 contaminated?

9 If so, it will be moved to an area where it's
10 segregated from the general population for
11 decontamination at a more appropriate time.

12 JUDGE COLE: After the occupants are removed?

13 WITNESS FIELD: After the occupants are
14 removed.

15 MS. ROREM: I think we're treading
16 dangerously close to the area which Mr. Edgar was eager
17 to jump into.

18 JUDGE GROSSMAN: Yes; and I'm going to agree
19 with Mr. Edgar in general, having read all of Proof
20 Issue No. 8, which apparently would have covered that
21 area.

22 MS. ROREM: But you are not going to consider
23 that this may have been taken care of under Contention
24 1(b), which is where I --

25 JUDGE GROSSMAN: I considered that, too.

1 MR. EDGAR: That's evacuation and sheltering,
2 your Honor. That really doesn't get to congregate care
3 and issues outside the EPZ.

4 JUDGE GROSSMAN: Well, we'll allow one or two
5 questions in that area.

6 BY MS. ROREM:

7 Q How will you then determine whether people on the buses
8 are contaminated?

9 A The same way we did the bus: with monitoring equipment,
10 survey equipment.

11 Q And will you segregate them quickly and put them in a
12 group or what will you do?

13 A Those individuals would be monitored upon entering the
14 Congregate Care Shelter.

15 Yes, segregated from other people until, you know,
16 it's determined that, yes or no, they are, in fact, or
17 are not contaminated.

18 Q And if they are contaminated, they will be -- will they
19 be allowed to enter the Congregate Care Center?

20 A If those people are contaminated, yes, they will be
21 allowed to enter the Congregate Care Shelter because
22 that's where we plan to decontaminate those individuals.

23 Q Do you plan to keep them there if they are seriously
24 contaminated?

25 A I'm not sure what you mean by "seriously contaminated."

1 Q If they are -- all right.

2 Would you please describe decontamination
3 procedures?

4 MR. EDGAR: Objection. Now we're getting
5 well beyond the contention.

6 JUDGE GROSSMAN: I think that's the case, and
7 I think that's about as far as we're going to go.

8 MS. ROREM: Okay.

9 Could I tell you what it is I'm trying to
10 accomplish?

11 JUDGE GROSSMAN: Why don't you.

12 MS. ROREM: I would like to get back to the
13 information which people are given about where their
14 children will be, where their relatives will be and
15 whether -- whether they are instructed to go to a
16 Congregate Care Center, which information will be given
17 them about where people are.

18 I think this does have a big effect on an orderly
19 evacuation.

20 JUDGE GROSSMAN: Well, I don't see that the
21 question you just posed is directed towards that, Ms.
22 Rorem.

23 MS. ROREM: I just -- I want to know: If a
24 parent, for instance, goes to a Congregate Care Center
25 and finds out that his -- his child is elsewhere or

1 whatever, what will he be told and so forth?

2 What registration techniques are going to be
3 undergone to know where people are going, and how will
4 other people be adequately informed about their
5 families?

6 JUDGE GROSSMAN: Could you rephrase the
7 pending question, Ms. Rorem?

8 Could the Reporter read that again, please?

9 (The record was thereupon read by the
10 Reporter.)

11 JUDGE GROSSMAN: Okay.

12 Ms. Rorem, why don't you ask another question?
13 We've sustained the objection to the prior one,
14 which is prior to this statement.

15 Why don't you just ask another question.

16 BY MS. ROREM:

17 Q Is there ever a need to do a quick survey of buses or
18 other vehicles before they leave the EPZ?

19 A We have no plans to do that.

20 Our concern in the area that you are addressing of
21 getting out school children naturally takes precedence
22 over any contamination problem.

23 We want to get the people out first and evaluate
24 the seriousness or the consequences of any radiological
25 contamination after the people are safely out of the

1 EPZ.

2 Q Okay. I didn't ask if you had plans. I asked if there
3 would be a need to do a survey.

4 Can you imagine any circumstances where you would
5 need to do this?

6 A That's a wide-open question, and I can't, you know --
7 right off the top of my head, no.

8 I think that we adequately cover what needs to be
9 done in our role in IPRA the way the procedures are set
10 up now.

11 Q Is there any plan to monitor in any way other vehicles
12 which may be coming from recreational areas, for
13 instance?

14 A Any radiological monitoring --

15 Q Yes.

16 A -- would be done outside of the EPZ.

17 Now, we would -- I might go on to state that we
18 would have a very good idea, before any of those cars
19 got out of the EPZ, if we had a contamination problem or
20 not, because that's our role. Our job is to do the
21 radiological accident assessment.

22 We feel that, yes, we would probably know, Question
23 No. 1, did we have a contamination problem in any of
24 these accident scenarios that we talked about today, or,
25 yes, if so, if there is a contamination problem, we have

1 a very good idea of how much -- you know, what we would
2 expect to see; and the whole purpose of decontamination
3 is to spread -- to avoid the spread of contamination.

4 That's our aim. That's, naturally, what would be
5 done.

6 Specifically, those kind of things, with the
7 information we would be given, probably by various
8 sources, as far as where we have decided we wanted cars
9 to come, for example, to be checked.

10 Obviously, we can't do everything at once. We want
11 to take care of the people first, getting the people
12 out.

13 We'll worry about the contamination problem if we
14 have one; and to what extent we have one, we'll, you
15 know, gauge our response to that effort.

16 Q Are there accidents in which you may know that there is
17 going to be a serious contamination problem with
18 vehicles evacuating the area?

19 A There are accident scenarios that call for
20 contamination -- a contamination hazard, so, yes, we
21 would fully expect that we might have contamination on
22 anything and everything that was in the path of this
23 radioactive plume.

24 Q Where will you be monitoring or -- where will you be
25 monitoring any vehicles which may be coming from the EPZ

1 and which may be contaminated or which you suspect are
2 contaminated?

3 A You are asking me to identify every location?

4 Q No. I'm just asking if -- I'm asking: Are there such
5 locations and have you identified them?

6 A Well, I already said that we would do something like
7 that at the Congregate Care Shelter.

8 Now, sure, there's -- if there's cars and material,
9 you know -- consider that possibly we have police cars
10 and fire trucks, as an example, that could possibly
11 become contaminated.

12 A determination somewhere in this accident scenario
13 would be made where we would want to do this kind of
14 effort.

15 Q Are there any places besides Congregate Care Centers
16 where you plan to do quick surveys for -- to detect
17 contamination?

18 A There's nothing predetermined, no, because that can be
19 done anywhere.

20 Q For people who have been in recreational areas in the
21 EPZ who may be badly contaminated, who are not going to
22 Congregate Care Centers, is there any way to stop the
23 spread of contamination -- you know, contaminated
24 material?

25 A Well, I'm not sure what you mean by "badly

1 contaminated." I don't want to try to conjure up what
2 that's supposed to mean.

3 Q I'm -- that's not my question.

4 The "badly contaminated" has little to do with it.

5 If you know -- if there are contaminated vehicles,
6 whether you know about them or not isn't important.

7 Is there any method set up to detect contamination
8 if these people are not going to a Congregate Care
9 Center?

10 MR. EDGAR: Objection.

11 This questioning now goes to what's being done
12 outside the EPZ on decontamination. It has nothing to
13 do with evacuation and protective action under 1(b), and
14 now we're back into Issue 8 on the responsibilities of
15 host communities.

16 This is well beyond the scope of any admitted
17 contention.

18 JUDGE GROSSMAN: Ms. Rorem?

19 MS. ROREM: I don't believe it's beyond the
20 scope of the contention because I think evacuation
21 safely has to do with -- with being concerned with the
22 safety of people after -- you know, when they are
23 evacuated.

24 If I leave a recreational area and go into Kankakee
25 with a badly contaminated vehicle, not only may be I

1 contaminating my host community, but I may be getting in
2 and out and in and out and in and out of that car and
3 contaminating myself.

4 There is nothing in the scripts which says anything
5 about monitoring people; and I was concerned about
6 whether or not vehicles --

7 JUDGE GROSSMAN: We will allow an answer to
8 that, sir.

9 A Well, I think it -- the best way for me to answer your
10 question is if, yes, we suspect there has been or we
11 have confirmed that there has been a contamination
12 problem, we will rely on our counterparts at ESDA to use
13 their broadcast methods to get that information out to
14 the public, that, A, yes, we would like them to go to a
15 specific location, either have themselves monitored for
16 contamination, or B, you know, any vehicles.

17 BY MS. ROREM:

18 Q If you do suspect a contamination problem, is there any
19 chance that you will do some checkpoint monitoring on
20 roads as they leave the EPZ? Has that been considered?

21 A There will be monitoring conducted all through the EPZ
22 ongoing during an accident. That's -- part of our
23 accident assessment is field teams doing confirmatory
24 assessment.

25 Q Would that lead to any traffic problems on any of these

1 roads if you are starting to detect contamination on
2 vehicles coming from the EPZ?

3 A We're not stopping vehicles just to check and see if
4 they are contaminated as they are coming out of the EPZ.

5 I said what we were doing was we were doing
6 monitoring within the EPZ.

7 Q Fine.

8 But my question before had been have you any plans
9 to or is there a possibility you will be doing any
10 monitoring to detect contamination on vehicles before
11 they leave the EPZ.

12 A I think the plan as written calls for people to go to
13 Congregant Care Shelters.

14 Our plan is to do those kind of activities at that
15 location.

16 Q At that location.

17 Are you aware of the fact that the EBS messages
18 direct people to either go to a Congregate Care Center,
19 or if they have friends or family outside of the EPZ, to
20 go there?

21 A If we suspect radiological contamination, we would
22 instruct people to go to the Congregant Care Shelter.

23 Q And how would you do that; over the EBS messages?

24 A I'm at a loss. I'm not sure what the EBS message says.
25 I haven't had privy, you know, to read it, so I don't

1 know how to comment. I'm not sure exactly what it says.

2 Q Are you familiar with this planning booklet of
3 Commonwealth Edison's?

4 A I'm familiar with the requirements in general.

5 I'm not privy to all the specifics for the
6 Braidwood book, but some of the general information
7 inside I think I have a pretty good understanding of.

8 Q So you are not aware of the fact that this pamphlet also
9 directs people to go -- that they -- instructs people
10 that they may be -- may be going to a friend or
11 relative's house?

12 A I'm not sure what that says in regard to that topic.

13 MS. ROREM: Okay. I'm done with my
14 questioning of this witness.

15 JUDGE GROSSMAN: You are finished with the
16 questioning?

17 MS. ROREM: Yes.

18 JUDGE GROSSMAN: Mr. Flynn.

19 MR. FLYNN: I have no questions.

20 JUDGE GROSSMAN: Mr. Edgar.

21 MR. EDGAR: I have none.

22 JUDGE GROSSMAN: Fine. Thank you very much,
23 sir.

24 You are excused.

25 (Witness excused.)

1 MR. EDGAR: I wanted to express on the record
2 our appreciation for Mr. Field on such short notice and
3 his cooperation.

4 JUDGE GROSSMAN: The board agrees with that.

5 MS. ROREM: So do I.

6 JUDGE GROSSMAN: Fine.

7 The prior panel has resumed its seats.

8 MS. ROREM: Let me find my place again.

9 BY MS. ROREM:

10 Q What provisions are there for EBS messages to
11 specifically state that people should not go to a friend
12 or relative's house?

13 A (WITNESS FAIROW) The EBS messages are prescribed to --
14 to facilitate activating the EBS system by the county
15 ESDA coordinator.

16 At the last sentence, in parens, on every EBS
17 message, it says that the county ESDA coordinator can
18 add situation-specific information as needed.

19 As I said earlier, the Department of Nuclear Safety
20 will have a representative in the county EOC.

21 If, in fact, there is contamination and they need
22 to adjust the message to indicate that all persons
23 should go to a Congregate Care Shelter to register, DNS
24 will provide that information to the county and the EBS
25 message will be adjusted before it's provided to the EBS

1 station.

2 Q Now, you had said earlier that -- well, there are
3 situations which may not be covered by EBS broadcasts or
4 where people do not have access to a radio; is this
5 correct?

6 MR. EDGAR: I object.

7 That's a compound question. There are two
8 questions there.

9 If we could have one at a time.

10 BY MS. ROEM:

11 Q Might there be situations where persons in the EPZ did
12 not have access to a radio?

13 A (WITNESS FAIROW) That's possible.

14 Q And they would then, you stated, be relying upon the
15 brochure?

16 A (WITNESS FAIROW) It depends on the situation.

17 Q I think what I am getting at is that there are
18 situations where people would not have access to a
19 radio, but they might -- and we might have a serious
20 contamination problem.

21 These people would not be aware that they were not
22 allowed to simply evacuate to any place they desired to
23 go?

24 A (WITNESS FAIROW) These people would be directed to
25 Congregate Care Shelter by the traffic and access

1 control post.

2 Q Can you tell me what authority the traffic and access
3 control people have to disallow people to go where they
4 please rather than to a Congregate Care Center?

5 A (WITNESS FAIROW) They can simply advise; but if they
6 are also indicating that there was some contamination,
7 and the decontamination is being performed at the
8 Congregant Care Shelter, I would assume that most people
9 would want to go get decontaminated.

10 Q Are these traffic control people aware that the vehicle
11 is contaminated?

12 . That was not part of my question.

13 A (WITNESS FAIROW) Well, if -- if there is a general
14 order for anyone evacuating to go to a Congregate Care
15 Shelter because of a contamination problem, they --
16 the -- the persons at the post would be made aware of it
17 so that they can direct the traffic in the right
18 direction into the right shelter.

19 Q Will these people -- will these traffic control people
20 be stopping each and every vehicle leaving the EPZ in
21 order to tell them where to go?

22 A (WITNESS FAIROW) I think it would depend on the
23 situation.

24 They could, if -- if there was a need.

25 Q So there might be a bottleneck at the edge of the EPZ or

1 at checkpoints along the EPZ as people are trying to
2 evacuate and are receiving information about where they
3 are to go?

4 A (WITNESS FAIROW) It is possible.

5 Q Can you tell me who has access to EBS stations?

6 Is it only through the county ESDA coordinator?

7 A (WITNESS FAIROW) The designated state representatives
8 also have access; that is, either the -- the director of
9 Illinois ESDA or the governor.

10 Q If a municipal leader wished to declare that he wanted
11 his area evacuated, would that message be run on EBS
12 stations?

13 A (WITNESS FAIROW) He would have to go through the county
14 where he was located to have that put into the county
15 EBS message.

16 Q Is it possible that the county would run such a message?

17 A (WITNESS FAIROW) It is possible.

18 Q So the county might -- I mean, it would be -- the county
19 ESDA coordinator might be following protective action
20 sheltering, as far as everyone else was concerned, but
21 announce that thus and so community was being evacuated?

22 A (WITNESS FAIROW) I'm not sure that I understand the
23 question.

24 Q I'm talking about a possible desire to evacuate, which
25 does not originate with the ESDA coordinator or with the

1 state decision-making apparatus, which does not
2 necessarily fall along sector lines or so forth.

3 If the mayor of a municipality wished, regardless
4 of the fact that sheltering was being recommended for
5 all of the EPZ, to evacuate his town or city, could he
6 do this?

7 A (WITNESS FAIROW) Yes, a mayor can recommend that
8 persons within his municipality evacuate.

9 Q And can he do this -- can this message been carried on
10 the EBS stations?

11 A (WITNESS FAIROW) Yes. He would have to make
12 arrangements with the county to broadcast that
13 information.

14 Q But there are no prescribed messages which encompass
15 this particular possibility?

16 A (WITNESS FAIROW) No.

17 It's a very specific case, and the message -- there
18 is no message that provides for evacuation of individual
19 municipalities.

20 Q Would the county ESDA coordinator necessarily have to
21 allow him or her to broadcast such messages on EBS
22 stations?

23 A (WITNESS FAIROW) Allow who?

24 Q The mayor or whatever of a city or town.

25 A (WITNESS FAIROW) It wouldn't be a case where they --

1 the county coordinator allows the mayor. The mayor
2 would provide the information to the county coordinator.

3 Q All right. He provides the information that he wishes
4 to evacuate his town and he provides a message to be
5 read on EBS stations.

6 Will the ESDA coordinator have to let that message
7 be run?

8 A (WITNESS FAIROW) Yes, I believe that if a mayor
9 requests that the information be provided to EBS, then
10 the county would provide that information to the public.

11 JUDGE GROSSMAN: Miss Rorem, what issue are we
12 on now?

13 MS. ROREM: 1(b).

14 MR. EDGAR: What special facility?

15 MS. ROREM: Well, this is what I'm getting
16 at.

17 BY MS. ROREM:

18 Q What happens then with the -- with the conflicting
19 chains of command with a village official or town
20 official and a school district?

21 If this message is run, will the -- will the
22 special facilities within that town be evacuated, also?

23 A (WITNESS FAIROW) Yes.

24 MS. ROREM: Okay. I have a whole new area to
25 enter, and it is 4:37.

1 Do you wish to postpone it until tomorrow?

2 JUDGE GROSSMAN: Okay. That sounds fine.

3 Can we now get an approximation from you as to how
4 long we're going to go with your cross examination total
5 beginning with tomorrow morning?

6 MS. ROREM: I would think that we might be
7 able to wrap it up tomorrow afternoon, but it might take
8 Wednesday morning as well.

9 MR. EDGAR: Is that a --.

10 JUDGE COLE: Tomorrow is Wednesday.

11 JUDGE GROSSMAN: Thursday morning?

12 MS. ROREM: Thursday. Excuse me.

13 MR. EDGAR: May I ask whether that refers to
14 this group of witnesses?

15 MS. ROREM: No. It refers to this group plus
16 the NRC staff and FEMA's witness.

17 JUDGE GROSSMAN: Okay. Why don't -- oh, Mr.
18 Edgar.

19 MR. EDGAR: I have a procedural matter.

20 JUDGE GROSSMAN: Sure.

21 MR. EDGAR: I'd like to know when this
22 subpoena will be served, because that could have a
23 potential impact on the schedule and we need to know how
24 that factors in.

25 JUDGE GROSSMAN: Mr. Edgar, I don't think

1 that -- if you want to informally ask Ms. Rorem that,
2 that's fine.

3 I don't think she's compelled to tell you when
4 she's going to serve a subpoena; and, as you know, there
5 are some reasons why subpoenas are ex parte. Not
6 everybody is willing to accept service of subpoenas.
7 That's --

8 MR. EDGAR: I really wasn't after anything
9 ulterior.

10 I was trying to get a grip on the schedule.

11 If we're going to have to deal with it, again --

12 JUDGE GROSSMAN: Okay. All I'm saying is we
13 don't want to be involved; and you certainly are free to
14 ask Ms. Rorem informally to work out some arrangements.

15 We prefer that you do that, so we won't discuss it
16 on the record.

17 Is there anything else before we adjourn until --

18 MR. EDGAR: Just a detail.

19 The gentleman sitting at the counsel table with Ms.
20 Rorem today wasn't identified. He came in a little
21 later.

22 I wonder if he could be identified.

23 JUDGE GROSSMAN: Well, he apparently is not
24 making an appearance, so --

25 MR. EDGAR: Oh --

1 JUDGE GROSSMAN: -- if he is assisting Ms.
2 Rorem, that's fine.

3 I certainly hope everybody avails themselves of
4 whatever assistance they can get here.

5 Fine. So we will reconvene tomorrow at 9:00
6 o'clock in the same courtroom.

7 Thank you.

8 (Whereupon, the hearing was continued to
9 Wednesday, March 12, 1936, at the hour
10 of 9:00 o'clock A, M,)

CERTIFICATE OF OFFICIAL REPORTER

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

NAME OF PROCEEDING: COMMONWEALTH EDISON COMPANY
(Braidwood Station, Units 1 and 2)

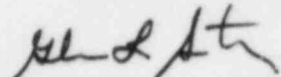
DOCKET NO.: 50-456 OL; 50-457 OL

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DATE: TUESDAY, MARCH 11, 1986

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

Gary L. Sonntag


Glenn L. Sonntag,
Nancy J. Hopp
Nancy J. Hopp

(sig)

(TYPED)

Official Reporter

Reporter's Affiliation