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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)	
)	
COMMONWEALTH EDISON COMPANY)	Docket Nos. 50-456
)	50-457
(Braidwood Station, Units 1 and 2)	

OFFICE OF SERVICE
DOCKETING & SERVICE
BRANCH

TESTIMONY OF GORDON WENGER
REGARDING ROREM CONTENTIONS 1(a) AND 1(b)

Q.1 Please state your name, your occupation, and your qualifications to testify on behalf of the Federal Emergency Management Agency (FEMA).

A.1 I am Gordon Wenger, Emergency Planning Specialist, with the Technological Hazards Branch, FEMA, Region V. I have held this position for the last six years. I am the Federal Team Leader for Radiological Emergency Preparedness Planning for Illinois and Indiana. I have participated in more than 50 exercises of nuclear power facilities, serving as evaluation team director or leader. I have reviewed radiological emergency plans, written exercise reports, interim findings and Regional Director's Findings for all six of the states in FEMA's Region V, namely, Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin. A statement of my professional qualifications was attached as an exhibit to my prefiled testimony on Rorem Contention 1(a) for the hearing held October 29, 1985, and was bound into the transcript following Transcript p. 518.

Q.2 What is the purpose of your testimony?

A.2 The purpose of my testimony is to address Rorem Contentions 1(a), including Offer of Proof Issues 2, 3, 4, and 6, and 1(b).

Contention 1 states:

1. Intervenor contends that an adequate emergency plan for the Braidwood Station should include the following:
 - (a) a program for informing the public within 10 miles of the Station of the means for obtaining instructions for evacuation or other protective measures in the event of a radiological emergency originating at the Station.
 - (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.

Offer of Proof Issues 2, 3, 4, and 6 states:

2. 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.
3. 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.
4. 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.

6. 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.

Q.3 What is the Illinois Plan for Radiological Accidents?

A.3 The Illinois Plan for Radiological Accidents (IPRA) is a comprehensive document which sets out in detail the plan for responding to any radiological emergency or accident which would happen in the state of Illinois. It is comprised of several volumes. The plan is both general, that is, state-wide, and specific, that is, tailored to deal with an emergency at each particular nuclear power station in Illinois. The IPRA is a record of the responsibilities which have been assigned to various officials of state and local government and utility companies.

Q.4 How was it developed?

A.4 Prior to the issuance of an operating license, the U.S. Nuclear Regulatory Commission (NRC) requires development of an emergency plan to assure the safety of the public in the event of an accident. 10 C.F.R. § 50.47. The content of emergency plans is spelled out in Appendix E to 10 C.F.R. Part 50. In addition, the NRC and the

Federal Emergency have published a guide, NUREG-0654/FFMA-REP-1, Rev. 1, October 1980, "Criteria for Preparation of Radiological Response Plans and Preparedness in Support of Nuclear Power Plants." Each utility company seeking a license will develop a plan in close cooperation with state and local government officials. In this case, Commonwealth Edison Company (CECO) developed a plan for the Braidwood Station together with the State of Illinois, Will, Kankakee and Grundy Counties, and various communities within those counties.

Q.5 Where is the plan for Braidwood found?

A.5 The IPRA is a multi-volume set. Volume One (Vol. I, June 1985) contains the State General Plan and refers to all of the 10 mile and 50 mile EPZs surrounding nuclear power plants in the State of Illinois. Volume Seven (Vol. VII, Preliminary, August 1985) contains the plan specific to the Braidwood Station offsite planning. In addition, there are Procedures (Vol. I February 3, 1982 and Vol. VII August, 1985) for the State and the Braidwood Station.

Q.6 What parts of those volumes did you refer to in preparing this testimony?

A.6 This testimony concerns itself with certain aspects of the public information effort; therefore, the parts of the IPRA which I have focused on deal with the dissemination of information before, during, and shortly after an accident.

Q.7 In general, what provisions does the IPRA make in that regard?

A.7 It sets out the procedures to be followed in educating the public before an accident, for notifying public officials at the time of an accident, for activating the Prompt Alert and Notification System, and for delivering reliable information to the public on the protective actions they are expected to take.

Q.8 Who are the individuals or officials who are called upon at these times?

Q.8 First, the licensee, the operator of the nuclear power plant develops a public information brochure in cooperation with state and local government officials. The licensee then distributes the brochure, at least annually. This was discussed at the October 29, 1985 hearing. At the time of an accident, the licensee is responsible for notifying the Illinois Emergency Services and Disaster Agency (IESDA). The IESDA will evaluate the licensee's recommendation and make the decision to notify the public and determine which sectors of the 10 mile EPZ are affected. The IESDA will notify the Grundy, Kankakee, and will County Sheriff's Dispatchers, as necessary, who will, in turn, notify the County ESDA Coordinators. Upon the decision by County officials to activate the Public Alert and Notification System, the coordinators will notify the County Sheriffs' dispatchers to activate the system. The County ESDA Coordinations will activate the Emergency Broadcast System (EBS). The IESDA will set up and operate the Joint Public Information Center. See

Vol. I, Chap. 2, Sections E and F, and Vol. I, Chap. 8, of the IPRA.

Q.9 What is the Joint Public Information Center?

A.9 As the name implies, the Joint Public Information Center (JPIC) is a central location where public officials will provide information to the news media about the progress of an accident. Its function is to provide timely, accurate, and essential information and to dispel unfounded rumors. The JPIC does not take the place of the EBS, but supplements it, especially during the times when the situation is essentially under control and information can be provided in a comprehensive and unhurried way.

Q.10 What is the Prompt Alert and Notification System?

A.10 The Prompt Alert and Notification System (PANS) is the means by which government officials call the public's attention to an emergency condition. Section IV.D.3 of 10 C.F.R. Part 50, Appendix E, states:

[T]he design objective of the prompt public notification system shall be to have the capability to essentially complete the initial notification of the public within the plume exposure pathway EPZ within about 15 minutes. The use of this notification capability will range from the immediate notification of the public (within 15 minutes of the time that State and local officials are notified that a situation exists requiring urgent action) to the more likely events where there is substantial time available for the State and local governmental officials to make a judgment whether or not to activate the public notification system.

The design of the PANS is within the discretion of the Applicant, subject to evaluation under criteria set forth in NUREG 0654/FEMA-REP 1, Rev.1. and Guide for the Evaluation of Alert and Notification Systems for Nuclear Power Plants, Appendix 3 FEMA-REP 10. A PANS typically uses sirens as the primary vehicle for alerting the public. Some systems, however, rely on tone-alert radios, direct dialing telephone systems, or "route alerting," that is, messages broadcast from emergency vehicles fitted with public address equipment. Many systems use some combination of these means. The PANS in the Braidwood EPZ uses sirens as the primary means of alerting the public and tone-alert radios and route alerting as backup means.

Q.11 What is the EPZ?

A.11 The acronym EPZ refers to the "Emergency Planning Zone." There are actually two EPZs surrounding each nuclear power plant. The larger one is the ingestion pathway EPZ, which generally extends 50 miles out from the plant. The other is the plume exposure pathway EPZ, and that extends 10 miles from the plant unless special circumstances justify the identification of a smaller zone. Emergency planning is required only within the plume exposure pathway EPZ, which has a 10 mile radius in the case of the Braidwood Station. Throughout my testimony, I am referring to the 10 mile EPZ unless I indicate otherwise.

Q.12 Once the PANS is activated, how does the public know what actions to take?

A.12 The public information effort which takes place before an accident, that is, distribution of brochures, educates the public to the need to tune its radios or televisions to the Emergency Broadcast System (EBS). Appropriate messages will be broadcast very shortly after the PANS is activated, and the messages will be repeated and updated as often as necessary.

Q.13 Who decides which messages are appropriate?

A.13 This, too, is spelled out in 10 C.F.R., Part 50, App. E. Section IV.D.3. Within 15 minutes after the power plant operator determines that an emergency exists, it must notify State officials. The State officials then evaluate the information provided by the utility and make a decision on activating the PANS. They decide whether to activate the entire system. This is a process of assessing the risk to each section of the EPZ, deciding if protective action is required and, if so, whether it should take the form of sheltering-in-place or evacuation. The officials pay particular attention to the characteristics of the plume if there has been a release of radioactive material. The nature of the risks depends on many factors including weather, the duration of the release, the shape of the plume, the direction of the plume's movement, the materials released, and whether the release is in gaseous, liquid, or particulate form. When those decisions have been made, messages are chosen from scripts in the IPRA. These scripts are targeted for the particular

sections of the EPZ affected by the emergency, and they contain specific information about the protective action recommended by the governmental officials.

Q.14 What factors indicate sheltering-in-place rather than evacuation?

A.14 If a release develops quickly, it is generally safer for people to be sheltered until the plume passes. Evacuation is preferred when there is enough time to move people out of the EPZ without exposing them to the plume.

CONTENTION 1(a)

Q.15 What does Rorem Contention 1(a) state?

A.15 Contention 1(a) states:

1. Intervenor contends that an adequate emergency plan for the Braidwood Station should include the following:
 - (a) a program for informing the public within 10 miles of the Station of the means for obtaining instructions for evacuation or other protective measures in the event of a radiological emergency originating at the Station.

Q.16 In your testimony on Rorem Contention 1(a) for the October 29, 1985 hearing, you discussed the dissemination of safety information prior to an accident at the nuclear power plant. You did not discuss, at that time, the dissemination of such information at the time of an accident. How is that accomplished at the time of an accident?

A.16 There are three basic ways that this is done. First there is the PANS. Secondly, there is the ERS; and thirdly, there is the JPIC.

The PANS in the Braidwood EPZ relies primarily on sirens to alert people to the existence of an emergency and the need to tune their radios or televisions to an EBS station. As discussed below in connection with Contention 3, some of the sirens and all of the route-altering vehicles used in this PANS have the capability to deliver voice messages.

The EBS is activated by State and local officials, as discussed in my Answer 8, above. The EBS is the primary means of delivering scenario-specific information to the public at the time of an accident. The EBS system uses pre-planned scripts to the fullest extent possible, but it also has the flexibility to carry particularized information as needed.

The JPIC is discussed above at my Answer 9. It is the principal means by which State and local officials communicate information to the general news media.

Q.17 What is your conclusion about the effectiveness of these means of communicating safety information to the public at the time of an accident?

A.17 I find that they make adequate provision for the dissemination of this information.

Q.18 What is the basis for your conclusion?

A.18 The emergency response plan for Braidwood Station was tested in an exercise on November 6, 1985. I took part in the evaluation of the exercise. In addition, I took part in the evaluation of the plan by the Regional Assistance Committee (RAC). The RAC found the plan to be adequate in that regard and I concur.

OFFER OF PROOF ISSUE 2

Q.19 What does Rorem Contention 2 state?

A.19 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.

Q.20 What is the scope of your testimony on this issue?

A.20 I will address the dissemination of information at the time of an accident which will enable the public to evacuate the EPZ safely, as well as the dissemination of information after an accident which will enable the public to re-enter the EPZ safely.

Q.21 Where are these matters addressed in the IPRA?

A.21 Earlier in my testimony, at Answer 8, I identified the portions of the IPRA which deal with the use of the EBS and JPIC at the time of an evacuation. Re-entry is addressed in Vol. I at Chapter 2, Section

5(g); Vol. VII, Chapter 1, Annex 1A, Section 1(d); and Vol. VII-7-SOP-11.

Q.22 Who are the individuals or officials responsible for carrying out these procedures?

A.22 As explained earlier, the IESDA makes the decision whether to shelter or evacuate. The County Emergency Services and Disaster Agency (ESDA) Coordinators activate the Emergency Broadcast System both when evacuation is ordered and at the time the IESDA determines that unrestricted re-entry is safe.

Q.23 What procedures or guidance are offered by the IPRA?

A.23 The IPRA identifies several delivery systems to disseminate emergency information.

The Braidwood Station public information brochure has been published and distributed to households, organizations, businesses, institutions, industries, individuals, and bulk quantities have been made available at locations which the public, including transients, frequents. The brochure provides significant general emergency planning information which directs the attention of readers of actions to take for their protection. It also directs readers to the sources of more precise emergency information.

The IPRA Volume VII and SOPs contain prescribed messages which are to be read by officials over the EBS radio and TV stations and

prescribed messages which are to read to the media by information specialists at the JPIC.

The information to be read will recommend the protective actions to be taken based on the recommendations of the utility and the Illinois Department of Nuclear Safety (IDNS). The recommended protective actions would be dependent upon the classification of the accident and plant conditions.

The same delivery system used to notify the population of the emergency and advise them of the protective actions will be used to notify the population of the precautionary procedures to enter the affected evacuated area. The post accident information gathered by the IDNS will determine if re-entry would be restricted or unrestricted.

Vol. VII-7-SOP-11 is entirely devoted to, and deals at length with, the procedures to be followed by local officials in allowing the public safely to re-enter the 10 mile EPZ. Once it has been determined that unrestricted re-entry is safe, the County ESDA Coordinators will initiate the broadcast EBS messages. At the same time, they will coordinate with the JPIC so that the same information is available to all the news media in addition to other than the EBS stations.

The scripts for the messages to be broadcast over the EBS and released to other new media through the JPIC are intentionally

general. It is expected that particularizing information will be added at the time of their dissemination so that they will be more complete and accurate. The scripts for the EBS announcements of unrestricted and restricted re-entry appear as Attachment D to Chapter II, Vol. VII-SOP.

Q.24 What provision is made for those people who may need to re-enter the EPZ after an evacuation has been ordered but before the general public is allowed to re-enter?

A.24 Where restricted re-entry is called for, State and local planning provides for emergency workers to enter the area only at the direction of supervisory personnel, and their authority is based on the IDNS advisement.

Those entering the area would be given a "stay time" dependent upon the measurements of radiation projected on an accumulated dose (time/radiation). Dosimetry is in place for distribution to emergency workers along with record keeping cards. Recordings are made on a short-term periodic basis, recorded, and the records must be submitted to the IDNS for evaluation.

Entry would be authorized and carefully controlled under the auspices of the local and State ESDAs and the IDNS. For example, if a kennel owner needed to return to the kennel in the evacuated area for care for the animals, that task might be assigned to

emergency workers solely or to the owner with emergency workers assisting.

Q.25 In what way has the adequacy of these procedures been verified?

A.25 During the November 6, 1985, joint radiological emergency exercise, the Applicant, State and local governments effectively demonstrated the capability to efficiently implement the procedures and messages to inform the population of the simulated emergency through the several delivery systems devised by the applicant, State and local governments. FEMA had exercise evaluators at key locations to oversee the demonstration of disseminating emergency information to the affected population.

Q.26 What conclusion have you reached regarding Offer of Proof Issue 2?

A.26 The IPRA provides an efficient way of getting information to the public promptly. More importantly, the content of the messages has been carefully thought out to protect the safety of the public.

OFFER OF PROOF ISSUE 3

Q.27 What does Rorem Offer of Proof Issue 3 state?

A.27 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.

Q.28 What is the scope of your testimony regarding Issue 3?

A.28 My testimony will describe the ways in which officials will deliver information to the public at the time of an accident. I will address the means used to target particular segments of the population of the EPZ.

Q.29 Where are these matters addressed in the IPRA?

A.29 They are addressed in Vol. 1, Chapter 2, Sections E and F; Vol. VII, Chapter 1, Section C; and Vol. VII-7-SOP-6, 8.

Q.30 Who are the responsible officials?

A.30 The Governor of Illinois or his representative will first make a general announcement regarding the accident. The County ESDA's initiate the activation of the PANS, as explained earlier. The County ESDA's are also responsible for the selections and broadcast of scenario-specific messages.

Q.31 What procedures or guidance is offered by the IPRA?

A.31 When the licensee notifies IESDA of the existence of an emergency, IESDA evaluates the situation and, if necessary, notifies the County Sheriffs' dispatchers to activate the system. The system includes sirens and appropriate announcements through those sirens with voice capability, and the mobile alerting as required. The prompt notification system will alert the public to tune to the EBS stations which are identified on page 15 of Vol. VII, Chapter 1, and in the public information brochure, for Braidwood Station. The scripts for

the prompt notification announcements and the EBS broadcasts are included as Annex 1A to this Chapter, and Volume 7-SOP-8 Attachments C, D and E.

The prompt notification system will be targeted to specific populations. The 10 mile EPZ is divided into 16 sectors of 22.5° and each sector is divided into three zones. The first zone is from zero to two miles from the power plant; and the second is from two to five miles from the plant; and the third is from five to ten miles. The decision making process by which the IESDA determines when to notify the public of an accident includes a system for determining which of these sectors and zones are affected. The messages which are generated by this process are particularized in that only the affected areas given specific route evacuation instructions in the event an evacuation is ordered. See Attachments C, D., and E to Vol. VII-7-SOP-8.

Generally speaking, the affected population is that which is in the down-wind plume pathway EPZ. The population within the 2-mile radius of the station will be evacuated prior to or simultaneously with any sector determined by field survey teams and the conditions of the nuclear power station during the accident.

Public notification of protective actions is based on distance and direction from the nuclear power station. Prescribed messages contained in IPRA Volume VII SOPs Braidwood 7-SOP-8 are by

mile/sector combinations. The IESDA has written the EBS prescribed messages to use familiar landmarks (roadways, waterways, political boundaries, or other geophysical features) for easy identification by the public.

Q.32 Are there any special arrangements for the notification of the transient population?

A.32 The transient population receives the emergency notification in much the same manner as the residential population. In addition to the mailing of the public information brochure which contains emergency preparedness information and instructions, the State and applicant made bulk distribution to organizations, businesses, institutions, industries, and government agency and department offices and other places where the public and transients frequent.

The brochure directs attention to sources for immediate emergency information. When the accident escalates to the point it becomes necessary to move a population, law enforcement personnel and other assigned personnel will be positioned at roadway junctions to direct traffic out of the area being evacuated and away from the plume to the reception and care centers.

The IESDA is studying the placement of signs in facilities where transients frequent which direct them, upon hearing the outdoor sirens or indoor tone-alert radios, to listen to the primary EBS radio station for specific instruction.

Q.33 Does the IPRA make any provisions for people who might not be near a radio or television?

A.33 This not specifically addressed by IPRA. However, the sirens in the recreational areas, where the situation is most likely to occur, have the capacity to carry voice messages. This public address capability could direct individuals to the nearest official source of information. In addition, the route-alerting component of the PANS has the same capability.

Q.34 In what way have you verified the adequacy of these procedures?

A.34 The emergency planning elements and procedures for notifying the resident and transient populations have been reviewed by the RAC and found to be adequate. The implementation of the procedures and messages was a part of the November 6, 1985, joint radiological emergency exercise. I participated in the evaluation of this exercise. The implementation of the delivery system was found to be effective and adequate. The certification demonstration of the PANS is scheduled for testing in 1986.

Q.35 What conclusions have you come to with regard to the dissemination of information to the residential and transient populations of the EPZ at that the time of an accident?

A.35 I find, as did the RAC, that the provisions of the IPRA for the prompt notification of the public to be adequate. It is also my judgment that the plan can and will be implemented so as to give the public adequate information to allow safe evacuation or sheltering.

OFFER OF PROOF ISSUE 4

Q.36 What does Rorem Offer of Proof Issue 4 state?

A.36 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.

Q.37 What is the scope of your testimony on Offer of Proof Issue 4?

A.37 My testimony will address the special attention that is given to major employees, that is, those with more than 25 employees. These employers are encouraged, but not required, to have plans in place for the sheltering or evacuation of their employees. This is not to suggest that no attention is given to smaller employers, but only that the logistics of evacuating or sheltering larger concentrations of employees are more complex than is the case with smaller groups. All groups of employees receive the same benefit from the prompt notification system as the general public.

Q.38 Where are these matters addressed in the IPRA?

A.38 Attachments F, G, and H to Vol. VII-7-SOP-8, contain a comprehensive list of special facilities, including major employers, within the 10 mile EPZ. The list identifies the sector, zone, and community that each facility is in, as well as the name and phone number of an individual to contact in the event of an emergency. At various places throughout this 7-SOP-8, there are references to the

notification of major employers. Sections 4.1(E), 4.2(E), 5.1(E), 5.2(D), 6.1(E), 6.2(e).

Q.39 Who are the responsible officials?

A.39 The notification of employers is carried out by local officials. The sheriff and other local law enforcement officials are responsible for notification of major employers and the recommendation of protective actions.

Q.40 What procedures or guidance are provided by the IPRA?

A.40 Volumes I and VII and Volume VII SOPs of the IPRA contain the planning and instructions to notify employers in the Braidwood Nuclear Power Station EPZ. IPRA Volume VII SOPs, 7-SOP-8 outlines the responsibilities and actions to be taken by designated officials of the three counties in the 10-mile EPZ. The attachments F, G, H to 7-SOP-8 contain comprehensive lists of the special concerns and facilities. I have personally contacted some of the special concerns and facilities.

The local officials have the responsibility of notifying the public and structured groups and organizations. It is their responsibility to notify them of the need to take protective action to protect the health and safety of those individuals under their care and direction. The local officials cannot direct the employers on facility shutdown. Many industries and businesses have a set procedure

which may require time and some manpower to accomplish an orderly ceasing of operation.

The IESDA and the IDNS conducted training for specific groups and organizations in the EPZ of the Braidwood Nuclear Power Station as they have done in all the other nuclear power stations in Illinois. The training consists of organization of planning and the structure for implementing planning. It provides good in-depth participation and demonstration with respect to radiological exposure and protective actions. The training is open to any organized group of citizens and officials on request. The State conducts the first and subsequent annual training as required by the IPRA. However, training can be requested at any time.

The structured groups and organizations such as industries and businesses have, in most cases, emergency plans which cover a multitude of emergency situations. Among those emergencies is the need to evacuate the premises. Particularly in the case of employers, employees have their own means of transportation to get to work, therefore there would be sufficient transportation to transport the work force from the area in the event of a recommendation to evacuate.

The sheriff and other local law enforcement officials are charged with traffic control responsibilities. Roadblocks are planned to move traffic out of the affected sectors away from the plume. The

evacuated employees would be directed to shelters if their domicile is in the affected sectors.

If the recommendation to shelter is made, most of the buildings can be closed sufficiently to afford protection to those who would be housed inside. In some cases shelter areas exist within the buildings such as basements and tornado shelters.

Q.41 In what way have you verified the adequacy of the plans regarding major employers?

A.41 The HESDA has furnished me with records of the training which took place in the Braidwood EPZ in the fall of 1985, prior to the exercise. I attended some of the training sessions in October 1985. I am satisfied that the training is good and is handled by competent instructors. In addition, I have personally contacted some of these employers.

Q.41 What conclusion have you reached as to the notification of employers in the event of an emergency?

A.42 The recommendations for protective actions to employers are much the same as they are for the general public with respect to shelter-in-place or evacuate. The RAC reviewed the special concerns and facilities portion of the IPRA Braidwood Plans and found them to be adequate. I concur in this judgment. I find that the IPRA makes adequate provision for notifying employers for the

purpose of advising employees of protective actions to be taken in the event of an emergency.

OFFER OF PROOF ISSUE 6

Q.43 What does Rorem Offer of Proof Issue 6 state?

A.51 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 the foodstuffs, water supplies, dairy and livestock, and field and garden crops.

Q.44 What is the scope of your testimony regarding Offer of Proof Issue 6?

A.44 In my testimony, I will describe the way in which the contamination of food, water, and livestock is assessed and information on that subject is communicated to the public. The issue of restricted and unrestricted re-entry into the EPZ after an accident was discussed earlier under Contention 2. I would incorporate that discussion by reference rather than repeat it here.

Q.45 Where is the treatment of contaminated food, water and livestock discussed in the IPRA?

A.45 This issue is addressed in Chapters 2 and 5 of Volume I and in Volume VII, 7-SOP-11, Sections 4 through 6, Attachments A through D, and several sections of the State SOPs Vol. I.

Q.46 Who are the responsible officials?

A.46 The IDNS is responsible for all aspects of radiation exposure, including the determination of when and under what restrictions it is safe to reenter the EPZ. The Illinois Department of Agriculture (IDA) is responsible for the treatment of foodstuffs. The IESDA will furnish information to the news media through the JPIC. County ESDAs will activate appropriate EBS messages.

Q.47 What procedures or guidance are offered by the IPRA?

A.47 Chapter 2 of Volume I of the IPRA is entitled Concept of Operations. Section 5 deals with Parallel Actions, which include public information, radiation control, and re-entry. The IDNS is responsible for all aspects of radiation exposure. Chapter 5 (Technical Functions), Section G.1 (Radiation Aspects of Technical Functions) gives a more detailed account of the role of IDNS in this regard. Section 5, Part (1), outlines the authority of the IDA to inspect, condemn, embargo, and confiscate unwholesome foodstuffs. The IDA will make such inspections and determinations as called upon by the IDNS.

Prior to re-entry, the IDA will monitor agricultural and horticultural products to assure that they are safe for commercial distribution. The IDA will report its findings to the IDNS. As stated in Section 5 (g), Chapter 2, Volume I, the IDNS will determine when and under what restrictions it is safe for the public to re-enter the affected area and public notification procedures will be implemented.

The EBS scripts for the re-entry announcements are general. In the case of unrestricted re-entry, no enhancements on the subject of foodstuffs are necessary. In a partially restricted re-entry, appropriate information will be added. It is accepted that much of the protective action instruction for re-entry will have to be developed as data is gathered from field surveys. Many variables will enter into the determination for safe re-entry and the protective actions to be implemented.

Q.48 What conclusion have you come to with regard to protection of the public from contaminated foodstuffs?

A.48 I find that the plan makes adequate provisions for informing the public concerning protective measures to be taken regarding foodstuffs at the time of re-entry.

CONTENTION 1(b)

Q.49 What does Forem Contention 1(b) state?

A.49 Contention 1(b) states:

1. Intervenor contends that an adequate emergency plan for the Braidwood Station should 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.

Q.50 What is the scope of your testimony regarding Contention 1(b)?

A.50 I will testify about the provisions in the IPRA for the sheltering or evacuation of the people in schools, institutions such as nursing homes, and recreational areas.

Q.51 Where are these matters addressed in the IPRA?

A.51 Arrangements for sheltering or evacuating these people are found in Volume I and VII of the IPRA and in the SOPs (Standard Operating Procedures of Volume VII).

Q.52 Who are the individuals or officials responsible for carrying out these procedures?

A.52 Once the IESDA recommends either sheltering or evacuation, the chief elected official of each unit of local government is charged with the responsibility of notifying key staff and local or area organization of the need to take protective action.

Q.53 What procedures or guidance for sheltering are offered by the IPRA?

A.53 In the documents referred to above, particularly the Volume VII SOPs, the arrangements and responsibilities for implementing protective actions and the protective actions are highlighted. For example, if the utility and State recommend shelter in place, institutions such as schools and nursing homes have trained personnel and plans to care for individuals at those locations. The Standard Operating Procedures (7-SOP-10 of Volume VII) provide specific guidance for sheltering in such institutions. If the sheltering-in-place option is selected, educational institutions,

licensed day care centers, and senior centers would be advised to close doors, windows, and shut down air exchange systems which circulate or mix inside and outside air and implement specific instructions in the SOPs.

Q.54 What procedures or guidance are provided by the IPRA for evacuation?

A.54 The Standard Operating Procedures of 7-SOP-10 of Volume VII provide specific guidance for the evacuation of institutions such as nursing homes, schools, licensed day care centers, and recreational areas.

If the order was given to implement evacuation procedures, responsible officials identified in the IPRA Volumes would implement the SOPs, evacuating that portion of the population in the plume exposure pathway of the EPZ. The Braidwood plan has detailed procedures designating by title the individuals responsible for giving the order to evacuate, the points of contact at institutions the actions these points of contact are to take, and the coordination of the necessary materials, supplies and transportation. See Vol. VII Chapters 7-SOP-8, 7-SOP-9 and 7-SOP-10.

If nursing homes are to be evacuated, the residents might require special arrangements for transportation. Another group of people in the Braidwood EPZ who have special needs are those who live alone or who may be alone during some portion of the day and have a

physical or medical impairment or no transportation. Provisions are made for these groups of people in the IPRA. As part of the Braidwood plan, the Braidwood public information brochure has a section (6) which solicits submission of information from the public on people with special needs. The county and public social service agencies also gather this information. A list of the people with special needs has been compiled and is retained in confidentiality at the county ESDA office in each of the three counties. For each such person, special arrangements have been planned.

In the case of schools, school buses and drivers will be mobilized to transport students and school personnel from the school to designated congregate care shelter locations in accordance with 7-SOP-9 of the IPRA. Licensed day care facilities or nursery schools will evacuate in staff vehicles and additional school buses as needed. Specific instructions for nursery schools are included in IPRA's 7-SOP-9 Attachment J.

Recreational areas require special treatment. Those living in mobile facilities in camp grounds and parks would be ordered to move from the area of potential risk. Patrons of recreational areas where no large permanent housing exists such as swimming areas, picnic grounds, hunting and fishing sites and golf courses, would be directed to leave the area of potential risk.

Q.55 Have you in any way verified that these plans will be carried out?

A.55 Yes. During my visits in the 10 mile EPZ of the Braidwood I contacted a random sample of representative institutions and individuals to discuss their implementation of emergency planning and response to an emergency at the Braidwood Station. I met with individuals representing schools, senior centers, nursing homes, business industry as well as, residents and visitors to recreational areas and found people to be cognizant of emergency planning matters. I also attended training sessions sponsored by IESDA and IDNS for emergency workers, municipal executives and police departments.

Q.56 What conclusion have you come to regarding Rorem Contention 1(b)?

A.56 I believe that the IPRA provides reasonable assurance that special concerns such as nursing homes, schools, and recreational areas are provided for in planning and can be protected or evacuated in the event of a radiological emergency.

I base my position on the comprehensive planning in the IPRA Volumes I and VII and the implementing SOPs to both volumes. Schools and special concerns are addressed in those volume and instructions are given in Volume VII SOPs 9 (schools) and 10 (special concerns). Recreational areas are provided for by the sheriff in coordination with the county ESDA coordinator and the superintendent of schools, Volume VII, SOP 8.

During my visits to the Braidwood area I have made contact with community leaders, businesspersons, and citizens and have gained assurance of their knowledge of the emergency response to an accident at the Braidwood Station. I have also contacted several persons by telephone using the information in the plans.