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UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

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OFFICE OF SLOBE DOCKETING A SERVICE BRANCH

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):

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

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 State 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. Fairow please state your full name and title.
- A:4 My name is Jana S. Fairow 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

of the emergency plan for Braidwood Station?
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. O, 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.

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

Would you explain the development of the IPRA?

Q:10 Describe the GSEP.

0:9

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

responsible for implementing IPRA.

("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 head-quarters. 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,

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 <u>not</u> 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. 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.

0:26

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-

lities 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?

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. Describe the third specific matter raised by the Intervenor in its Reply with respect to Offer of Proof

Q:31

Issue 2.

A:30

- 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.

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.

0:33

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 reentry" 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 reentry 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.
- O: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. How does CECo carry out its responsibility for notification of offsite authorities in the event of an emergency at Braidwood Station?

0:38

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?
- 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.

0:44

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. <u>Id</u>. 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
- 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
mebile 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.

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.

A:57

- Q:58 How will employers be notified of the potential need to cease operations or to provide for shelter or evacuation of employees?
- Evacuation and take shelter recommendations for A:58 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. "Offer of Proof" Issue 6 states:

0:59

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 foodstuffs, 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. <u>Id</u>. pp. 53-57. The Illinois Department of Public Health responsibilities include identifying and disposing of contaminated food and dairy products. <u>Id</u>. 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 "institutions" 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

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 level3 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 infor
mation regarding the time required to mobilize available

transportation.

Q:67

A:67

How was the assessment data used by IESDA?

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 preschools, 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

- 55 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

appropriately to an evacuation recommendation?

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 of 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.

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

Q:78

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. 0:81 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 oddress 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. How will Royal Willow be notified in the event of an

Q:90 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:
 - Instruct all staff, volunteers and nursing care center residents to report/remain indoors and account for all staff, volunteers and residents.
 - Shut off all intake fans, heaters and air conditioners. Close all windows, shades and drapes.
 Secure unattended doors.
 - Make staff assignments per Royal Willow Nursing Care Center Emergency Plan.
 - 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.
- Request assistance from the Wilmington ESDA Coordinator, if needed.
- 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.
- 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;
 - 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:
 - If not already completed, complete the tasks required for a take shelter recommendation.
 - 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;
- Load drug supplies into the administrator's car or a designee's car;
- 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.
- 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.
- 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.

7-SOP-9 08/85 Attachment A Page 1 of 5

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.

7-SOP-9 08/85 Attachment A Page 2 of 5

- I. Prepare for a possible evacuation recommendation.
 - Implement Checklist 3.1 to determine the number of buses required for evacuation.
 - Place school bus drivers on call or standby, as the situation warrants.
 - 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
 - G. 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.

7-SOP-9 08/85 Attachment A Page 3 of 5

3.0 CHECKLISTS

- 3.1 Evacuation Transportation Requirements
- 3.2 Braceville Elementary School Ventilation Checklist

7-SOP-9 08/85 Attachment A Page 4 of 5

CHECKLIST 3.1

EVACUATION TRANSPORTATION REQUIREMENTS

| 1. | Total Faculty, Staff and Students |
|----|--|
| 2. | Special Education Students 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 |

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.

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.

7-SOP-10 08/85 Attachment E Page 1 of 6

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.

7-SOP-10 08/85 Attachment E Page 2 of 6

- 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.
 - Report to the Wilmington ESDA Coordinator when all protective actions for take shelter are complete.
 - J. Prepare for a possible evacuation recommendation.
 - 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.
 - Necessary drug supplies.
 - c. Personnal care supplies.
 - d. Medical history records.

7-SOP-10 08/85 Attachment E Page 3 of 6

- 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.
 - 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:
 - 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.
 - Load drug supplies into the administrator's car or a designee's car.
 - Load personal care supplies into the nursing care center van or car.
 - 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.

7-SOP-10 08/85 Attachment E Page 4 of 6

- 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.
 - 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 reentered.
 - 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

7-SOP-10 08/85 Attachment E Page 5 of 6

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 var or pickup truck.) | n |
| 4. | Transportation Requirements: | |
| | Number of Autos/Vans | |
| | Number of Ambulances | |

7-SOP-10 08/85 Attachment E Page 6 of 6

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.
- Seal up openings in the building to minimize infiltration of airborne radioactivity.
- 5. Turn off electricty and/or gas, if necessary.

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

DOCKETED

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

'86 FEB 24 P3:48

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

Docket Nos. 50-4508 ADING & SERVICE 50-457-OF BRANCH

CERTIFICATE OF SERVICE

I hereby certify that copies of the attached COMMONWEALTH EDISON'S TESTIMONY 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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Board
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Commission
Washington, D.C. 20555
(By Hand)

Dr. Richard F. Cole
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Dated: February 24, 1986