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Docket No. 50-237  
Docket No. 50-249

Commonwealth Edison Company  
ATTN: Mr. Cordell Peed  
Senior Vice President  
Opus West III  
1400 Opus Place  
Downers Grove, IL 60515

Gentlemen:

We have received the enclosed Federal Emergency Management Agency (FEMA) letter and associated exercise report dated June 13, 1990, transmitting the FEMA Region V findings of the offsite emergency preparedness aspects of the Dresden Nuclear Power Station's annual exercise conducted on November 1, 1989. This was a partial-participation exercise for the State of Illinois and a full-participation exercise for Grundy, Will and Kendall Counties.

FEMA identified no deficiencies in the performance of offsite agencies during the exercise. However, four areas requiring corrective action were identified by FEMA. Based on its review of the exercise and schedule of corrective actions, FEMA concluded that offsite radiological emergency preparedness is adequate to provide reasonable assurance that appropriate offsite measures can be taken to protect the health and safety of the public living in the vicinity of the Dresden Nuclear Power Station.

Sincerely,

L. Robert Greger, Chief  
Reactor Programs Branch

Enclosure: As stated

See Attached Distribution

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Greger  
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Commonwealth Edison Company

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Distribution:

cc w/enclosure:

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Counsel, State of Illinois Center



# Federal Emergency Management Agency

Washington, D.C. 20472

JUN 13 1990

PRIORITY ROUTING	

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8 months!

Mr. Frank J. Congel  
 Director, Division of Radiation Protection  
 and Emergency Preparedness  
 Office of Nuclear Reactor Regulation  
 U.S. Nuclear Regulatory Commission  
 Washington, DC 20555

Dear Mr. Congel:

Enclosed is a copy of the final report for the November 1, 1989, exercise of the offsite radiological emergency response plans site-specific to the Dresden Nuclear Power Station. The Counties of Grundy, Will, and Kendall fully participated in the exercise, as well as the Commonwealth Edison Company. The State of Illinois partially participated in the exercise. The report, dated May 25, 1990, was prepared by the Federal Emergency Management Agency (FEMA) Region V staff.

There were no deficiencies observed during the November 1, 1989, exercise. The report identifies four Areas Requiring Corrective Action (ARCA). However, FEMA has withdrawn one ARCA that has been more appropriately identified as a planning issue. A schedule of corrective actions, included in the report, has been provided by the State of Illinois in response to the remaining three exercise weaknesses identified. Additional verification of corrective actions will be provided by FEMA Region V during the next exercise for the Dresden Nuclear Power Station, now scheduled for October 7, 1991. A copy of the final exercise report has been forwarded to the State of Illinois.

Based on our review of the final exercise report and schedule of corrective actions, FEMA considers that offsite radiological emergency preparedness is adequate to provide reasonable assurance that appropriate offsite measures can be taken to protect the health and safety of the public living in the vicinity of the Dresden Nuclear Power Station, in the event of a radiological emergency at the site. Therefore, the approval of the offsite plans for the Dresden Nuclear Power Station granted under 44 CFR 350 on October 14, 1982, continues to be in effect.

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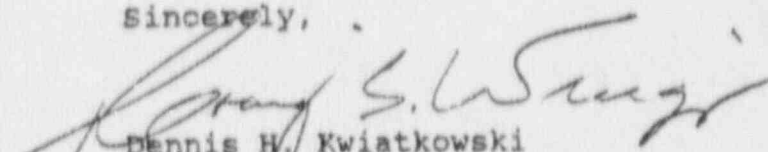
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If you have any questions, please feel free to contact Mr. Craig S. Wingo, Chief, Technological Hazards Division, on 646-3026.

Sincerely, .



Dennis H. Kwiatkowski  
Assistant Associate Director  
Office of Natural and  
Technological Hazards

Enclosure

EXERCISE REPORT  
DRESDEN NUCLEAR POWER STATION  
COMMONWEALTH EDISON COMPANY  
JOINT EXERCISE

Facility Location: Grundy County, Illinois  
Exercise Date: November 1, 1989  
Date of Draft Report: November 17, 1989  
Date of Revised Draft: January 23, 1990  
Date of Final Report: May 25, 1990  
Participants: State of Illinois (Partial), Grundy  
County (Full), Will County (Full), and  
Kendall County (Full)

FEDERAL EMERGENCY MANAGEMENT AGENCY  
REGION V  
NATURAL AND TECHNOLOGICAL HAZARDS DIVISION  
175 WEST JACKSON BOULEVARD  
CHICAGO, ILLINOIS 60604

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## EXERCISE REPORT

### Introduction

#### 1. Exercise Background

This was the seventh joint exercise for the State of Illinois, the Counties of Grundy, Will and Kendall, and the Commonwealth Edison Company resulting from a simulated accident at the Dresden Nuclear Power Station. Earlier exercises were held on October 28, 1980; September 30, 1981; June 29-30, 1982; September 15, 1983; April 23, 1985; and September 2, 1987. This report addresses the November 1, 1989, partial participation exercise.

#### 2. Participating and Non-participating State and Local Governments

The 10-mile plume exposure emergency planning zone (EPZ) of the Dresden Nuclear Power Station includes portions of Grundy, Will and Kendall Counties. The State of Illinois performed a partial demonstration while the Counties fully participated in this exercise.

#### 3. List of Evaluators

For this exercise, there was a total of seven Federal evaluators observing offsite exercise activities. Onsite activities were evaluated by a separate team from the Nuclear Regulatory Commission (NRC). The offsite evaluation team consisted of three FEMA evaluators and four contractors from Argonne National Laboratory (ANL).

Offsite Exercise Evaluation Team Director: Dan Bement, FEMA

##### State of Illinois Evaluation Team:

Marcia Smith FEMA, Team Leader

Brad Salmonson IDNL,

Relocation\Decon\Registration\Monitoring

James Sutch, ANL, Joint Information Center

##### Grundy County Evaluation Team:

Bill King, FEMA, Team Leader

William Small, ANL, Traffic Control\School Evacuation

##### Will County Evaluation Team:

Ed Hakala, ANL, Team Leader

Sue Ann Curtis, ANL, Traffic Control

##### Kendall County Evaluation Team:

Marcia Smith FEMA, Team Leader

Brad Salmonson, IDNL, Traffic Control

#### 4. Evaluation Criteria

The plans that were evaluated during this exercise were developed using the "Criteria for Preparation and Evaluation of Nuclear Power Plants." (NUREG-0654--FEMA Rep-1, Revision 1). Therefore, the NUREG-0654 criteria and Exercise Evaluation Methodology based Guidance Memorandum EX-3 "Managing Pre-Exercise Activities and Post Exercise Meetings, dated February 26, 1988, were used for exercise evaluation.

#### 5. Exercise Objectives

Objectives for this exercise were selected from among the FEMA standard objectives listed in Guidance Memorandum EX-3, "Managing Pre-Exercise Activities and Post Exercise Meetings," dated February 26, 1988.

Objectives selected by the State of Illinois and Grundy, Will and Kendall Counties were submitted for FEMA Region V review on August 18, 1989. FEMA Region V reviewed and approved the objectives on September 20, 1989. The exercise objectives are located in Attachment I to this report.

#### 6. Summary of Scenario

The Dresden Nuclear Power Station emergency preparedness exercise scenario was developed by writers from the utility, the State of Illinois and all affected Counties. Weaknesses identified in past exercises were taken into consideration to develop a scenario which allowed demonstration of corrective actions taken to resolve these identified weaknesses. The offsite sequence of events portion of the Dresden exercise scenario is Attachment II of this report.

#### 7. State and Local Resources Implemented During The Exercise

The State of Illinois activated and staffed the Joint Information Center located in Mazon, IL. The State also used the necessary communications systems to support Grundy, Will and Kendall Counties. The Reception, Decontamination Center and Congregate Care Center activation and staffing was simulated in Bourbonnais, Illinois, and evaluated through personnel interviews. Traffic Control was demonstrated by the State Highway Patrol. Transient Warning was Simulated by County Law Enforcement Officers located in Kendall County, Illinois.



## 8. Former Exercise Findings

Three Areas Requiring Corrective Action were identified for the State of Illinois during the September 2, 1987, joint exercise. The corrective actions for all three weaknesses were successfully demonstrated either during this exercise or in the plan revision for 1988.

Two Areas Requiring Corrective Action were identified for Grundy County during the September 2, 1987, joint exercise. Corrective actions taken for both weaknesses were successfully demonstrated during this exercise.

One Area Requiring Corrective Action was identified for Kendall County during the September 2, 1987, joint exercise. Corrective action taken for this weakness was successfully demonstrated during this exercise

9. Required Exercise Objective Status

Dresden Nuclear Power Plant Exercise

November 1, 1989

GM EX-3 Objectives

	Illinois State	Grundy County	Will County	Kendall County
1. Use ECLs	N/D*	D	D	D
2. Mobilize\Activate	N/D*	D	D	D
3. Direction & Control	N/D*	D	D	D
4. Communications	N/D*	D	D	D
5. Facilities\Equipment	N/D*	D	D	D
6. Emergency Worker Control	N/D*	D	D	D
7. Field Monitoring	N/S	N/A	N/A	N/A
8. Airborne Radioiodine Measurement	N/S	N/A	N/A	N/A
9. Particulate Sample\Lab Analyses	N/S	N/A	N/A	N/A
10. Dose Projection for Public	N/S	N/A	N/A	N/A
11. Protective Action Decision Making	N/S	N/A	N/A	N/A
12. Initial Alert-10 mile EPZ	N/A	D	D	D
13. Coordinate EBS Message	N/A	D	D	D
14. Media Briefing	D	P	D	D
15. Rumor Control	N/D	D	D	N/D
GROUP B				
16. KI - Emergency Workers	N/A	D	D	P
17. KI - General Public	N/A	N/A	N/A	N/A
18. Implement Plume EPZ PARS	N/A	P	P	D
19. Implement Plume School PARS	N/A	D	D	N/S
20. Traffic\Access Control	N/A	D	D	P
21. Monitor\Decon Evacuees	P	N/A	N/A	N/A
22. Adequacy of Congregate Facility	D	N/A	N/A	N/A
23. Transport Contaminated Injured	N/A	N/S	N/S	N/S
24. Medical Facilities	N/A	N/S	N/S	N/S
25. Decontamination\Emergency Workers	D	N/A	N/A	N/A
GROUP C				
26. Federal Assistance	N/S	N/S	N/S	N/S
27. Ingestion Pthwy Sampling Transport	NS	N/A	N/A	N/A
28. Ingestion Pthwy Lab	NS	N/A	N/A	N/A

29. Ingestion Pthwy Dose Projection\PARs	NS	N/A	N/A	N/A
30. Implement Ingestion Pthwy PARs	NS	N/A	N/A	N/A
31. Est Total Population Dose	NS	N/A	N/A	N/A
32. Determine Controlled Reentry	NS	N/A	N/A	N/A
33. Implement Controlled Reentry	NS	D	D	N/D
34. 24 Hour Staffing	NS	N/S	N/S	N/S
35. Coordinate Onsite Evac	N/A	D	N/S	N/S
36. Unannounced Off-hours Activation	N/S	N/S	N/S	N/S

LEGEND    D: Fully Demonstrated  
           NS: Not Selected for Demonstration  
           P: Partially Demonstrated  
           NA: Not Applicable  
           ND: Not Successfully Demonstrated  
           ND\*: Per agreement with regional FEMA office

## EXERCISE SUMMARY

The Dresden Nuclear Power Station radiological emergency preparedness joint exercise was conducted on November 1, 1989. The exercise included limited participation by the State of Illinois and full participation by Grundy, Will and Kendall Counties.

The exercise participants critique was conducted by FEMA at the Commonwealth Edison Company Emergency Operations Facility in Mazon, Illinois at 9:00 a.m. on November 3, 1989. Representatives from the State, Counties and the utility were present. The public and media briefing was conducted jointly by FEMA and the NRC at the same location at 11:00 a.m.

This report will provide an overview of the findings for the offsite evaluation of the State of Illinois and Grundy, Will and Kendall Counties. The evaluation is a consensus of the seven Federal evaluators responsible for different areas of observation.

The exercise findings in this report will be identified as one of the following categories:

**Deficiency:** If this event happened or failed to happen during a real emergency public health and safety would have been affected.

**Area Requiring Corrective Action:** The event observed during the exercise would not affect public health and safety if it had occurred during a real emergency. The issue is serious enough, though, for FEMA to require a schedule of corrective action.

**Area Recommended for Improvement:** The event observed during the exercise would not affect public health and safety if it had occurred during a real emergency. The issue is brought to the attention of State or local government as a recommendation to improve plans and operations. No schedule of corrective actions is required by FEMA.

## STATE OF ILLINOIS

### Emergency Operations Center (EOC)

Eleven objectives were selected by the State for demonstration. The state EOC was partially activated and staffed with representatives from Illinois Emergency Services Disaster Agency (IESDA) and the Illinois Department of Nuclear Safety (IDNS). Participation was limited to communication systems only. This limited participation was agreed to with regional FEMA personnel prior to the exercise. Three objectives were selected by the state for demonstration in Kankakee County. One ARCA and two ARFIs were identified in the Joint Public Information.

#### Objective 1 EMERGENCY CLASSIFICATION LEVELS (ECL)

JPIC representatives successfully demonstrated their ability to monitor, understand use the Emergency Classification Levels (ECL). Staff personnel were fully aware of the requirements for ECL changes and implemented the appropriate activities at each escalation of the incident. Although the current ECL was not posted in the media work area, all media staff members were aware of the status at all times.

#### Objective 2 MOBILIZATION OF EMERGENCY PERSONNEL

The ISEDA representative and other state agencies and off-site government personnel assigned to the JPIC were each notified through their own organizations in conjunction with notification and activation of the State EOC. The ability to alert, mobilize and activate personnel for emergency operations in the JPIC was successfully demonstrated by all organizations.

#### Objective 3 DIRECTION AND CONTROL

The ability to direct, coordinate and control emergency activities in the Joint Public Information Center was successfully demonstrated by Public Information personnel. The Joint Public Information Center was staffed by personnel from Commonwealth Edison Company, and representatives from the State of Illinois. Briefings were conducted to determine the agenda of each media presentation. This contributed to the overall effectiveness and organization of the briefings. Utility and state press releases and updates were available to all media staff members throughout the exercise.

#### Objective 4 COMMUNICATIONS

This objective was successfully demonstrated in the Joint Public Information Center. Ample communications were available to support the mission, in spite of the failure of the facsimile lines. Commercial and dedicated telephone lines, as well as radio and facsimile equipment were the principle links between the JPIC, and State and County EOCs and other governmental agencies. The State staff also had use of a cellular phone which provided additional capability. The State facsimile machine was not available during the exercise, as the telephone line for it was not operable. An alternate method was developed to provide copies through the use of the facsimile located in the utility Emergency Operations Facility (EOF).

AREA RECOMMENDED FOR IMPROVEMENT: Telephone lines for the ESDA facsimile machine failed to operate during the exercise which prevented the State ESDA spokesman from coordinating information for media releases. Capability should be available to either repair affected lines or to switch to alternate lines in order to provide the required service.

#### Objective 5 FACILITIES, EQUIPMENT AND DISPLAYS

This objective was successfully demonstrated. Facilities required to conduct emergency operations by the State staff at the Joint Public Information Center were adequate in all respects. Additional materials required by the staff to provide accurate and timely information to the media were brought to the facility by State personnel. These materials included a computer, facsimile machine, charts, graphs, etc.

#### Objective 13 ALERT, NOTIFICATION AND EMERGENCY INFORMATION - PUBLIC INSTRUCTIONS

The JPIC staff successfully demonstrated the aspects of this objective assigned to this facility. Information initially given to the public was subsequently provided to the media as followup messages and to provide additional details and instructions. This data was obtained from State and County EOCs, and other appropriate State and Federal agencies for use at the JPIC.

#### Objective 14 ALERT, NOTIFICATION AND EMERGENCY INFORMATION - MEDIA

The JPIC staff successfully demonstrated the ability to brief the media in an accurate and timely manner. Facilities for the media and for JPIC staff were excellent and used to full advantage. Media representatives were accorded a preliminary briefing on the objectives of the Joint Information Center. Five briefings were

conducted to keep the media abreast of events as they occurred. Arrangements were in place to provide information between briefings.

Press releases provided information regarding the emergency situation at the plant and official actions taken to protect public health and safety. Although they were available in the JPIC, charts and graphs were used sparingly. Visuals used to support briefings have a positive impact on the briefing material and should be used where possible.

AREA RECOMMENDED FOR IMPROVEMENT: Schematics, charts, plant diagrams and other visuals available in the JPIC should be used for briefing clarification and to assist the media in their understanding of the problems at hand.

Objective 15 ALERT, NOTIFICATION AND EMERGENCY INFORMATION -  
RUMOR CONTROL

Rumor Control was not demonstrated by the State of Illinois.

AREA REQUIRING CORRECTIVE ACTION: This objective was selected for demonstration during this exercise, however, it was not demonstrated. This objective should be demonstrated at the next full-scale exercise for the State of Illinois.

Objective 21 RELOCATION CENTERS-REGISTRATION, RADIOLOGICAL  
MONITORING AND DECONTAMINATION

This objective was partially demonstrated as agreed upon prior to the exercise. The demonstration consisted of a facility survey and interviews with various staff members.

The IDNS representative, in accordance with the limitations of the objectives, discussed the monitoring and decontamination functions at the Bourbonnais Upper Grade School. The school facility was adequate for performing monitoring and decontamination of evacuees, equipment and vehicles; however, attention should be paid to the traffic flow patterns in the decontamination areas since both clean and contaminated evacuees would be using common hallways enroute to and from the shower facilities.

One monitoring team would be positioned at each entrance (one men's and one women's) to the facility. With only two monitors positioned at each entrance there is not reasonable assurance that all evacuees would be monitored within 12 hours. An additional monitor would be located in each shower/decon area for monitoring evacuees following decontamination. A thyroid monitoring station is placed enroute between the initial monitoring station and the Congregate Care registration station.

Two types of monitoring instruments would be available for use (an HP-260, GM pancake detection and a SPA-3, sodium iodide detector) for monitoring against a contamination limit of twice background.

County personnel involved in the interviews for the registration and monitoring portions of this objective were knowledgeable of their duties and procedures.

#### Objective 22 RELOCATION CENTERS - CONGREGATE CARE

This objective was successfully demonstrated by interviews. The Congregate Care facility was located in the Bourbonnais Upper Grade School. The facility and its components were adequate to handle the number of evacuees which would be accepted at the site. Red Cross representatives were interviewed and indicated that adequate arrangements were made regarding food, crisis counseling, sleeping arrangements, washrooms and parking areas. The shelter was designed to accommodate handicapped evacuees. Nursing capability would be available if required. Five other facilities were available if the number of evacuees exceeded the amount expected at this particular facility. Red Cross Congregate Care procedures would be followed in the registration and care of evacuees.

#### Objective 25 EMERGENCY WORKER DECONTAMINATION

Within the limitations of the scope of exercise play, IDNS and County support personnel demonstrated their knowledge of procedures, equipment and supplies for decontamination of Emergency Workers, equipment, vehicles and waste disposal techniques. IDNS and fire department personnel were interviewed and discussed their responsibilities in the decontamination process.

Contamination survey techniques were not observed, but discussions indicated that two types of survey instruments would be used. Monitoring surveys with a limit of twice background contamination were to be conducted. The instruments to be used for monitoring were the SPA-3 sodium iodide detector and HP-260 GM pancake detector.

A general pencil sketch of the monitoring and decontamination areas were prepared for the exercise, but did not provide enough detail for the decontamination area traffic control area. The possibility of cross contamination in the emergency worker/evacuee decontamination area exists.

AREA REQUIRING CORRECTIVE ACTION: A general sketch of the monitoring and decontamination areas was prepared for the exercise but did not provide enough detail for the decontamination area traffic control patterns. Two types of



instruments were to be used for contamination surveys with a contamination limit of twice background. Twice background on the SPA-3 sodium iodide detector might not register on the HP-260 GM pancake detector.

A procedures manual with detailed facility specific traffic flow pattern and monitoring procedures and locations to provide close control between the clean and contaminated evacuees/emergency workers should be developed. All instruments used for contamination surveys should be calibrated to a common contamination level. The must take into consideration the differences in instrument sensitivities.

#### WILL COUNTY

Will County selected 15 objectives for demonstration. All objectives were successfully demonstrated. An Area Requiring Corrective Action (ARCA) from the last exercise was corrected during this exercise. No Deficiencies or Areas Requiring Corrective Action were identified during this exercise.

##### Objective 1 EMERGENCY CLASSIFICATION LEVELS (ECL)

The ability to monitor, understand and use Emergency Classification Levels (ECL) was successfully demonstrated by Will County EOC personnel. Following receipt of the ECL notification from the state, a color coded poster was displayed in the EOC operations area. Staff followed the procedures associated with each ECL and used the correct classification levels in the EOC staff briefings, simulated press briefings and notifications to the municipalities.

##### Objective 2 MOBILIZATION OF EMERGENCY PERSONNEL

Will County successfully demonstrated the ability to alert, mobilize and activate personnel for all emergency functions. The dispatcher received the ALERT notification at 9:16 am. The call was verified, and the EOC staff was alerted and mobilized. The EOC was declared activated within 30 minutes of the initial mobilization call.

##### Objective 3 DIRECTION AND CONTROL

Will County successfully demonstrated the ability to direct, coordinate and control County responsibilities during an emergency. The County Board executive was the official in charge of overall County response activities, with the County IESDA

Coordinator serving as Operations Officer. The Operations Officer effected staff coordination through frequent briefings, ensuring actions were implemented, completed and appropriate. Messages were logged and distributed according to procedures.

#### Objective 4 COMMUNICATIONS

The objective to demonstrated the ability to communicate with all appropriate locations, organizations and field personnel was met. The communication systems available to Will County emergency staff included commercial telephone lines, modular telephones, NARS telephone, a number of radios linking the County with municipalities, sheriff, five networks as well as IDNS and the State. Volunteer ham radios were also in place and staffed. Back-up systems were also demonstrated. Parallel communication systems were available in the sheriffs communications van which was available for use during this demonstration.

#### Objective 5 FACILITIES EQUIPMENT AND DISPLAYS

The Will County EOC was located in the basement of the County office building and met the requirements of this objective. The facility included an operations area, executive offices, kitchenette and communications room. A gas powered generator was available for back-up power supply. A mobile command post van and a sheriffs communications van were two adjunct facilities available to the EOC staff supporting field operations.

The status board was promptly updated on major events; however, all PARs, siren activations and EBS broadcast times were not posted. A flip chart was also available for recording more detailed information on emergency response activities.

AREA RECOMMENDED FOR IMPROVEMENT: PARs, siren activations and EBS messages with times should be posted on the status board.

#### Objective 6 EMERGENCY WORKER EXPOSURE CONTROL

The Will County RADEF officer successfully demonstrated the ability to monitor and control Emergency Worker exposure. A 0-200R self-reading dosimeter, a TLD and instructional card were issued to each Emergency Worker according to the State Plan. Discussions with Illinois Department of Nuclear Safety personnel indicated their awareness of dosimetry requirements for Emergency Workers. The State of Illinois must obtain 11,000 of the 0.5R to 20R self-reading dosimeters. Budget considerations necessitate purchasing a minimum of 2,000 dosimeters each year. This approach of compliance to FEMA guidance and policy and been approved by FEMA Headquarters. FEMA Region V is monitoring the effort.

Records were maintained to monitor and control doses. Emergency

Workers were instructed on the procedures for dosimetry use and written instructions were contained in issued dosimetry packets.

Objective 12 ALERT, NOTIFICATION AND EMERGENCY INFORMATION -  
INITIAL ALERT AND NOTIFICATION

The ability to initially alert the public in the 10-mile EP2 and disseminate an instructional message within 15 minutes of the State decision, was successfully demonstrated by Will County EOC personnel. Following receipt of the Site Area Emergency notification, and its protective action recommendations at 10:15 a.m., the EOC sounded sirens at 10:25, followed by an appropriate EBS message. These actions were in coordination with other Counties.

Objective 13 ALERT, NOTIFICATION AND EMERGENCY INFORMATION -  
PUBLIC INSTRUCTIONS

Coordination of the formulation and dissemination of accurate information and instructions to the public, following initial alert and notification, was successfully demonstrated by the EOC. The EOC staff had access to current, accurate, timely information on protective action decisions through briefings, distribution of messages status boards and maps. Protective Action areas were described in familiar geographical terms, and all necessary information was contained in each message. All information released by the County executive, was timely and accurate.

Objective 14 ALERT, NOTIFICATION AND EMERGENCY INFORMATION -  
MEDIA

Will County public affairs staff successfully demonstrated the County's ability to brief the media accurately. A simulated briefing was conducted by the County Executive, the County IESDA Coordinator and a public affairs staff member. Hourly briefings were scheduled and during the exercise the EOC coordinator organized information for other simulated briefings. Press releases were also developed throughout the day and approved by the County Executive. A press release message log was compiled and copies of the releases were transmitted to the JPIC and other EOCs.

Objective 15 ALERT, NOTIFICATION AND EMERGENCY INFORMATION -  
RUMOR CONTROL

Rumor control activities were successfully demonstrated by Will County EOC personnel. Rumors were promptly referred to the County Executive. Appropriate County department heads were requested to

verify the information. Misinformation was corrected by written notice, approved by the County Executive and then faxed to the JPIC. Information to dispel rumors were incorporated into the press briefings.

#### Objective 16 USE OF KI

The ability to make the decision to recommend and distribute KI for Emergency Workers was successfully demonstrated. Three volunteer Emergency Workers at municipal EOCs were notified through a simulated demonstration. No institutionalized persons were identified in the risk area. KI was provided in the dosimetry control kits that were issued to all Emergency Workers dispatched from the County EOC. Distribution briefings informed workers of KI recommendation procedures. Doses and time of the administration of the dose were recorded by the County RADEF staff.

#### Objective 18 IMPLEMENTATION OF PROTECTIVE ACTIONS - PLUME EPZ

The ability and resources necessary to implement protective actions for the permanent and transient plume EPZ population was demonstrated successfully. The Health Department representative had a current listing of transportation dependent persons who lived within the EPZ. The listing indicated specific needs for each individual as well as their location and telephone number. Appropriate steps to ensure the protection of each individual were taken. Coordination with Health Services, Red Cross and other County response representatives was well demonstrated.

#### Objective 19 IMPLEMENTATION OF PROTECTIVE ACTIONS - EVACUATION OF SCHOOLS

Appropriate protective actions for school children in the plume EPZ were partially demonstrated. The EOC authorized evacuation for 975 students. The students were simulated as relocated in Orland Park, IL. The EOC school representative notified the Superintendent of schools in Channahon of the evacuation and discussed the availability of adequate buses. This information was also provided to the Public Information Officer for inclusion in the next media release.

#### Objective 20 TRAFFIC AND ACCESS CONTROL

Will County successfully demonstrated their ability to control evacuation traffic flow and access to evacuated and sheltered areas. Five traffic control points were activated, and one was observed. Personnel were knowledgeable of their responsibilities. The squad unit radio was available to provide updates on the emergency situation, although no protective action recommendations were issued during observation period.

The management of an evacuation impediment was demonstrated by the re-routing of a predetermined evacuation route. Various EOC managers and department heads participated in the decision making and implementation of the alternative route.

#### Objective 33 RECOVERY, REENTRY AND RELOCATION - IMPLEMENTATION

Will County EOC staff successfully demonstrated their ability to implement appropriate reentry and recovery measures. This demonstration consisted of: traffic control points remaining to assist returnees; issuance of an EBS message to indicate safe reentry; and planning for closing of Congregate Care Centers. Accident assessment, medical matters and public information needs were reviewed. Reentry planning was coordinated in a detailed briefing of the entire staff.

### GRUNDY COUNTY

Grundy County selected sixteen objectives for demonstration. Fourteen objectives were successfully demonstrated. Objective 14 was partially met and objective 19 was partially met. No deficiencies were identified. Two ARCAs were identified.

#### Objective 1 EMERGENCY CLASSIFICATIONS LEVELS (ECL)

The ability to monitor, understand and use the Emergency Classification Levels was successfully demonstrated. The ECLs were received in a timely manner and in accordance with plan and procedures requirements. Activation of the EOC followed the ALERT notification. Proper procedures and actions were taken following each classification.

#### Objective 2 MOBILIZATION OF EMERGENCY PERSONNEL

The ability to fully alert, mobilize and activate personnel for both facility and field-based emergency functions was adequately demonstrated. Notifications of emergency response personnel were performed within 15 minutes according to procedures and the EOC was activated within that 15 minutes.

#### Objective 3 DIRECTION AND CONTROL

The ability to direct, coordinate and control emergency activities in the County EOC was effectively accomplished by the County IESDA Coordinator. The staff was involved in the decision-making process throughout the exercise. Copies of the plan were available in sufficient quantities to support the EOC staff. Messages were reproduced and distributed to all EOC staff

members.

#### Objective 4 COMMUNICATIONS

Communication systems were available to enable County emergency personnel to maintain contact with all designated facilities. Backup communication systems were available. Internal message handling, logging and reproduction for multiple distribution was successfully demonstrated.

#### Objective 5 FACILITIES EQUIPMENT AND DISPLAYS

Prior to this exercise FEMA Region V was notified by letter that Grundy County no longer had a permanent EOC facility. The Grundy County EOC was established in a temporary space awaiting either the construction of a new EOC or reassignment of space in the County Building. The area had sufficient space, furnishings, lighting, restrooms ventilation and back-up power. Sufficient equipment, space and supplies were available to house and feed the EOC staff. All necessary EPZ information maps were posted as was the status board and emergency classification level signs.

AREA REQUIRING CORRECTIVE ACTION: Grundy County must address the location of a permanent EOC per NUREG 0654 H.3 guidance.

#### Objective 6 EMERGENCY WORKER EXPOSURE CONTROL

Emergency Worker exposure control procedures were implemented according to County plans and procedures. This objective was demonstrated by interviewing a Morris, Illinois, City Police Officer who established the traffic control point. The officer was equipped with dosimetry and was knowledgeable of its use and the procedures to follow if he exceeded his exposure limit.

#### Objective 12 ALERT, NOTIFICATION AND EMERGENCY INFORMATION - INITIAL ALERT AND NOTIFICATION

The ability to initially alert the public within the plume EPZ in 15 minutes was adequately demonstrated. Grundy County received the first Site Area Emergency notification, verified the call, coordinated the activation of the sirens, EBS instructions and simulated the siren activation and EBS transmission according to procedures within required 15 minute timeframe.

#### Objective 13 ALERT, NOTIFICATION AND EMERGENCY INFORMATION - PUBLIC INSTRUCTIONS

The ability to coordinate and disseminate accurate information and instructions to the public in a timely manner was fully met. Prescribed EBS messages provided the necessary information to

the public. Coordination of siren activations and EBS message transmissions with other affected Counties was well organized and proceeded according to plans. EBS messages were provided to the JPIC via facsimile.

Objective 14 ALERT NOTIFICATION AND EMERGENCY INFORMATION -  
MEDIA

The ability to brief the media in an accurate, coordinated and timely manner was partially met. A media briefing was conducted by the County ESDA Coordinator. Two FEMA evaluators acted as media to allow the County to demonstrate the objective. The briefing consisted of a very brief statement about the actions taken according to his status board log.

AREA RECOMMENDED FOR IMPROVEMENT: The coordinator did not prepare a statement or use any maps, displays or handouts. The briefing contained only minimal information.

Objective 15 ALERT, NOTIFICATION AND EMERGENCY INFORMATION -  
RUMOR CONTROL

The ability to establish and operate rumor control in a coordinated and timely fashion was fully met by Grundy County. Upon receipt of call from a simulated UPI person, the County referred them to the JPIC. The EOC staff was advised to take actions necessary to assure that the information they had received was accurate. The County took correct actions and demonstrated the ability to respond to rumors.

Objective 16 USE OF KI

Grundy County successfully demonstrated the ability to recommend and distribute KI to Emergency Workers and institutionalized persons. The use of KI was authorized in a NARS message and a radio message was simulated to the traffic control point. The procedure was described adequately by the officer who was assigned to that traffic control point. KI is maintained in public institutions. All Emergency Workers would receive a supply of KI in the issuance of personal dosimetry.

Objective 18 IMPLEMENTATION OF PROTECTIVE ACTIONS - PLUME EPZ

The ability and resources necessary to implement appropriate protective actions for permanent and transient plume EPZ population were successfully demonstrated. Personnel involved in this function were knowledgeable of procedures and responsibilities. Coordination between all involved response personnel was excellent. Special needs and institutionalized persons rosters were current and available for immediate use.

Objective 19 IMPLEMENTATION OF PROTECTIVE ACTIONS - EVACUATION  
OF SCHOOLS

The ability and resources necessary to implement appropriate protective actions for school children within the plume EPZ were partially demonstrated. A discussion of evacuation plans and procedures was conducted with a District Superintendent and a Middle School principal, who is also the Director of Transportation. They were knowledgeable of alert procedures, evacuation preparations, movement of students and how to request additional transportation when required.

Teachers, mechanics and custodians were trained as bus drivers to be used in case the scheduled driver did not report. The bus drivers and their substitutes have not attended training in the use of the radiological kits provided to the bus company by the Illinois Department of Nuclear Safety, therefore radiological protection for students and drivers is questionable.

AREA REQUIRING CORRECTIVE ACTION: Grundy County should arrange for the Illinois Department of Nuclear Safety to reschedule the appropriate training for all bus drivers and their substitutes.

Objective 20 TRAFFIC AND ACCESS CONTROL

The Morris City Police Department adequately demonstrated the establishment of a traffic control point. The officer involved was knowledgeable of the plan including; calling for additional support, dosimetry issuance and use.

Objective 33 RECOVERY, REENTRY AND RELOCATION - IMPLEMENTATION

Grundy County adequately demonstrated the ability implement appropriate measures for unrestricted re-entry. Following receipt of the NARS message recommending unrestricted re-entry, each County Department director reviewed their responsibilities to ensure a smooth and safe return to the evacuated area.

Objective 35 EVACUATION OF ONSITE PERSONNEL

Grundy County responsibilities regarding the evacuation of plant personnel were simulated. These responsibilities included accountability of site personnel, pre-selected evacuation routes to the Braidwood Nuclear Plant, and the monitoring and decontamination of evacuated personnel.



## KENDALL COUNTY

Kendall County selected fourteen objective for demonstration during this exercise. Eleven objectives were adequately demonstrated, two were not adequately demonstrated and two were partially demonstrated. One Area Requiring Corrective Action was identified.

### Objective 1 EMERGENCY CLASSIFICATION LEVELS (ECL)

Kendall County personnel successfully demonstrated the ability to monitor, understand and use Emergency Classification Levels. County personnel were notified by the Illinois Emergency Disaster Services Agency (IESDA) over the NARS line. Facsimile hard copy was available as a backup notification system. Staff members followed their procedures properly at each classification level. ECLs were prominently displayed and the staff was notified immediately of each classification change.

### Objective 2 MOBILIZATION OF EMERGENCY PERSONNEL

Kendall County successfully demonstrated the ability to fully alert, mobilize and activate EOC personnel and simulated field-based emergency functions. The Sheriff's dispatcher was notified over the NARS of the ALERT at the Dresden facility, verified the message and immediately began notification of emergency response personnel by radio and telephone. A written call out list containing the names and phone numbers of key emergency response personnel was used during the notification process. The Kendall County EOC was declared activated within 30 minutes of the initial NARS phone call.

### Objective 3 DIRECTION AND CONTROL

The ESDA County Coordinator and the County Board Representative adequately demonstrated the ability to direct, control and coordinate County emergency response functions. Briefings were conducted at frequent intervals. The County Board Representative was knowledgeable of all County responsibilities and coordinated decision making with his County IESDA Coordinator.

Messages were logged and distributed in a timely manner. Copies of the State and County plans and procedures were available and followed throughout the exercise. The IESDA Coordinator adequately demonstrated the necessary coordination involved the procedure of Grundy County activation of Kendall County Sirens. All functions were demonstrated according to the County Emergency Plan and corresponding procedures.

#### Objective 4 COMMUNICATIONS

Kendall County demonstrated the ability to communicate with all appropriate locations, organizations and field personnel. The Kendall County EOC is well equipped with commercial telephone lines. In addition to the RACES radio system, there were three other radio systems which provided a means for continuous contact with emergency groups from local, State and County organizations.

#### Objective 5 FACILITIES, EQUIPMENT AND DISPLAYS

Kendall County successfully demonstrated their facilities, equipment and materials to support emergency operations. The EOC was an adequate facility with equipment and administrative material to support 24-hour staffing. Adequate back-up electrical power was available. Controlled access to the facility was successfully demonstrated. Maps were prominently displayed with all required information. The population distribution map contained a number of persons in one sector of Kendall county which did not actually reflect the population of the area. The status board was prominently displayed and was maintained with correct, current information throughout the exercise.

AREA RECOMMENDED FOR IMPROVEMENT: The population count in sector A of the population distribution map should be reviewed to ensure that adequate planning is in effect for the residents of that area.

#### Objective 6 EMERGENCY WORKER EXPOSURE CONTROL

The ability to continuously monitor and control Emergency Worker exposure was adequately demonstrated through simulation. Dosimetry kits contained a 0-20R direct reading dosimeter (DRD), a simulated TLD, simulated KI tablets, and an exposure record card. The DRD used in the Emergency Worker kit is adequate but different from the County plan's designated high and low range dosimeters (0-200R and 0-200mr). The kits did not have instruction cards which provide exposure limits or reading frequencies. The Dosimetry Control Officer (DCO) was not aware of the Emergency Worker exposure limits, or "call in" limits. Emergency Workers interviewed by evaluators were aware of their exposure limits and the "call in" procedures. Annual training is provided by Illinois Department of Nuclear Safety regarding these requirements.

AREA RECOMMENDED FOR IMPROVEMENT: Additional training should be provided for the DCO and Emergency Workers emphasizing exposure limits, use of dosimetry and provision for exposure limit information cards in the kits. The County plan should be revised to reflect Direct Reading Dosimeters being used.

Objective 12 ALERT, NOTIFICATION, AND EMERGENCY INFORMATION -  
INITIAL ALERT NOTIFICATION

Kendall County successfully demonstrated the ability to initially alert the public within the 10 mile EPZ and begin dissemination of an instructional message within 15 minutes of a decision by the State. The initial Site Area Emergency protective action recommendation (PAR) was received from the state at 10:15 am. The IESDA Coordinator immediately began to organize the coordination of siren sounding by Grundy County and Kendall County's activation of their emergency broadcast system. According to County plans and agreements Grundy County activated Kendall County sirens at 10:25 a.m. with EBS activation by Kendall County at 10:26 a.m.. Route alerting which was part of the primary notification system was simulated.

Objective 13 ALERT, NOTIFICATION AND EMERGENCY INFORMATION -  
PUBLIC INSTRUCTIONS

Kendall County successfully demonstrated the ability to coordinate the formulation and dissemination of accurate information and instructions to the public in a timely manner following the initial notification. Current information of protective action decisions were provided by the State via the NARS and facsimile. Familiar landmarks and roads were used to describe affected areas. Instruction for transient populations were part of pre-scripted messages. Adequate instructional messages were provided. All PARs were followed by sirens and EBS messages within the required 15 minutes. The County Board representative and the ESDA Coordinator approved all messages prior to each release.

Objective 14 ALERT, NOTIFICATION AND EMERGENCY INFORMATION -  
MEDIA

The Kendall County Public Information Officer successfully demonstrated the ability to brief the media in the County EOC until the Joint Information Center was activated. Three briefings were conducted and contained information from status boards, EOC briefings and press releases faxed from other Counties, the State and the utility. Information was timely and correct. Questions were answered in a timely manner. The County demonstration relating to the media were consistent with County and State JPIC procedures.

Objective 15 ALERT, NOTIFICATION AND EMERGENCY INFORMATION -  
RUMOR CONTROL

This objective was selected for demonstration: however, County personnel were not knowledgeable of their responsibilities and were unable to demonstrate their ability to function in this

effort. According to the State of Illinois Plan County EOCs are to function as rumor control centers until they are unable to handle the amount of requests. At that time the State will assume this responsibility. This was not demonstrated nor were County personnel aware of this responsibility.

AREA REQUIRING CORRECTIVE ACTION: County EOC personnel should be provided training in rumor control responsibilities and be prepared to demonstrate this ability during the next scheduled exercise.

#### Objective 16 USE OF KI

Within the limitations of exercise play, Kendall County demonstrated its ability to distribute and administer KI to Emergency Workers once the decision to authorize use of KI had been made. Simulated KI was provided in the dosimetry packets which were prepared for simulated Emergency Workers. The State decision to recommend use of KI was simulated via a NARS call which indicated that KI should be administered to Emergency Workers and immobile populations within the EPZ.

AREA RECOMMENDED FOR IMPROVEMENT: During an exercise, FEMA evaluators should be provided an opportunity to check the inventory of KI in order to determine whether adequate protective resources are available.

#### Objective 18 IMPLEMENTATION OF PROTECTIVE ACTIONS - PLUME EPZ

The Kendall County EOC staff successfully demonstrated their ability and resources (simulated) necessary to implement appropriate protective actions for the impacted permanent and transient plume EPZ population. The IESDA Coordinator determined that no transient-dependent or other special needs residents were located in the EPZ. Since the EPZ is a rural farming area, the County Sheriff utilizes route alerting in addition to siren sounding to notify the farm homes and farmers working in the fields. Six sheriff's department units and five fire department units were simulated for route alerting. Simulated route alerting was conducted in conjunction with each protective action recommendation.

#### Objective 20 TRAFFIC AND ACCESS CONTROL

Within the limitations of exercise play, the Kendall County EOC staff partially demonstrated the organizational ability and resources necessary to control access to sheltered areas. The Kendall County Sheriff demonstrated the ability to choose and establish access control points using simulated sheriff's department and fire department personnel. The exercise scenario did not cause an evacuation in Kendall County, therefore, there was unnecessary to establish evacuation control points. The

scenario did not provide for impediments to traffic, therefore, the ability to respond to traffic impediments was not observed during the exercise.

AREA RECOMMENDED FOR IMPROVEMENT: Future exercises should provide activities to test evacuation traffic control points and the ability to respond to traffic impediments.

Objective 33 RECOVERY, REENTRY AND RELOCATION - IMPLEMENTATION

The objective was selected for demonstration, however, scenario data did not drive PARs to enable Kendall County EOC staff to successfully demonstrate this objective.

SUMMARY OF EXERCISE FINDINGS

Dresden Nuclear Power Station  
Exercise Findings  
November 1, 1989  
Deficiencies

NUREG ITEM      NARRATIVE STATEMENT OF WEAKNESS

There were no deficiencies identified for the State of Illinois or Will, Grundy and Kendall Counties during this exercise.

CORRECTIVE ACTION

Dresden Nuclear Power Station  
Exercise Findings  
November 1, 1989  
Areas Requiring Corrective Action

STATE OF ILLINOIS

NUREG ITEM	NARRATIVE STATEMENT OF WEAKNESS
G.4.c	Rumor Control was not demonstrated by the State of Illinois during this exercise.

During the next scheduled exercise this objective must be demonstrated as required by FEMA GM-3.

CORRECTIVE ACTION

Rumor control was successfully demonstrated by the State of Illinois during the December 6-7, 1989, Byron exercise. This ARCA is now corrected.

WILL COUNTY

No Areas Requiring Corrective Action Identified

GRUNDY COUNTY

NUREG ITEM	NARRATIVE STATEMENT OF WEAKNESS
H.3	Grundy County must address the location of a permanent EOC.

CORRECTIVE ACTION PROPOSED

The County plan states that the County's Emergency Operations Center will be located at 111 E. Washington St., Morris, Illinois. The County Plan also states that in the event that the primary location is rendered unusable that the Mobile Command Unit may be moved to a suitable location for the establishment of an alternate EOC. (pages F-1 and F-3).

The IPRA Plan, 2-SOP-1G, Attachment, Page 2 of 2, which was submitted for revision on 17 August 89, indicates that Grundy County would use the County Board Room as a temporary Emergency



Operating Center, meaning that the room would be used as needed by Grundy County, but would not be a dedicated EOC.

Although Grundy County is attempting to provide a permanent, dedicated EOC in the near future, review of NUREG 0654 H.3 indicates that the objective was met during the Dresden IPRA exercise.

Since Grundy County has established the County Board Room as a temporary EOC to be used as needed by the County and since a plan revision was made deleting references to EOC in the basement, we agree with and support Grundy County's position that an ARCA is not warranted.

FEMA RESPONSE: FEMA agrees that for the purpose of this exercise NUREG 0654 H.3 guidance was successfully demonstrated, however, the fact remains that this facility is not the permanent EOC and the effort to develop a permanent facility should be documented and tracked by FEMA.

NUREG ITEM	NARRATIVE STATEMENT OF WEAKNESS
J.10.g GM EV-2	Grundy County must arrange the Illinois Department of Nuclear Safety to provide appropriate training for all bus drivers and their substitutes.

#### CORRECTIVE ACTION PROPOSED

Training for Bus drivers and substitutes will be offered again during 1990.

FEMA RESPONSE This corrective action is acceptable. Efforts to ensure attendance at this required training should be made.

#### KENDALL COUNTY

NUREG ITEM	NARRATIVE STATEMENT OF WEAKNESS
G.4:c.	County EOC personnel require training in rumor control responsibilities and should be able to demonstrate this ability during the next schedule exercise.

#### CORRECTIVE ACTION PROPOSED

The State of Illinois will provide training on rumor control to Kendall County. This objective will be demonstrated during the next Dresden exercise scheduled during 1991.

Dresden Nuclear Power Station  
Exercise Findings  
November 1, 1989  
Areas Recommended For Improvement

STATE OF ILLINOIS

Telephone lines for the ESDA facsimile machine failed to operate during the exercise which prevented the State ESDA spokesman from coordinating information for media releases. Repair capability should be available to repair affected lines or switch to alternate lines in order to provide the required service.

Schematics, charts, plant diagrams and other visuals available in the JPIC should be used for briefing clarification and to assist the media in their understanding of the problems at hand.

WILL COUNTY

PARs, siren activations and EBS messages with times should be posted on the status board.

GRUNDY COUNTY

The Coordinator did not prepare a statement or use any maps, displays or handouts during media briefings. The briefings contained only minimal information.

KENDALL COUNTY

The population count in sector A of the population distribution map should be reviewed to ensure that adequate planning is in effect for the residents of that area.

Additional training should be provided for the DCO and Emergency Workers emphasizing exposure limits, use of dosimetry and provision for exposure limit information cards in the kits.

During an exercise, FEMA evaluators should be provided an opportunity to check the inventory of KI in order to determine whether adequate protective resources are available.

Future exercise should provide activities to test evacuation traffic control points and the ability to respond to traffic impediments.

SCOPE OF PARTICIPATIONIllinois Emergency Services and Disaster Agency

The Illinois Emergency Services and Disaster Agency (IESDA) will participate on a partial scale basis in the Dresden Power Station Exercise. The State EOC will be partially activated and prepared to demonstrate the State's ability to accomplish all of the offsite objectives listed for IESDA. Reporting State agencies will be contacted but will not report to the State EOC. Notifications to non-reporting State agencies will be simulated.

The State Forward Command Post will be partially staffed to serve as a training session for State agency personnel in the Dresden Station area. IESDA representatives will be prepositioned in the Dresden Station vicinity for response to the Mazon EOF, State Forward Command Post, the county EOCs and the JPIC.

Illinois Department of Nuclear Safety

The Illinois Department of Nuclear Safety (IDNS) will demonstrate partial scale participation in the Dresden Exercise. REAC will be fully activated as a training tool and prepared to demonstrate the State's ability to accomplish all of the offsite objectives listed for IDNS. Reporting State agencies will be contacted.

IDNS representatives will be prepositioned in the Dresden vicinity for response to the Mazon EOF, the county EOCs, the JPIC and the State Forward Command Post. Since RAFT will not be activated, field monitoring activities will be simulated.

Grundy County

Grundy County will fully participate in the Dresden Exercise. The Grundy County EOC will be fully activated and Grundy County will be prepared to demonstrate each of the County objectives. Each municipality within the Dresden EPZ in Grundy County will activate its EOC.

Kendall County

Kendall County will fully participate in the Dresden Exercise. The Kendall County EOC will be fully activated and Kendall County will be prepared to demonstrate each of the County objectives. Kendall County will man a traffic and access control post during the exercise.

Will County

Will County will fully participate in the Dresden Exercise. The Will County EOC will be fully activated and Will County will be prepared to demonstrate each of the County objectives. Will County will man a traffic and access control post during the exercise. Each municipality within the Dresden EPZ in Will County will activate its EOC.

STATE OF ILLINOIS OBJECTIVES  
FOR THE  
DRESDEN NUCLEAR POWER PLANT EXERCISE  
NOVEMBER 1, 1989

1. Demonstrate the ability to monitor, understand and use emergency classification levels (ECL) through the appropriate implementation of emergency functions and activities corresponding to ECLs as required by the scenario. The four ECLs are: Notification of unusual event, alert, site area emergency and general emergency.

This objective will be demonstrated by the State of Illinois through the implementation of procedures at each ECL, including notification and activation procedures. The implementation of some procedures will be simulated since this exercise is partial scale for the State of Illinois.

2. Demonstrate the ability to fully alert, mobilize and activate personnel for both facility and field-based emergency functions.

The State Emergency Operations Center (EOC) will be partially activated with IESDA and IDNS personnel. The IESDA Dispatcher will implement notification procedures as defined in the IPRA-State General Plan, Volume I. Supporting State agency liaisons will be contacted but will not report to the State EOC.

The State Forward Command Post will be partially activated as a training tool for State agency personnel in the Dresden Station area. IESDA personnel will be pre-positioned in the Dresden Station area and dispatched to the County EOCs, Forward Command Post, JPIC and EOF.

The IDNS Dispatcher will simulate notification procedures as defined in the IPRA-State General Plan and in accordance with IDNS SOPs. REAC will be fully activated as a training tool. RAFT will not be activated. IDNS personnel will be pre-positioned in the Dresden Station area and dispatched to the County EOCs, Forward Command Post, JPIC and EOF.

3. Demonstrate the ability to direct, coordinate and control emergency activities.

The ability to direct and control emergency activities will be demonstrated at the State EOC. Coordination will be demonstrated between the State EOC, REAC, the Forward Command Post, JPIC and the County EOCs.

4. Demonstrate the ability to communicate with all appropriate locations, organizations and field personnel.

IESDA will use a variety of communication systems (Nuclear Accident Reporting System (NARS), telefax, commercial telephone, radio) to communicate with other organizations and locations.

IDNS (intra/inter-agency) communications capabilities will be demonstrated in accordance with appropriate SOPs (e.g. NARS, telefax, commercial telephone, radio).

5. Demonstrate the adequacy of facilities, equipment, displays and other materials to support emergency operations.

This objective will be demonstrated in the State EOC through the use of maps, status boards and displays.

IDNS will demonstrate this objective in REAC through the use of maps, status boards and displays.

- 6-9. These objectives will not be demonstrated by the State of Illinois.

10. Demonstrate the ability, within the plume exposure pathway, to project dosage to the public via plume exposure, based on plant and field data.

The ability to project dosage to the public via plume exposure based on plant and field data will be performed in REAC as a training exercise.

11. Demonstrate the ability to make appropriate protective action decisions, based on projected or actual dosage, EPA PAGs, availability of adequate shelter, evacuation time estimates and other relevant factors.

The coordination to determine PAG recommendations based upon available shelters, evacuation time estimates and other relevant factors will be demonstrated between the State EOC and REAC.

12. Demonstrate the ability to initially alert the public within the 10-mile EPZ and begin dissemination of an instructional message within 15 minutes of a decision by appropriate State and/or local official(s).

This capability will be demonstrated as outlined in the IPRA-State General Plan. The Governor, or his representative in the State EOC, will notify the appropriate Emergency Broadcast System (EBS) station. The IESDA NARS operator will notify the County EOCs of the appropriate recommendation regarding protection of the public via NARS. In turn, the County EOCs will alert and provide instructions to the public through the use of the Prompt Notification System and the local EBS station.

13. Demonstrate the ability to coordinate the formulation and dissemination of accurate information and instructions to the public in a timely fashion after the initial alert and notification has occurred.

This objective will be demonstrated in conjunction with and as outlined in Item 12 above.

14. Demonstrate the ability to brief the media in an accurate, coordinated and timely manner.

This objective will be demonstrated at the JPIC in coordination with the State EOC and REAC.

15. Demonstrate the ability to establish and operate rumor control in a coordinated and timely fashion.

This objective will be demonstrated by the State through coordination between the JPIC, State EOC, REAC and the County EOCs.

- 16-20. These objectives will not be demonstrated by the State of Illinois.

21. Demonstrate the adequacy of procedures, facilities, equipment and personnel for the registration, radiological monitoring and decontamination of evacuees.

This objective will be demonstrated by the State of Illinois at one of the congregate care shelters designated in IPRA-Dresden. Local agencies, i.e. ESDA, law enforcement and Red Cross, will demonstrate their ability to perform their functions at the relocation center. IDNS monitoring teams will not be activated, but an IDNS representative will be available to discuss the IDNS role at the congregate care shelter. This demonstration will not take place during the exercise but at a pre-arranged time prior to the day of the exercise. Additional information will be provided to FEMA at a later date.

22. Demonstrate the adequacy of facilities, equipment and personnel for congregate care of evacuees.

This objective will be demonstrated in conjunction with and as outlined above for Objective 21.

23. Demonstrate the adequacy of vehicles, equipment, procedures and personnel for transporting contaminated, injured or exposed individuals.

This objective will be demonstrated by the State of Illinois in conjunction with the onsite medical drill being conducted later this year. Details will be provided to FEMA at a later date.

24. Demonstrate the adequacy of medical facilities equipment, procedures and personnel for handling contaminated, injured or exposed individuals.

This objective will be demonstrated by the State of Illinois in conjunction with the onsite medical drill being conducted later this year. Details will be provided to FEMA at a later date.

25. Demonstrate the adequacy of facilities, equipment, supplies, procedures and personnel for decontamination of emergency workers, equipment and vehicles and for waste disposal.

The ability to decontaminate emergency workers, equipment and vehicles will be partially demonstrated. IDNS RAFT personnel will not be fully activated for this demonstration but rather, one of the facilities used for a decontamination station will be available for inspection by FEMA to ensure its adequacy. Representatives from IDNS and the local fire department will be present for the inspection. Additional information will be provided to FEMA as soon as it is available.

- 26-36. These objectives will not be demonstrated by the State of Illinois.

GRUNDY COUNTY OBJECTIVES  
FOR THE  
DRESDEN NUCLEAR POWER PLANT EXERCISE  
NOVEMBER 1, 1989

1. Demonstrate the ability to monitor, understand and use emergency classification levels (ECL) through the appropriate implementation of emergency functions and activities corresponding to ECLs as required by the scenario. The four ECLs are: Notification of unusual event, alert, site area emergency and general emergency.

This objective will be demonstrated by Grundy County through the implementation of procedures at each ECL.

2. Demonstrate the ability to fully alert, mobilize and activate personnel for both facility and field-based emergency functions.

Grundy County will fully activate the Grundy County EOC in Morris, Illinois. The County will implement notification procedures as defined in IPRA-Dresden.

3. Demonstrate the ability to direct, coordinate and control emergency activities.

Decision making will be demonstrated at the State EOC and the Grundy County EOC. Coordination of decisions and emergency activities will be demonstrated between Grundy County, the State EOC and the JPIC, and between the County and the municipalities within the EPZ.

4. Demonstrate the ability to communicate with all appropriate locations, organizations and field personnel.

Grundy County will use NARS, commercial telephone, radio and telefax to communicate with departments and agencies at other locations. Field personnel will be contacted by commercial telephone and radio.

5. Demonstrate the adequacy of facilities, equipment, displays and other materials to support emergency operations.

This capability will be demonstrated in the Grundy County EOC through the use of maps, status board and other displays as appropriate.

6. Demonstrate the ability to continuously monitor and control emergency worker exposure.

Grundy County will demonstrate this objective by close coordination with IDNS and timely dissemination and exchange of information within the County Dosimetry Control Officer network.



7-11. These objectives will not be demonstrated by Grundy County.

12. Demonstrate the ability to initially alert the public within the 10-mile EPZ and begin dissemination of an instructional message within 15 minutes of a decision by appropriate State and/or local official(s).

This objective will be fulfilled through the simulated activation of the Dresden Station EPZ Prompt Notification System as defined in IPRA-Dresden and 2-SOP-6, "Dresden Station EPZ Prompt Notification System". The ability to provide instructions to the public will be demonstrated through the simulated activation of the local Emergency Broadcast System (EBS) station.

13. Demonstrate the ability to coordinate the formulation and dissemination of accurate information and instructions to the public in a timely fashion after the initial alert and notification has occurred.

Grundy County will demonstrate this objective by using pre-scripted messages, as indicated in IPRA-Dresden and 2-SOP-8, "Dresden Station EPZ Sheltering and Evacuation - General Population", to develop the EBS messages. Broadcast of the EBS messages will be simulated.

14. Demonstrate the ability to brief the media in an accurate, coordinated and timely manner.

This capability will be demonstrated in the Grundy County News Media Briefing Location by the Grundy County Board Chairman, or his designee, under the provisions outlined in the IPRA-Dresden, Annex 2A.

15. Demonstrate the ability to establish and operate rumor control in a coordinated and timely fashion.

The objective will be demonstrated by Grundy County through coordination between the County EOC, State EOC and the JPIC.

16. Demonstrate the ability to make the decision to recommend the use of KI to emergency workers and institutionalized persons, based on predetermined criteria, as well as to distribute and administer it once the decision is made, if necessitated by radioiodine releases.

If notified by the State of Illinois to distribute and administer KI, Grundy County officials will discuss the issuance of KI to emergency workers and immobile populations, as a voluntary measure, and will notify the municipalities of the State's recommendation.

17. This objective will not be demonstrated by Grundy County.

18. Demonstrate the ability and resources necessary to implement appropriate protective actions for the impacted permanent and transient plume EPZ population (including transit-dependent persons, special needs populations, handicapped persons and institutionalized persons).

This objective will be simulated by Grundy County.

19. Demonstrate the ability and resources necessary to implement appropriate protective actions for school children within the plume EPZ.

Grundy County officials will demonstrate this capability by discussing the implementation of the pertinent SOPs and the inter-departmental coordination involved.

In addition, an EV-2 demonstration will be conducted at a Grundy County school. Details of this demonstration will be provided to FEMA as soon as they are finalized.

20. Demonstrate the organizational ability and resources necessary to control evacuation traffic flow and to control access to evacuated and sheltered areas.

Coordination between Grundy County agencies designated to provide traffic and access control will be exhibited in the Grundy County EOC. One traffic and access control post will be manned by the County Sheriff's Department during the exercise. The manning of the remaining posts will be simulated.

- 21-22. These objectives will not be demonstrated by Grundy County.

23. Demonstrate the adequacy of vehicles, equipment, procedures and personnel for transporting contaminated, injured or exposed individuals.

This objective will be demonstrated in conjunction with the Dresden Station medical drill scheduled for later this year. Details will be provided to FEMA at a later date.

24. Demonstrate the adequacy of medical facilities equipment, procedures and personnel for handling contaminated, injured or exposed individuals.

This objective will be demonstrated in conjunction with the Dresden Station medical drill scheduled for later this year. Details will be provided to FEMA at a later date.

- 25-32. These objectives will not be demonstrated by Grundy County.

33. Demonstrate the ability to implement appropriate measures for controlled re-entry and recovery.

Grundy County will implement re-entry procedures upon direction from the State EOC and with the assistance of IDNS. These procedures will be carried out under the provisions of 2-SOP-11, "Dresden Station EPZ Re-entry", and Annex 2A of the IPRA-Dresden.

34. This objective will not be demonstrated by Grundy County.

35. Demonstrate the ability to coordinate the evacuation of onsite personnel.

This ability will be demonstrated in the Grundy County EOC through coordination between the utility representative and the County agencies designated to provide traffic and access control.

36. This objective will not be demonstrated by Grundy County.

KENDALL COUNTY OBJECTIVES  
FOR THE  
DRESDEN NUCLEAR POWER PLANT EXERCISE  
NOVEMBER 1, 1989

1. Demonstrate the ability to monitor, understand and use emergency classification levels (ECL) through the appropriate implementation of emergency functions and activities corresponding to ECLs as required by the scenario. The four ECLs are: Notification of unusual event, alert, site area emergency and general emergency.

This objective will be demonstrated by Kendall County through the implementation of procedures at each ECL.

2. Demonstrate the ability to fully alert, mobilize and activate personnel for both facility and field-based emergency functions.

Kendall County will fully activate the Kendall County EOC in Yorkville, Illinois. The County will implement notification procedures as defined in IPRA-Dresden.

3. Demonstrate the ability to direct, coordinate and control emergency activities.

Decision making will be demonstrated at the State EOC and the Kendall County EOC. Coordination of decisions and emergency activities will be demonstrated between Kendall County, the State EOC and the JPIC.

4. Demonstrate the ability to communicate with all appropriate locations, organizations and field personnel.

Kendall County will use NARS, commercial telephone, radio and telefax to communicate with departments and agencies at other locations. Field personnel will be contacted by commercial telephone and radio.

5. Demonstrate the adequacy of facilities, equipment, displays and other materials to support emergency operations.

This capability will be demonstrated in the Kendall County EOC through the use of maps, status board and other displays as appropriate.

6. Demonstrate the ability to continuously monitor and control emergency worker exposure.

Kendall County will demonstrate this objective by close coordination with IDNS and timely dissemination and exchange of information within the County Dosimetry Control Officer network.

- 7-11. These objectives will not be demonstrated by Kendall County.

12. Demonstrate the ability to initially alert the public within the 10-mile EPZ and begin dissemination of an instructional message within 15 minutes of a decision by appropriate State and/or local official(s).

This objective will be fulfilled through the simulated activation of the Dresden Station EPZ Prompt Notification System as defined in IPRA-Dresden and 2-SOP-6, "Dresden Station EPZ Prompt Notification System". The ability to provide instructions to the public will be demonstrated through the simulated activation of the local Emergency Broadcast System (EBS) station.

13. Demonstrate the ability to coordinate the formulation and dissemination of accurate information and instructions to the public in a timely fashion after the initial alert and notification has occurred.

Kendall County will demonstrate this objective by using pre-scripted messages, as indicated in IPRA-Dresden and 2-SOP-8, "Dresden Station EPZ Sheltering and Evacuation - General Population", to develop the EBS messages. Broadcast of the EBS messages will be simulated.

14. Demonstrate the ability to brief the media in an accurate, coordinated and timely manner.

This capability will be demonstrated in the Kendall County News Media Briefing Location by the Kendall County Board Chairman, or his designee, under the provisions outlined in the IPRA-Dresden, Annex 3A.

15. Demonstrate the ability to establish and operate rumor control in a coordinated and timely fashion.

The objective will be demonstrated by Kendall County through coordination between the County EOC, State EOC and the JPIC.

16. Demonstrate the ability to make the decision to recommend the use of KI to emergency workers and institutionalized persons, based on predetermined criteria, as well as to distribute and administer it once the decision is made, if necessitated by radioiodine releases.

If notified by the State of Illinois to distribute and administer KI, Kendall County officials will discuss the issuance of KI to emergency workers, as a voluntary measure.

17. This objective will not be demonstrated by Kendall County.

18. Demonstrate the ability and resources necessary to implement appropriate protective actions for the impacted permanent and transient plume EPZ population (including transit-dependent persons, special needs populations, handicapped persons and institutionalized persons).

This objective will be simulated by Kendall County.

19. This objective will not be demonstrated by Kendall County.
20. Demonstrate the organizational ability and resources necessary to control evacuation traffic flow and to control access to evacuated and sheltered areas.

Coordination between Kendall County agencies designated to provide traffic and access control will be exhibited in the Kendall County EOC. One traffic and access control post will be manned by the County Sheriff's Department during the exercise. The manning of the remaining posts will be simulated.

- 21-22. These objectives will not be demonstrated by Kendall County.

23. Demonstrate the adequacy of vehicles, equipment, procedures and personnel for transporting contaminated, injured or exposed individuals.

This objective will be demonstrated in conjunction with the Dresden Station medical drill schedule for later this year. Details will be provided to FEMA at a later date.

24. Demonstrate the adequacy of medical facilities equipment, procedures and personnel for handling contaminated, injured or exposed individuals.

This objective will be demonstrated in conjunction with the Dresden Station medical drill scheduled for later this year. Details will be provided to FEMA at a later date.

- 25-32. These objectives will not be demonstrated by Kendall County.

33. Demonstrate the ability to implement appropriate measures for controlled re-entry and recovery.

Kendall County will implement re-entry procedures upon direction from the State EOC and with the assistance of IDNS. These procedures will be carried out under the provisions of 2-SOP-11, "Dresden Station EPZ Re-entry", and Annex 3A of the IPRA-Dresden.

- 34-36. These objectives will not be demonstrated by Kendall County.

WILL COUNTY OBJECTIVES  
FOR THE  
DRESDEN NUCLEAR POWER PLANT EXERCISE  
NOVEMBER 1, 1989

1. Demonstrate the ability to monitor, understand and use emergency classification levels (ECL) through the appropriate implementation of emergency functions and activities corresponding to ECLs as required by the scenario. The four ECLs are: Notification of unusual event, alert, site area emergency and general emergency.

This objective will be demonstrated by Will County through the implementation of procedures at each ECL.

2. Demonstrate the ability to fully alert, mobilize and activate personnel for both facility and field-based emergency functions.

Will County will fully activate the Will County EOC in Joliet, Illinois. The County will implement notification procedures as defined in IPRA-Dresden.

3. Demonstrate the ability to direct, coordinate and control emergency activities.

Decision making will be demonstrated at the State EOC and the Will County EOC. Coordination of decisions and emergency activities will be demonstrated between Will County, the State EOC and the JPIC, and between the County and the municipalities within the EPZ.

4. Demonstrate the ability to communicate with all appropriate locations, organizations and field personnel.

Will County will use NARS, commercial telephone, radio and telefax to communicate with departments and agencies at other locations. Field personnel will be contacted by commercial telephone and radio.

5. Demonstrate the adequacy of facilities, equipment, displays and other materials to support emergency operations.

This capability will be demonstrated in the Will County EOC through the use of maps, status board and other displays as appropriate.

6. Demonstrate the ability to continuously monitor and control emergency worker exposure.

Will County will demonstrate this objective by close coordination with IDNS and timely dissemination and exchange of information within the County Dosimetry Control Officer network.

7-11. These objectives will not be demonstrated by Will County.

12. Demonstrate the ability to initially alert the public within the 10-mile EPZ and begin dissemination of an instructional message within 15 minutes of a decision by appropriate State and/or local official(s).

This objective will be fulfilled through the simulated activation of the Dresden Station EPZ Prompt Notification System as defined in IPRA-Dresden and 2-SOP-6, "Dresden Station EPZ Prompt Notification System". The ability to provide instructions to the public will be demonstrated through the simulated activation of the local Emergency Broadcast System (EBS) station.

13. Demonstrate the ability to coordinate the formulation and dissemination of accurate information and instructions to the public in a timely fashion after the initial alert and notification has occurred.

Will County will demonstrate this objective by using pre-scripted messages, as indicated in IPRA-Dresden and 2-SOP-8, "Dresden Station EPZ Sheltering and Evacuation - General Population", to develop the EBS messages. Broadcast of the EBS messages will be simulated.

14. Demonstrate the ability to brief the media in an accurate, coordinated and timely manner.

This capability will be demonstrated in the Will County News Media Briefing Location by the Will County Executive, or his designee, under the provisions outlined in the IPRA-Dresden, Annex 4A.

15. Demonstrate the ability to establish and operate rumor control in a coordinated and timely fashion.

The objective will be demonstrated by Will County through coordination between the County EOC, State EOC and the JPIC.

16. Demonstrate the ability to make the decision to recommend the use of KI to emergency workers and institutionalized persons, based on predetermined criteria, as well as to distribute and administer it once the decision is made, if necessitated by radioactive releases.

If notified by the State of Illinois to distribute and administer KI, Will County officials will discuss the issuance of KI to emergency workers and immobile populations, as a voluntary measure, and will notify the municipalities of the State's recommendation.

17. This objective will not be demonstrated by Will County.



18. Demonstrate the ability and resources necessary to implement appropriate protective actions for the impacted permanent and transient plume EPZ population (including transit-dependent persons, special needs populations, handicapped persons and institutionalized persons).

This objective will be simulated by Will County.

19. Demonstrate the ability and resources necessary to implement appropriate protective actions for school children within the plume EPZ.

Will County officials will demonstrate this capability by discussing the implementation of the pertinent SOPs and the inter-departmental coordination involved.

20. Demonstrate the organizational ability and resources necessary to control evacuation traffic flow and to control access to evacuated and sheltered areas.

Coordination between Will County agencies designated to provide traffic and access control will be exhibited in the Will County EOC. One traffic and access control post will be manned by the County Sheriff's Department during the exercise. The manning of the remaining posts will be simulated.

- 21-22. These objectives will not be demonstrated by Will County.

23. Demonstrate the adequacy of vehicles, equipment, procedures and personnel for transporting contaminated, injured or exposed individuals.

This objective was demonstrated in conjunction with the Braidwood Station medical drill conducted on May 25, 1989.

24. Demonstrate the adequacy of medical facilities equipment, procedures and personnel for handling contaminated, injured or exposed individuals.

This objective will be demonstrated in conjunction with the Dresden Station medical drill scheduled for later this year. Details will be provided to FEMA at a later date.

- 25-32. These objectives will not be demonstrated by Will County.

33. Demonstrate the ability to implement appropriate measures for controlled re-entry and recovery.

Will County will implement re-entry procedures upon direction from the State EOC and with the assistance of IDNS. These procedures will be carried out under the provisions of 2-SOP-11, "Dresden Station EPZ Re-entry", and Annex 4A of the IPRA-Dresden.

- 34-36. These objectives will not be demonstrated by Will County.

ATTACHMENT 2

3.0 EXERCISE SCENARIO

NARRATIVE SUMMARY

Initial Conditions  
(0715-0740)

Unit 3 is shutdown for refueling and defueled with fuel handling in progress. Unit 2 is currently at 95% power and has been operating at high power levels for the last six (6) months. The weather has been unseasonably warm and storm warnings are in effect due to a predicted meeting of a warm front currently in the area and a large cold front from Canada. Severe thunderstorms have caused disruption of electrical service over a large area. The Load Dispatcher calls the Control Room to issue a Severe Storm Warning/Tornado Watch and requests that Unit 2 remain on line to help maintain system load.

At 0740 hours, a phone call is received in the Control Room by a Dresden employee who lives near Coal City (within five miles of the site) reporting a tornado sited just north of Coal City. He informs the Control Room that the tornado is headed north towards the plant.

Expected Actions

Precautionary measures should be started. Unit 2 should remain at power due to the Load Dispatcher's request.

Alert  
(0820-0940)

At 0820, a tornado touches down on the site in the contractor parking lot, crosses the management parking lot lifting a parked car and forcing it through the Security Fence (25' East of the Main Gate) and into the side of the Security Diesel Building. Damage occurs to a portion of the "E" field and double fence which requires Security Force actions and repairs to the fence. The car damages the wall of the Security Diesel Building. A fault which occurs on an incoming power line results in the loss of the Unit 2 Auxiliary Transformer 22 and subsequent automatic transfer of auxiliary power. The 2A Recirculation Pump is removed from operation as a result of low lube oil level and elevated bearing temperatures.

Expected Actions

The Control Room should declare an Alert due to a tornado touching down in a vital area. (EAL 6.0). Damage inspections should be initiated. Security Patrols should be established due to the loss of the "E" Field and damage to the fence. Repairs to the "E" Field and Security Fence should be started. Loss of Transformer 22 should be investigated and repairs initiated. Unit 2 will remain on line honoring the Load Dispatcher's request.

Site Emergency  
(0940-1055)

At 0930, in accordance with approved procedures, the speed of the operating Recirc. Pump is decreased to 43% which results in reactor core power oscillations. The reactivity oscillations are indicated by alternating (2-3 second period) LPRM HI-LO lights. The Control Room initiates a manual SCRAM in accordance with procedures. Rods fail to insert resulting in an ATWS condition. Operators should close the Control Rod Drive (CRD) System 2-0301-25 valve which allows rods to be slowly inserted. This stops the core oscillations but does not terminate the ATWS. The only operable CRD Pump fails preventing further rod insertion. Damage to fuel cladding occurs and Main Steam Line (MSL) radiation levels increase. At 1055, MSL rad levels have exceeded three times the normal level which results in a Group I Isolation and the Main Steam Isolation Valve (MSIV) closure.

Expected Actions

The Control Room should initiate a Manual SCRAM due to the reactivity oscillations. A Site Emergency should be declared due to the ATWS (EAL 3.k). CRD Pump repairs should be initiated. Proper procedural actions should be taken in response to the closure of the MSIVs due to high radiation.

General Emergency  
(1055-1300)

The pressure transient and power spike cause additional fuel damage. Reactor pressure increases, safety valves lift and quickly reseat resulting in steam and primary system radioactivity being released in Primary Containment. When reactor pressure has been greater than 1070 psig for 25 seconds, the Isolation Condenser initiates. Primary Containment radiation levels, pressure, and temperature start to increase along with Torus temperature. By 1100, Containment Radiation levels exceed 2000 R/hr. Torus temperature continues to increase which requires the injection of Standby Liquid Control (SLC).

At approximately 1130, the Isolation Condenser develops a tube bundle break and a Hi Radiation alarm is received from the Isolation Condenser Vent Radiation Monitor. A Group 5 isolation signal is received but does not complete an isolation of all the Isolation Condenser Valves. If Operators attempt to close the Isolation Condenser Steam Inlet Valves, the valves do not close due to the tube break causing high differential pressure across the Motor Operated Valves. A discharge to the environs occurs which results in offsite doses at the State of Illinois Rueter Stokes Monitors of approximately 750 mR/hr. In addition, the TSC will experience elevated radiation levels due to shine from the radiation released from the Isolation Condenser, as well as radiation friskers alarming on high background. A worker returning from work on the CRD pump will be contaminated by a hot particle upon returning to the OSC.

If SLC is injected and control rods are inserted after CRD Pump repairs are completed, reactor power and pressure decrease. When reactor pressure decreases sufficiently, the differential pressure across the Isolation Condenser isolation valves is decreased allowing the isolation valves to be closed, terminating the release of radioactivity to the environment.

#### Expected Actions

A General Emergency should be declared due to high containment radiation level (EAL 2 "r"). SBLC will be injected due to failure of the control rods to insert. Protective Action Recommendations recommending evacuation out to at least five miles should be made to the State. Actions to close the Isolation Condenser Isolation Valves should be started but will not be successful. Radiation controls will need to be implemented for work on the Isolation Condenser valves and CRD pump. Environs Field Teams will be sent to measure the plume. Estimates of radioactivity source terms will be made from Field Team results. Special evaluation should be made of the TSC habitability and the contaminated worker should be decontaminated. Standby Liquid injection is completed and the reactor is shutdown.

#### Recovery Phase (1300-1500)

A twenty-four (24) hour time jump occurs at 1300. All necessary work to maintain the reactor in cold shutdown has occurred. Surveys of the on-site and offsite environs have been taken with results showing fairly high Iodine 131 contamination on-site but only minimal contamination offsite. Containment rad levels have decreased dramatically but are still above the level allowing for recovery. Containment air and reactor water samples have been obtained and analyzed for radioactivity.

#### Expected Actions

Determination if conditions warrant recovery and planning for Recovery Phase work should take place. Clean up of on-site contamination from the Isolation Condenser tube break should be given priority. Core damage assessments should be made based on the reactor water sample results. Evaluation should be made as to whether the containment should be vented to reduce radiation levels to allow entry into recovery or to wait for decay to reduce containment radiation levels.

ILLINOIS ESDA/DNS  
CONTROLLER INFORMATION  
DRILL SCENARIO

<u>EVENT</u>	<u>REAL TIME</u>	<u>MESSAGE FOR/FROM</u>	<u>MESSAGE</u>	<u>ANTICIPATED RESPONSE</u>
ALERT	0820	IESDA Disp./ CECo	An ALERT has been declared at the Dresden Station.	<p>IESDA and IDNS Dispatchers receive notification of the ALERT. IESDA Dispatcher verifies the NARS message.</p> <p>IDNS Dispatcher simulates activation of the IDNS response team.</p> <p>IDNS Duty Officer contacts the Dresden Station Shift Engineer.</p> <p>IESDA Dispatcher notifies IESDA personnel of the ALERT per SOP.</p> <p>IDNS Duty Officer provides an incident narrative to the IESDA Dispatcher.</p> <p>IESDA Dispatcher notifies Grundy, Kendall and Will Counties of the ALERT.</p> <p>County dispatchers complete and verify the NARS message.</p> <p>IESDA notifies Governor's office of the ALERT (simulated).</p> <p>IESDA Dispatcher notifies appropriate State agencies of the ALERT.</p> <p>IESDA notifies FEMA of the ALERT.</p> <p>County Dispatcher notifies key County officials and municipalities of the ALERT per SOP.</p>

ILLINOIS ESDA/DNS  
CONTROLLER INFORMATION  
DRILL SCENARIO

<u>EVENT</u>	<u>REAL TIME</u>	<u>MESSAGE FOR/FROM</u>	<u>MESSAGE</u>	<u>ANTICIPATED RESPONSE</u>
SITE AREA EMERGENCY	0940	IESDA Disp./ CECo	A SITE AREA EMERGENCY has been declared at the Dresden Station.	<p>Municipalities complete and verify the NARS message.</p> <p>Municipalities notify key officials of the ALERT per SOP.</p> <p>IESDA and IDNS receive notification of the SITE AREA EMERGENCY. IESDA Dispatcher verifies the NARS message.</p> <p>IDNS Duty Officer contacts the Dresden Station Shift Engineer.</p> <p>IDNS Duty Officer notifies the SEOC with an incident narrative.</p> <p>IESDA notifies the Governor's Office and requests that a representative report to the SEOC (simulated).</p> <p>IESDA Dispatcher notifies Grundy, Kendall and Will counties of the SITE AREA EMERGENCY.</p> <p>County dispatchers complete and verify the NARS message.</p> <p>IESDA dispatches liaisons to the County EOCs, EOF and JPIC.</p> <p>IESDA notifies FEMA of conditions.</p>

ILLINOIS ESDA/DNS  
CONTROLLER INFORMATION  
DRILL SCENARIO

<u>EVENT</u>	<u>REAL TIME</u>	<u>MESSAGE FOR/FROM</u>	<u>MESSAGE</u>	<u>ANTICIPATED RESPONSE</u>
				IESDA notifies State agencies: <ul style="list-style-type: none"><li>- Illinois State Police</li><li>- IDOT/Division of Highways</li><li>- IDOC</li><li>- Illinois National Guard</li><li>- ICC</li><li>- American Red Cross</li><li>- IDPH</li></ul>
				IDNS simulates contacting Federal and State support agencies.
				IESDA simulates notifying non-reporting agencies: <ul style="list-style-type: none"><li>- Central Management Services</li><li>- Board of Education</li><li>- Dept. of Employment Security</li><li>- IDPA</li><li>- Corps of Engineers</li></ul>
				REAC provides an update to the SEOC Liaison and County EOC Liaisons.
				REAC provides an update to the IDNS PIO.
				IESDA activates the State Forward Command Post: <ul style="list-style-type: none"><li>- IESDA</li><li>- ISP</li><li>- IDOT</li><li>- IDOC</li></ul>
				County Dispatchers notify County officials and municipalities of the SITE AREA EMERGENCY per SOP.

ILLINOIS ESDA/DNS  
CONTROLLER INFORMATION  
DRILL SCENARIO

<u>EVENT</u>	<u>REAL TIME</u>	<u>MESSAGE FOR/FROM</u>	<u>MESSAGE</u>	<u>ANTICIPATED RESPONSE</u>
GENERAL EMERGENCY	1055	IESDA Disp./ CECo	A GENERAL EMERGENCY has declared at the Dresden Station. Protective actions are recommended.	<p>County officials report to the EOCs.</p> <p>Municipal dispatchers complete and verify the NARS message.</p> <p>Municipal dispatchers notify officials to report to the EOC per SOP.</p> <p>Dosimetry is issued to emergency personnel, EOC staffs and exposure records are completed.</p> <p>IESDA and IDNS receive notification of the GENERAL EMERGENCY. IESDA verifies the NARS message.</p> <p>REAC and the SEOC evaluate the protective action recommendations.</p> <p>A recommendation is made to the Governor. The Governor recommends that protective actions be implemented.</p> <p>SEOC staff is advised of the GENERAL EMERGENCY.</p> <p>IESDA notifies Grundy, Kendall and Will counties of the GENERAL EMERGENCY and the recommended protective actions.</p> <p>County dispatchers complete and verify the NARS message.</p>



ILLINOIS ESDA/DNS  
CONTROLLER INFORMATION  
DRILL SCENARIO

<u>EVENT</u>	<u>REAL TIME</u>	<u>MESSAGE FOR/FROM</u>	<u>MESSAGE</u>	<u>ANTICIPATED RESPONSE</u>
				IESDA advises the County Liaisons of the GENERAL EMERGENCY and to prepare for sheltering evacuees.
				REAC provides an update to the IDNS PIO.
				REAC provides an update to the SEOC Liaison and County EOC Liaisons.
				County Dispatchers notify EOC officials and municipalities of the GENERAL EMERGENCY and the recommended protective actions per SOP.
				Municipalities complete and verify the NARS message.
				Counties sound sirens, activate EBS and implement traffic and access control per SOPs, as applicable.
				IESDA notifies the State Forward Command Post of the GENERAL EMERGENCY.
				IESDA notifies FEMA of the GENERAL EMERGENCY.
				IESDA simulates updating non-reporting agencies.

ILLINOIS ESDA/DNS  
CONTROLLER INFORMATION  
DRILL SCENARIO

<u>EVENT</u>	<u>REAL TIME</u>	<u>MESSAGE FOR/FROM</u>	<u>MESSAGE</u>	<u>ANTICIPATED RESPONSE</u>
GENERAL EMERGENCY (continued) A release is occurring.	1130	IESDA Disp./ CECO	A RELEASE is occurring from Dresden Station. Protective action recommendations are upgraded due to a wind shift.	IESDA and IDNS receive notification that a release is occurring. IESDA verifies NARS message.  REAC advises the SEOC that REAC confirms that a release is occurring.  REAC and SEOC jointly concur with the upgrade in protective action recommendations.  A recommendation is made to the Governor. The Governor recommends that protective actions be upgraded.  SEOC staff is advised that a release is occurring.  IESDA notifies Grundy, Kendall and Will counties of the release and the upgraded protective action recommendations.  County dispatchers complete and verify the NARS message.  IESDA advises the County liaisons to prepare for sheltering additional evacuees.  REAC provides an update to the IDNS PIO.  REAC provides an update to the SEOC liaison and County EOC liaisons.

ILLINOIS ESDA/DNS  
CONTROLLER INFORMATION  
DRILL SCENARIO

<u>EVENT</u>	<u>REAL TIME</u>	<u>MESSAGE FOR/FROM</u>	<u>MESSAGE</u>	<u>ANTICIPATED RESPONSE</u>
				County dispatchers notify EOC officials and municipalities of the release and the upgraded protective action recommendations per SOP.
				Municipalities complete and verify the NARS message.
				Counties sound sirens, activates EBS and implements traffic and access control per SOPs, as applicable.
				IESDA notifies the State Forward Command Post of the release and the upgraded protective actions.
				IESDA simulates updating non-reporting agencies.
				IESDA provides an update to FEMA.
ONSITE RECOVERY	1410	IESDA Disp./ CECo	Onsite Recovery commences at the Dresden Station.	IESDA and IDNS receive notification of onsite Recovery. IESDA verifies the NARS message.
RETURN OF THE PUBLIC	1415	SEOC/REAC	Evacuated area is safe for return of the public.	REAC notifies the SEOC that unrestricted re-entry is recommended.
				REAC provides an update to the IDNS PIO.
				REAC provides an update to the SEOC Liaison and County EOC Liaisons.

ILLINOIS ESDA/DNS  
CONTROLLER INFORMATION  
DRILL SCENARIO

<u>EVENT</u>	<u>REAL TIME</u>	<u>MESSAGE FOR/FROM</u>	<u>MESSAGE</u>	<u>ANTICIPATED RESPONSE</u>
				IESDA notifies the Grundy, Kendall and Will County dispatchers that re-entry operations are to commence.
				County dispatchers complete and verify the NARS message.
				IESDA notifies the County Liaisons of re-entry procedures.
				IESDA notifies the State Forward Command Post of the re-entry procedures.
				IESDA updates non-reporting agencies.
				IESDA notifies FEMA of the re-entry recommendation.
				County Dispatchers notify EOC officials and municipalities of the re-entry recommendation per SOP.
				Municipalities complete and verify the NARS message.
				County EOCs implement re-entry actions per SOP.
				County EOCs coordinate removal of traffic and access control posts around exclusion area.
				County ESDA Coordinators activate EBS to inform the public of re-entry.

ILLINOIS ESDA/DNS  
CONTROLLER INFORMATION  
DRILL SCENARIO

<u>EVENT</u>	<u>REAL TIME</u>	<u>MESSAGE FOR/FROM</u>	<u>MESSAGE</u>	<u>ANTICIPATED RESPONSE</u>
EXERCISE TERMINATED	After re-entry is complete.	SEOC	The exercise is terminated.	<p>County EOCs advise SEOC that re-entry is complete.</p> <p>SEOC terminates the exercise and informs the SEOC Staff.</p> <p>IESDA informs Grundy, Kendall and Will County dispatchers of the termination of the exercise.</p> <p>County dispatchers complete and verify the NARS message.</p> <p>County Dispatchers notify EOC and municipalities of the termination of the exercise per SOP.</p> <p>Municipalities complete and verify NARS message.</p> <p>REAC provides an update to the IDNS PIO.</p> <p>REAC provides an update to the SEOC Liaison and County EOC Liaisons.</p> <p>IESDA notifies the County Liaisons that the exercise is terminated.</p> <p>IESDA notifies the State Forward Command Post that the exercise is terminated.</p> <p>IESDA notifies all other locations that the exercise is terminated.</p>

TIME LINE FOR ACTUAL EVENTS

ACTION	ONSITE	STATE	GRUNDY Co.	WILL Co.	KENDALL Co.	NOTES
ALERT		N/A	0910	0916	0916	Clock tower was not synchronized
SITE AREA EMERGENCY		N/A	1010	1015	1010	
DAIRY ADVISORY PAR#1		N/A	1025	1025	1025	
GOV. DECLARES STATE OF EMERGENCY		N/A	N/A	N/A	N/A	
GENERAL EMERGENCY		N/A	1132	1137	1132	
PAR # 2		N/A	1104	1111	1104	
SIRENS ACTIVATED #1 SAE		N/A	1025	1025	1025	
EBS # 1		N/A	1025	1025	1025	
SIRENS ACTIVATED #2 SAE PAR#2		N/A	1125	1125	1125	
EBS # 2		N/A	1125	1125	1125	
PAR # 3 GENERAL		N/A	1132	1137	1132	
SIRENS ACTIVATED #3		N/A	1150	1150	1150	
EBS # 3		N/A	1150	1150	1150	
KI TAKEN EMERGENCY WORKERS		N/A	1215	1208	1215	
PAR # 4 <i>Reid A</i>		N/A	1217	1221	1217	
SIRENS ACTIVATED # 4		N/A	1230	1231	1230	
EBS # 4		N/A	1230	1232	1230	
PAR # 5 REENTRY		N/A	1414	1414	1414	
EBS # 5 REENTRY		N/A	1425	1440	1415	