

AUG 30 1985

*54-146*  
Docket No. 50-237  
Docket No. 50-249

Commonwealth Edison Company  
ATTN: Mr. Cordell Reed  
Vice President  
Post Office Box 767  
Chicago, IL 60690

Gentlemen:

We have received the enclosed Federal Emergency Management Agency (FEMA) letter dated August 6, 1985, and associated final exercise evaluations on the offsite emergency preparedness exercise conducted on April 23, 1985. This was a partial-participation exercise for the State of Illinois, and a full-participation exercise for the Counties of Grundy, Kendall, and Will. This final exercise evaluation lists several recommendations (which are referred to in the FEMA letter and attachments as deficiencies) regarding the offsite emergency response plans for the area around the Dresden Nuclear Generating Station.

Based on the performance of the offsite agencies during the exercise, FEMA did not identify any deficiencies affecting public health and safety in the event of an accident at the Dresden Nuclear Generating Station. As a result, the approval under FEMA Rule 44 CFR 350 will remain in effect.

We fully recognize that the recommendations to be implemented may involve actions by other parties and political institutions which are not under your direct control. Nonetheless, we would expect the subject of offsite preparedness for the area around the Dresden Nuclear Generating Station to be addressed by you as well as others.

In accordance with 10 CFR 2.790 of the Commission's regulations, a copy of this letter and the enclosure will be placed in the NRC's Public Document Room.

Sincerely,

W. D. Shafer, Chief  
Emergency Preparedness and  
Radiological Protection Branch

Enclosure: Ltr dtd  
August 6, 1985

See Attached List For Distribution

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AUG 30 1985

Distribution

cc w/enclosure:

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# Federal Emergency Management Agency

Washington, D.C. 20472

AUG 6 1985

MEMORANDUM FOR: Edward L. Jordan  
Director  
Division of Emergency Preparedness  
and Engineering Response  
Office of Inspection and Enforcement  
U.S. Nuclear Regulatory Commission

FROM: *Richard W. Krimm*  
Richard W. Krimm  
Assistant Associate Director  
Office of Natural and Technological  
Hazards Programs

SUBJECT: Exercise Report of the April 23, 1985, Exercise of the Offsite  
Radiological Emergency Preparedness Plans for the Dresden  
Nuclear Power Station

Attached are two copies of the Exercise Report of the April 23, 1985, joint exercise of the offsite radiological emergency preparedness plans for the Dresden Nuclear Power Station. This exercise was partial participation for the State of Illinois and full-participation for Grundy, Kendall and Will Counties. The report dated June 24, 1985, was prepared by Region V of the Federal Emergency Management Agency (FEMA).

Although there were deficiencies observed at the exercise, they did not detract from the overall demonstrated capability to protect the health and safety of the public. The State is preparing a schedule of corrective actions. As soon as they are received, we will send you a copy. However, since there were no identified impediments to protecting the public during the exercise, the approval under FEMA Rule 44 CFR 350 will remain in effect.

If you have any questions, please contact Mr. Robert S. Wilkerson, Chief, Technological Hazards Division, at 646-2861.

Attachments  
As Stated

~~85484742874~~

DRESDEN NUCLEAR POWER STATION  
COMMONWEALTH EDISON COMPANY  
JOINT EXERCISE

Facility Location: Located in the State of Illinois, Grundy County Mail Station, Morris, Illinois.

Exercise Date: April 23, 1985

Date of Report: June 24, 1985

Participants: State of Illinois (partial); Grundy County (full) including Coal City and Minooka; Kendall County (full); Will County (full) including Braidwood, Channahon, Elwood, Joliet, Shorewood and Wilmington; and Commonwealth Edison Company.

Federal Emergency Management Agency  
Region V  
Natural and Technological Hazards Division  
Technological Hazards Branch  
300 South Wacker Drive  
Chicago, Illinois 60606

~~8508474287~~

55pp.



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## EXECUTIVE SUMMARY

### State of Illinois

This was a partial participation exercise for the State of Illinois. The State of Illinois demonstrated the ability to mobilize staff and activate facilities promptly at the State EOC in Springfield, Illinois but did not mobilize the JPIC staff.

The ability to make decisions and to coordinate emergency activities were demonstrated at the State EOC, Illinois Emergency Services and Disaster Agency (ESDA) Region V, Grundy, Kendall and Will Counties and the Joint Public Information Center (JPIC). Coordination between the JPIC and the Counties was inadequate.

The adequacy of facilities and displays to support emergency operations was demonstrated in the State EOC through the use of maps, status boards and other displays.

The State of Illinois demonstrated the ability to communicate with all appropriate locations, organizations and field personnel through the use of a variety of communication systems such as telefax, commercial telephone, radio, and teletype. Telephone availability at the JPIC was insufficient. The ability to identify the need for, request and obtain Federal assistance was demonstrated by the State of Illinois through TWX message traffic with FEMA.

The State demonstrated the ability to project dosage to the public via plume exposure based on plant and field data and to determine appropriate protective measures based on PAG's, available shelters, evacuation time estimates and other appropriate factors at the Illinois Department of Nuclear Safety (IDNS) Radiological Emergency Assessment Center (REAC). Protective action recommendations from the utility were reviewed and discussed by the State agencies in the State EOC before making recommendations to the Governor. The State properly recommended to the Counties that the outdoor warning system and EBS be activated twice to provide pertinent emergency information to the public on the shelter and evacuation protective action recommendations. The demonstration of ability to estimate total population exposure was simulated by IDNS. Policy and procedures were developed between IDNS and the State EOC staff to allow reentry to the evacuated area. Relaxation of protective actions were based on monitor data indicating safe levels of radiation.

The IDNS Public Information Officer (PIO) was very familiar with his subject and gave an outstanding explanation in response to questions concerning how the State came to recommend emergency workers take KI. The recovery and reentry news release was thorough.

Because prescribed news releases in the plan were not used, unnecessary time passed between changes in emergency classifications or protective actions and the release of this information at the JPIC. Some news releases issued to the media had important omissions. For example, the news release recommending evacuation defined the areas that were affected in terms of sectors rather than the familiar landmarks in the prescribed messages and evacuation routes were omitted entirely. In addition the PIO's almost never used the visual aids at their disposal. The JPIC facility itself remains an inadequate facility.

Although both the Plan and the objectives for this exercise contemplate that news releases will be prepared by the Governor's Press Office and released through the JPIC, all that was demonstrated was the preparation of releases by the JPIC. Moreover, only a token attempt was made by the JPIC to coordinate the information it released with that of the counties. Although all the JPIC releases were telefaxed to the Counties, only one news release was read by the ESDA PIO to Grundy County prior to release, and copies of the County releases never were obtained by JPIC staff.

#### Grundy County

The Grundy County EOC was activated after the Site Area Emergency notification was received. The EOC staff were notified by the County ESDA Coordinator, Sheriff dispatcher and Morris City Police dispatcher using a prepared call up list. The EOC was staffed by personnel knowledgeable of their duties. The ESDA Coordinator was designated by the County Board Chairman to be in charge of the EOC operation's room. He was very effective and was knowledgeable of the plan. Regular briefings were held and there were discussions with staff before decisions were made.

The facilities located in the basement of the Grundy County Courthouse were sufficient to support sustained operations. All the necessary amenities were available for use by the staff. The Communications system has the capability to communicate with all of the necessary support agencies located within the EPZ. The staff demonstrated professionalism in the use of the communication equipment.

The public alerting and activation of the EBS system was accomplished in a timely manner. The EOC staff initiated the appropriate protective actions during the course of the exercise. The ESDA Coordinator was the designated PIO and he had a press conference for local media in the County Board Room. He gave a update of all events and was very efficient in his presentation. The EOC staff implemented the proper procedures during the recovery and reentry phase of the exercise, which included a simulated message to the EBS station.

#### Coal City

The Coal City EOC was activated effectively by using a written call list to notify the participants. The Police Chief/ESDA Coordinator was designated to be in charge of the EOC operation and showed excellent leadership. The staff were knowledgeable of the duties they were to perform. The EOC had the necessary amenities to support the staff. The communications systems are adequate to support the EOC operations.

## Minooka

The police chief was effectively in charge of emergency operations and was knowledgeable of his duties. He was assisted by a trained staff. The facilities are spacious and contain the necessary amenities to support operations. Communications are adequate to support the activities of the EOC staff.

## Will County

Will County officials operated out of the alternate County EOC located in the County Courthouse Annex in downtown Joliet. The exercise play was simulated to indicate that conditions caused by flooding in the Plainfield area, where the primary EOC is situated, required the use of the alternate EOC location. During the exercise a Will County ESDA Coordinator was situated in the Plainfield Dispatch Center to accept incoming NARS messages for relaying to the alternate EOC and County municipalities.

The alternate EOC activation was effected upon receipt of the Site Area Emergency notification. Delays were experienced as a result of the initial notification procedure. Some individuals could not be contacted during the call out from the County Communications Center in Plainfield. Notification time was a contributing factor in the less than timely staffing at the alternate EOC for Will County. The ability to fully staff the EOC around the clock was not completely demonstrated.

There were eleven (11) agencies and organizations represented in the EOC in accordance with the plan. There was an effective demonstration of ability to make decisions and to coordinate emergency activities within the County EOC as demonstrated by the County Board Chairman, the Will County ESDA Coordinator and the EOC staff. There were periodic briefings held to update staff on the progress of the operation. The staff was actively involved in decisionmaking, with major decisions being made by the chief executives. The staff effectively reported on the progress of the operation as it pertained to their respective organizations.

The facilities and displays of the alternate EOC were demonstrated during this exercise. The operations room was expeditiously set-up, from an empty room to an operational EOC, in a minimum of time by County ESDA personnel. The EOC was complete with a sufficient number of telephones, tables, chairs, status boards, the required maps, etc. A flip chart was used to post message information and a status board was available to post significant events.

There was demonstration of the ability to communicate with all appropriate locations, organizations, and field personnel. The initial NARS messages were to the Plainfield EOC Dispatcher and relayed to the alternate EOC. All other communications was by telephone and two way radio. The County Sheriff's Mobile Communications Van was set-up and operational outside the alternate EOC during the exercise. In addition to the telephone, radio communications is permanently established between the State EOC and all county ESDA organizations including the Will County alternate EOC. The Will County alternate EOC was active in activating the Prompt Alert and Notification System.



There was simulation of an evacuation of the McKinley Woods Forest Preserve from the County EOC. The EOC representative of the County Forest Preserve Police reported that two Forest Preserve Police Patrols were evacuating individuals from the preserve, which is within the five mile EPZ of the utility. The patrols were reportedly canvassing the preserve and notifying individuals to evacuate the preserve and/or transporting individuals to areas of safety outside the EPZ.

There was a demonstration of the organizational ability and resources necessary to control access to an evacuated area. The activation of traffic control points were promptly ordered and initiated by the County Sheriff's Department and coordinated with the County Highway Department, who assisted by dispatching Highway Department vehicles with barricades.

There was a partial evacuation and return of 41 students from the Channahon Junior High School (Will County) to the Kankakee West High School (Kankakee County). The evacuation was via Will County School District bus which was escorted to the County line at Kankakee by a patrol of the Will County Sheriff's Department. The escort to the Kankakee reception/congregate care center was via a Sheriff squad car of the Kankakee County Sheriff's Department. The evacuation route was monitored by Civil Air Patrol personnel that flew the evacuation route via air plane and reported the progress of the evacuation along the route to the Will County Sheriff's Communications Van.

The relocation center was open at the Kankakee High School. The students were unloaded, monitored and registered by Red Cross staff and volunteers. At the relocation center in Kankakee a team from the Illinois Department of Nuclear Safety was set up and monitored all passengers of the bus prior to registration.

A press briefing room was set-up with telephones, desks, and an intercom system on the third floor of the alternate EOC. The County Public Information Officer provided a briefing for representatives from Dewitt and Clinton Counties (serving as the press). The briefing was accurate and complete and void of technical jargon for the understanding of the participants. The information released was consistent with the information coming from other spokespersons. The PIO in the EOC provided and/or received information from the JPIC throughout the exercise.

Under the leadership of the County Coordinator announcement was made to begin reentry. A discussion was held among the EOC staff on what could be expected as to environmental aspects in the evacuated area.

#### Braidwood

Activation and staffing of the EOC were completed 1 1/2 hours after the initial notification of the Site Area Emergency was received by the Braidwood dispatcher. The Water and Sewer Department, Streets and Alleys Department and the Mayor did not participate in the exercise. The ability to maintain around the clock emergency coordination and staffing was not demonstrated. The Emergency Coordinator effectively controlled the EOC operations, but he needs to delegate some of his responsibilities.



The facility was sufficient to conduct emergency operations, but since only one phone was in the emergency operations area it could slow operations. All maps and displays were posted and utilized. Communication between the Will County EOC and Braidwood EOC was by commercial phone. After the reentry and recovery notification from Will County it took 1/2 hour to get through to Will County to verify the message. Braidwood emergency operations provided support after notification of the evacuation bus breakdown. Coordination and assistance by Braidwood to support the evacuation was well done. No reentry and recovery operations were required based on the scenario.

#### Channahon

The activation of the EOC was timely. The receiving, logging and distributing of information was thorough. The facilities are adequate for the purpose intended and could be used for a extended period of time by a limited number of personnel. All roster and telephone lists were up to date and accurate.

The Coordinator took over control of the situation and directed the emergency response activities. A considerable amount of interaction among the participants occurred and the discussion often pointed out potential problems and possible solutions. Supplemental area and route alerting is performed by the Channahon Fire Department.

#### Elwood

Calls to activate the EOC are received in a private house which may not always be manned. The EOC is located in the fire station and in order to activate the EOC fire apparatus must be moved out doors. There is minimum of furniture available and maps and displays were available.

The message to activate the EOC arrived at 0703 and the Coordinator arrived at 0825. One of the first actions taken was to dispatch a vehicle with a system to perform supplemental route alerting in the community.

The facilities were only partially staffed and no discussion about around the clock staffing was conducted. This limited staffing was not conducive to a demonstration of decision making and coordination activities. There were only two telephones present, one of them being the emergency fire phone, the other a business phone. Communication to appropriate organizations were minimal. Call lists and appropriate telephone numbers were not present.

#### Joliet

Activation and staffing were not directly observed. However, a system was in place to promptly carry out these activities. The municipal police dispatch center provides 24-hour monitoring. Following notification and verification from the Will County Communications Center, the EOC was activated. An actual shift change was not observed, although a roster was present to demonstrate 24 hour staffing capabilities.

The EOC staff and management effectively demonstrated their capabilities in decision making and coordination of emergency activities. The staff was clearly involved in decision making, message-activity logs were maintained and access control was demonstrated.

The Joliet EOC was located in a multi-purpose municipal building. While small, the facility was adequate to support emergency operations. Appropriate maps and displays were posted and updated regularly.

The communications network operated effectively and contact with appropriate locations and organizations was maintained. All NARS messages were recorded on specified forms and messages were verified. The communication system was comprised of dedicated land lines with radio and regular landline back up. The heavy dependence on land lines could be a limiting factor if the lines went down during an emergency or if they could not support the peak demands.

Protective actions for sheltering were carried out for a portion of this community at the recommendation of the County ESDA staff. Protective actions including road blocks, rerouting local air traffic and putting school buses on stand-by were simulated. This municipality also has a program in place to manage the special needs of the mobility impaired that participate in the HEMATS transit program. The Joliet EOC demonstrated their ability to implement a controlled recovery with a table-top discussion. Planned actions were simulated and this phase was terminated by a simulated press briefing.

#### Shorewood

The Shorewood EOC was activated at the Site Area Emergency notification. The notification message was received from the County Communication Center by the Chief of Police who was the acting duty officer. Following verification, the village administration was contacted and he began the call out of EOC staff.

EOC managers demonstrated their ability to make decisions and to coordinate emergency activities. Message logs were maintained and information was distributed to appropriate participants. The Shorewood EOC is located in the City Municipal Building. The facilities and displays were adequate to support emergency operations.

The Communication system consisted of land lines for primary contacts and radios for back-up. During this exercise, the presence of some back up radios were simulated. Communication procedures were acceptable. Logs were maintained and major messages were posted. All NARS messages were recorded on a specified form and calls were verified.

#### Wilmington

Activation and Staffing of the EOC were completed within 1 1/4 hours after the initial notification of the Site Area Emergency was received by the Wilmington dispatcher. Although the dispatcher was incorrectly instructed to limit her calls to the mayor, ESDA Coordinator and Police Chief, she realized that she should follow her SOP's and completed notification under the SOP's. A message log was not maintained at the EOC.

The EOC was sufficient to conduct emergency operations, but since only one phone was in the emergency operations area, it could slow operations. All maps were posted but a message board with the emergency classification posted was not displayed until late in the exercise. Communication between the Wilmington EOC and the Will County EOC was by commercial phone. Due to the nature of the scenario it was not necessary to implement or support protective actions. No reentry and recovery operations were required based on the scenario.

#### Kendall County

The alert message was received by the Sheriff dispatcher from Illinois ESDA via commercial phone as the NARS instrument was malfunctioning at this time. The message was verified and the County ESDA Coordinator initiated activation procedures. An updated, written call list was used. All required department representatives, except the Red Cross, had reported to the EOC or were on standby at their operational base by 0643.

A complete shift change was not demonstrated. The County Board representative, as designated in the plan, was the person effectively in charge of and responsible for emergency operations. The County ESDA Coordinator functioned as Chief of Staff and directed emergency operations. Periodic briefing were held and the staff was involved in the decision making process. The County operations plan was available for reference and written check lists were used by department representatives. A log was kept of NARS messages but messages received over the fax machine were not logged. Messages were reproduced and distributed to the operations room staff.

The operations/communications rooms that comprise the EOC is adequate for the conduct of emergency operations by the Kendall County staff. The emergency operations level was posted. The status board is centrally located and was kept up to date with significant events. All necessary and required maps were displayed and posted with current operational conditions.

Kendall County has the necessary communications equipment in the EOC for the conduct of emergency operations with one notable exception. They have commercial telephone, Sheriff's radio, State police radio, State CB radio, local hospital and ambulance radio, home radio and a fax capability to the JPIC. The exception, there is no NARS extension in the EOC.

General Emergency notification was received at 0810 along with protective action recommendations for people were to take shelter, 0-2 miles in all sectors and 2 to 5 miles in sectors A, B and R. While these population protective actions did not apply to Kendall county they were notified by Grundy County that Grundy County would be activating the common siren system to alert their citizens living in the risk area. Kendall county officials activated the EBS system. At this time Kendall County Health Department notified USDA that dairy cattle in sectors A, B and R out to 10 miles should be placed on stored feed.

At 0848 a Nars message was received recommending shelter out to 10 miles in sectors A, B and R. Operations room staff reactivated the EBS station for broadcast of emergency information for citizens of Kendall County. Prescribed messages describing the area at risk in familiar terms were used for this process. The Lisbon/Seward Fire Department and the Sheriff's Department undertook supplemental route alerting. Again, prescribed messages were used. The County did demonstrate the ability to control access into a sheltered, risk area.

Space has been set aside on the second floor of the EOC building for media briefings. The procedures for recovery and reentry described in 2-SOP-11 were followed. The USDA was advised that feeding restrictions for dairy cattle had been removed, the highway department removed barricades and the EBS station was notified.

## EXERCISE REPORT

### Introduction

#### Exercise Background

This was the fifth joint exercise for the Illinois Emergency Services and Disaster Agency and the Counties of Grundy, Kendall and Will resulting from a simulated accident at the Dresden Nuclear Power Station. The first joint exercise was on October 28, 1980 and involved partial participation by the State of Illinois and full participation by Grundy, Kendall and Will Counties. The second joint exercise was on September 30, 1981 and involved partial participation by the State of Illinois and full participation by Grundy, Kendall, and Will Counties. The third joint exercise was on June 29-30, 1982 and involved partial participation by the State of Illinois and full participation by Grundy, Kendall and Will Counties. The fourth joint exercise was on September 15, 1983 and involved partial participation by the State of Illinois and full participation by Grundy, Kendall and Will Counties. This report addresses the most recent joint exercise for the Dresden Nuclear Power Station which was conducted on April 23, 1985.

#### Participating and Non-Participating State and Local Governments

The emergency planning zone (EPZ) of the Dresden Nuclear Power Station impacts on both of the States of Illinois and Indiana. The inhalation EPZ encompasses most of Grundy County and portions of Kendall and Will Counties. In addition to these areas, there are 19 counties, 2 in Indiana and 17 in Illinois, which are within the ingestion EPZ. These Counties, Lake and Newton in Indiana and Bureau, Cook, DeKalb, DuPage, Ford, Grundy, Iroquois, Kane, Kankakee, Kendall, Lee, Livingston, Marshall, McLean, Putnam, Will and Woodford in Illinois did not demonstrate the procedures for implementation of ingestion EPZ protective actions as this activity was beyond the scope of the exercise. This was a full participation exercise for Grundy, Kendall, and Will Counties and a partial participation exercise for the State of Illinois. This exercise was initiated during the period of midnight and 6:00 a.m. and continued into the normal day shift.

#### List of Evaluators

For this exercise, there was a total of thirteen (13) Federal evaluators observing off-site exercise activities. On-site activities were evaluated by a separate team from the Nuclear Regulatory Commission. Of the off-site evaluators, seven, including the off-site Exercise Evaluation Team Director, were FEMA Region V staff; six were contract evaluators from the Argonne National Laboratory (ANL). The evaluator assignments were as follows:



Off-site Exercise Evaluation Team Director  
Wallace Weaver, FEMA

State of Illinois Evaluation Team  
Dan Bement, Team Leader, FEMA  
Ed Tanzman, ANL

Grundy County Evaluation Team  
Ed Robinson, Team Leader, FEMA  
Bill Knoerzer, ANL  
Jerry Staroba, ANL

Will County Evaluation Team  
Gordon Wenger, Team Leader, FEMA  
Woodie Curtis, FEMA  
Walter O'Keefe, FEMA, Red Cross Representative  
Sue Ann Curtis, ANL  
Gordon Veerman, ANL  
John Tatar, ANL

Kendall County Evaluation Team  
Ray Kellogg, Team Leader, FEMA

#### Evaluation Criteria

The plans being evaluated by this exercise were developed using the "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants" (NUREG-0654/FEMA REP-1, Revision 1). Therefore, these criteria and the exercrit based on these criteria, "Modular Format for Uniformity of Radiological Emergency Preparedness Exercise Observations and Evaluation" dated June 1983, were used for exercise evaluation.

#### Exercise Objectives

Objectives for this exercise were selected from among the 35 standard objectives listed in Tab "M" of the "Modular Format for Uniformity of Radiological Emergency Preparedness Exercise Observations and Evaluations" dated June 1983. The objective numbers listed below correlate to Tab "M".

The State of Illinois selected the following twelve (12) objectives, including those applicable to the JPIC, to be demonstrated during the exercise.

1. Demonstrate ability to mobilize staff and activate facilities promptly.
3. Demonstrate ability to make decisions and to coordinate emergency activities.
4. Demonstrate adequacy of facilities and displays to support emergency operations.



5. Demonstrate the ability to communicate with all appropriate locations, organizations and field personnel.
10. Demonstrate ability to project dosage to the public via plume exposure based on plant and field data, and to determine appropriate protective measures based on PAGs, available shelters, evacuation time estimates and all other appropriate factors.
13. Demonstrate ability to alert the public with the 10-mile EPZ, and disseminate an initial instructional message, within 15 minutes.
14. Demonstrate ability to formulate and distribute appropriate instructions to the public, in a timely fashion.
24. Demonstrate ability to brief the media in a clear, accurate and timely manner.
25. Demonstrate ability to provide advance coordination of information released.
32. Demonstrate ability to identify need for, request and obtain Federal assistance.
34. Demonstrate ability to estimate total population exposure.
35. Demonstrate ability to determine and implement appropriate measures for controlled recovery and reentry.

Grundy County selected the following thirteen (13) objectives to be demonstrated during the exercise.

1. Demonstrate ability to mobilize staff and activate facilities promptly.
2. Demonstrate ability to fully staff facilities and maintain 24-hour staffing.
3. Demonstrate ability to make decisions and to coordinate emergency activities.
4. Demonstrate adequacy of facilities and displays to support emergency operations.
5. Demonstrate the ability to communicate with all appropriate locations, organizations and field personnel.
13. Demonstrate ability to alert the public within the 10-mile EPZ, and disseminate an initial instructional message, within 15 minutes.
14. Demonstrate ability to formulate and distribute appropriate instructions to the public in a timely fashion.

15. Demonstrate the organizational ability and resources necessary to manage an orderly evacuation of all or part of the plume EPZ.
17. Demonstrate the organizational ability and resources necessary to control access to an evacuated area.
19. Demonstrate the organizational ability and resources necessary to effect an orderly evacuation of schools within the plume EPZ.
24. Demonstrate ability to brief the media in a clear, accurate and timely manner.
25. Demonstrate ability to provide advance coordination of information released.
35. Demonstrate ability to determine and implement appropriate measures for controlled recovery and reentry.

Will County selected the following thirteen (13) objectives to be demonstrated during the exercise.

1. Demonstrate ability to mobilize staff and activate facilities promptly.
2. Demonstrate ability to fully staff facilities and maintain 24-hour staffing.
3. Demonstrate ability to make decisions and to coordinate emergency activities.
4. Demonstrate adequacy of facilities and displays to support emergency operations.
5. Demonstrate the ability to communicate with all appropriate locations, organizations and field personnel.
13. Demonstrate ability to alert the public within the 10-mile EPZ, and disseminate an initial instructional message, within 15 minutes.
14. Demonstrate ability to formulate and distribute appropriate instructions to the public in a timely fashion.
15. Demonstrate the organizational ability and resources necessary to manage an orderly evacuation of all or part of the plume EPZ.
17. Demonstrate the organizational ability and resources necessary to control access to an evacuated area.
19. Demonstrate the organizational ability and resources necessary to effect an orderly evacuation of schools within the plume EPZ.

24. Demonstrate ability to brief the media in a clear, accurate and timely manner.
25. Demonstrate ability to provide advance coordination of information released.
35. Demonstrate ability to determine and implement appropriate measures for controlled recovery and reentry.

Kendall County selected the following ten (10) objectives to be demonstrated during the exercise.

1. Demonstrate ability to mobilize staff and activate facilities promptly.
2. Demonstrate ability to fully staff facilities and maintain 24 hour staffing.
3. Demonstrate ability to make decisions and to coordinate emergency activities.
4. Demonstrate adequacy of facilities and displays to support emergency operations.
5. Demonstrate the ability to communicate with all appropriate locations, organizations and field personnel.
13. Demonstrate ability to alert the public within the 10-mile EPZ, and disseminate an initial instructional message, within 15 minutes.
14. Demonstrate ability to formulate and distribute appropriate instructions to the public in a timely fashion.
24. Demonstrate ability to brief the media in a clear, accurate and timely manner.
25. Demonstrate ability to provide advance coordination of information released.
35. Demonstrate ability to determine and implement appropriate measures for controlled recovery and reentry.

#### Summary of Scenario

The events in the 1985 Dresden exercise scenario will be driven mainly by saboteurs within the station.

Unit 2 will be shut down after being at 100% power for eight (8) consecutive months. The spent fuel from Unit 2 will have just been transferred to the fuel pool. Unit 3's diesel generator will be out of service for the annual diesel generator inspection and the 5 year, 18,000 hour diesel generator inspection.

The Unusual Event will be declared due to a contaminated injured person requiring transport to an offsite medical facility. The injured person will have been found unconscious with a laceration to his head. When the injured person regains consciousness, he will indicate that he was injured by receiving a blow to the head from an intruder. Also, ongoing throughout the Unusual Event will be a resin intrusion on Unit 3. This will be indicated by conductivity increases and MWe decreases.

The Alert again will be caused by a saboteur. There will be a loss of all annunciators on Panels 902(3)-3 and Panel 902(3)-5 for greater than 30 minutes. The loss will be caused by the saboteurs cutting the panel's power cables in the Auxillary Electric Room. The plant personnel will not discover that it was an act of sabotage until about 15 minutes before the Site Area Emergency.

The Site Area Emergency will be declared when the Unit 3 main transformers are knocked out and the diesel generator 2/3 fails to start. Again, the failures will be caused by the saboteurs. The current transformer wires to the differential relays will be cut, causing the transformer trip. The Diesel Generator 2/3 will fail to start because the air start lines have been cut and the air start solenoid has been smashed. Also, HPCI will fail to initiate, thus, requiring the reactor to be cooled down using the iso-condenser. The HPCI will fail to start due to a breaker trip on 2301-3 valve.

The General Emergency will be initiated by an explosive device detonating in the Spent Fuel Pool. This will cause a spike release through Standby Gas Treatment and the EAL for release rates will be exceeded. The release rate will reach a peak of 3.0 uCi/sec and then begin to taper off through the end of the exercise.

There will be a two week time jump so that the Recovery Phase can begin. At 1300, exercise terminated.

During the exercise, there was a sub-scenario which was to be implemented to demonstrate the ability of local government to provide for the limited evacuation of school children. The purpose of this event is to demonstrate the ability of the County and of the municipality to identify, notify and evacuate schools in the affected sectors. Sometime after the General Emergency is announced, Will County and the Village of Channahon will be notified that they are to evacuate a representative school in their section of the EPZ. They will be told that for safety reasons students should be transported out of the EPZ and sheltered at a relocation center.

A representative school in Channahon is being utilized to demonstrate the evacuation of students. They will be picked up by school district buses and transported to a shelter at Kankakee High School. The shelter will be managed by Red Cross personnel and supported by Kankakee County ESDA. The operation is being controlled by controller in the Will County EOC, Channahon EOC and field persons assigned to follow the evacuation.

The actual scenario events followed the pre-exercise scenario, although there were some time delays early during the exercise. The Unusual Event was declared at 0425, the Alert at 0506, the Site Area Emergency at 0627 and the General Emergency at 0807. The two week time jump initiating recovery/reentry activities occurred at 1111. The simulated accident at the Dresden Nuclear Power Station necessitated protective action recommendation "sheltering" (0815), protective action recommendation "evacuation" (0845), and the recommendation local emergency workers take potassium iodide (0845).

#### State and Local Resources Planned to be Used in the Exercise

The State of Illinois planned to use the State EOC in Springfield, the State Radiological Emergency Assessment Center in Springfield and the Joint Public Information Center in Mazon. The also planned to use the necessary communications systems to conduct emergency operations.

Grundty County planned to demonstrate its EOC facilities, emergency response staff and communications systems. The County also chose to demonstrate its capability (simulated) to activate the Prompt Alert and Notification Systems, access control and evacuation of a part of the plume EPZ and demonstrate the capability to brief the news media at the County news media location in the County Building. The County also chose to activate the EOCs at Coal City and Minooka.

Will County planned to demonstrate its alternate EOC facilities, emergency response staff and communications systems. The County also chose to demonstrate its capability (simulated) to activate the Prompt Alert and Notification Systems, access control and evacuation of school children to the city of Kankakee and demonstrate the capability to brief the news media at the County news media location in the alternate EOC. The County also chose to activate the EOCs at Joliet, Elwood, Braidwood, Wilmington, Channahon and Shorewood.

Kendall County planned to demonstrate its EOC facilities, emergency response staff and communications systems. The County also chose to activate the necessary personnel for access control and to evacuate part of the plume EPZ if necessary.

#### Deficiencies Noted in Past Exercises which Persist

There were no significant deficiencies identified during the evaluation of the September 14, 1983 joint exercise for the Dresden Nuclear Power Station. However, there were twenty-two (22) other deficiencies identified during that exercise. These twenty-two (22) deficiencies were reviewed during this exercise evaluation to determine that the appropriate corrective actions have been implemented. The results of this review are discussed below. None of the deficiencies noted below seriously affect the governmental jurisdictions' capability related to public health and safety.



Of the twenty-two (22) other deficiencies noted above the four (4) assigned to the State of Illinois were adequately corrected, the four (4) assigned to Grundy County were adequately corrected, four (4) of seven (7) assigned to Kendall County were adequately corrected and six (6) of seven (7) assigned to Will County were adequately corrected. Of the four (4) other deficiencies not adequately corrected, all were partially corrected and the remaining areas for improvement are reflected in the category B deficiencies discussed later in this report.

#### Exercise Objectives Still to be Effectively Achieved

Because of the deficiencies noted elsewhere in this report, the following exercise objectives were not completely demonstrated. Appropriate action will be required to correct the exercise deficiencies and these objectives must be successfully demonstrated during the next radiological emergency preparedness exercise for the Dresden Nuclear Power Station.

The State of Illinois did not completely demonstrate the following two objectives:

24. Demonstrate ability to brief the media in a clear, accurate and timely manner.
25. Demonstrate ability to provide advance coordination of information released.

Will County did not completely demonstrate the following two objectives:

1. Demonstrate ability to mobilize staff and activate facilities promptly.
2. Demonstrate ability to fully staff facilities and maintain 24-hour staffing.

Kendall County did not completely demonstrate the following four objectives:

2. Demonstrate ability to fully staff facilities and maintain 24-hour staffing.
5. Demonstrate the ability to communicate with all appropriate locations, organizations and field personnel.
24. Demonstrate ability to brief the media in a clear, accurate and timely manner.
25. Demonstrate ability to provide advance coordination of information released.



## Narrative

### State of Illinois

#### Activation and Staffing

The April 23, 1985 exercise of the Dresden Nuclear Power Station was the fifth such exercise under NUREG-0654 in which the State of Illinois participated. This was a partial participation exercise for the State of Illinois. The Illinois Emergency Services and Disaster Agency (IESDA) and the Illinois Department of Nuclear Safety (IDNS) activated and staffed facilities sufficient to support the emergency response being demonstrated by the Counties.

The IDNS did demonstrate staff alerting and mobilization for the personnel assigned to simulate the functions of the Radiological Emergency Assessment Center (REAC) in Springfield. The ESDA had intended to demonstrate its ability to mobilize its staff and activate facilities upon receipt of the appropriate utility notification.

Staff mobilization and activation of facilities have been evaluated and successfully demonstrated on numerous occasions during previous exercises within the State of Illinois. For this exercise, all of the designated emergency response functions were staffed and the personnel who did participate in the exercise at the State EOC and the REAC capably supported the local governmental units who were participating fully in the exercise.

#### Emergency Operations Management

Emergency operations management was satisfactory for the level of participation. The Illinois ESDA Director was effectively in charge of the overall emergency response effort of the EOC staff.

The State Director held briefings and kept staff current on happenings. Information was exchanged and procedures were effectively implemented. The staff participated in decision-making. The site-specific plans were available and referred to on occasion. Message logs were kept and distributed to EOC staff. Message handling was efficient. A simulated request for Federal assistance from FEMA (mobile communications equipment) was prepared and sent to FEMA Region V. The Region responded, using messages simulating the assistance requested.

The Unusual Event classification was received at 0425, the Alert at 0506, the Site Area Emergency at 0627 and the General Emergency at 0807. Protective action (shelter in place) was ordered at 0815 and upgraded (evacuate) at 0845. The recommendation to activate the Prompt Alert and Notification System was made using the Nuclear Accident Reporting System (NARS) at 0815 and again at 0845.

The State of Illinois is currently revising the NARS form. It is suggested consideration be given to sequentially numbering the messages produced for quick reference and accountability and modifying the box designators from a letter to possibly a number to reduce confusion, especially in #8 wind direction data and #9 recommended protective actions.

#### Facilities

The State EOC is functional for directing emergency operations. Furniture, space, lighting, communications equipment are exceptional. Noise levels are acceptable. Accommodations are present to house operations personnel for an extended period. Emergency power capability is present but was not activated during this exercise. Emergency classification levels were posted.

Status boards were kept current and have high visibility. The required maps are present and are used during full participation exercises.

The function of the REAC was being simulated during this exercise and the facilities were not fully activated and staffed. Adequacy of the REAC facilities has been demonstrated and evaluated in conjunction with previous exercises within the State of Illinois.

#### Communications

Communications between the State EOC and other points were effective and efficient. Telephone (NARS and commercial) was the principal means of exchanging information. Hard copy capability exists between the EOC and the JPIC. Periodically, communications were interrupted between the State EOC and the Kendall County EOC on the NARS. This problem is addressed later in this report. Information exchange between ESDA and FEMA Region V was by teletype.

The NARS and commercial telephone lines utilized at the REAC functioned properly throughout the exercise. The capability for hard copy transmission of news releases and color graphics displays between the REAC and the JPIC should be considered to augment informational capabilities of the IDNS staff at the JPIC.

#### Dose Assessment and Protective Action Recommendation

As noted earlier in the report, the function of the REAC was being simulated during the exercise. Neither dose assessment nor protective action decision-making were to be demonstrated. Actions taken in Illinois were based on the pre-exercise scenario and the protective action recommendations of the utility. Recommendations for protective actions for the State of Illinois were accomplished in a timely fashion, always within fifteen minutes of the receipt of the utility recommendations. Although not a specific exercise objective, there was a recommendation for the use of potassium iodide for emergency workers and selected populations within the EPZ. This recommendation was based on the release of radioiodine and was consistent with the State plan. However it is recommended that the rationale for the use of potassium iodide be provided to the local governments along with the decision to utilize it.

## Public Alerting and Instruction

The role of the State EOC is to disseminate protective action recommendations from the REAC to local governments for implementation. Further, the State EOC recommends the activation of the Prompt Alert and Notification System by local governments. During this exercise, activation of the system was accomplished by use of the NARS for the sheltering recommendation at 0815 and the first evacuation recommendation at 0845.

## Protective Action

The protective action recommendations from the utility were reviewed and discussed by the State agencies represented in the ESDA Emergency Operations Center before making recommendations to the Governor's office. Activation of traffic control points were necessary as part of both the sheltering protective action recommendation (0-2 miles radius plus 2-5 miles in sectors R, A, and B) and the evacuation protective action recommendation (0-2 miles radius and 2-5 miles in sectors R, A, and B and sheltering in 5-10 miles radius in sectors R, A, and B).

Both the shelter recommendations and the evacuation recommendations placed milk producing animals on stored feed within a 10-mile radius of the Dresden Nuclear Power Station. Appropriate actions were ordered to control access to the area by road, air and water. Simulated assistance was requested from the Illinois National Guard and the Illinois State Police to relieve County personnel on access control duty. Twenty-four (24) helicopters were made available by the National guard and 150 sets of protective clothing were relocated to the Joliet National Guard Armory (simulated). The State EOC staff was kept informed on the status of the simulated evacuation and the demonstrated evacuation involving 42 grade school (5th) and two teachers from the Channahon Elementary School to the Kankakee High School.

## Radiological Exposure Control

Since the Springfield EOC and the REAC are not within the 10-mile EPZ and the forward command post and radiological field monitoring teams were not activated, radiological exposure control was not an objective for the State of Illinois during the exercise.

## Media Relations

The initial activation of the JPIC was not demonstrated during the exercise. The IESDA and IDNS PIOs were prepositioned having arrived from Springfield the previous night. The State PIOs had only the clerical support that was provided by the utility, although they stated there would be a secretary assigned. The JPIC was set up in advance, with telephones, slide projector and press kits in place prior to the activation of the JPIC. Activation of the JPIC and its personnel should be demonstrated at the next exercise. The JPIC staff from ESDA and IDNS need training in their

responsibilities. There was no routine coordination of news releases with the Counties EOCs before they were issued. The news releases did not discuss recommended protective actions in terms of geographic boundaries (2-SOP-8) instead they were given in terms of sectors which the public would not understand. When questioned about this, the ESDA PIO responded that citizens could determine whether they were included in the plume by consulting the public information brochure map. There were some other areas that showed a lack of training such as: (1) from 0830 to 0900, the IESDA PIO could not provide the telephone number for persons to use when in need of assistance, (2) at 0905, the IESDA PIO stated the reason police were setting up traffic control points was to prevent looting and sightseeing. He never mentioned that a major purpose was to effectuate a school evacuation and did not know the evacuation routes except what is in the public information brochure, and (3) the IESDA PIO stated at 1032 that ESDA had a list of all people who had evacuated, and then had to retract the statement.

The facility used for the JPIC had furniture to accommodate sixty (60) reporters but lacked space, supplies and other amenities. The room was extremely noisy due to the ventilation system which had to be turned off during the briefings and the interference from a transformer made it difficult to hear the PIOs, even with the use of a PA system and the ventilation system turned off. There is insufficient space for the PIOs to have private areas to work. During the exercise, the PIO's used space in the EOF as their private office, however, in a real accident, the space would be used by other State personnel.

The communications system at the JPIC was not sufficient to sustain the operation. The ESDA and IDNS PIO's had no principal telephones, although they had two (2) phone lines available to maintain contact with other agencies. In a real accident these phone lines would be used by the State liaison team assigned to the EOF. Another serious problem was the excessive time lag between changes in emergency classifications and when the announcements occurred in the JPIC. Over one hour passed between the classification of Site Area Emergency and its announcement in the JPIC; eighteen (18) minutes at General Emergency; and twenty-three (23) minutes when the Governor advised to evacuate.

The informational functions demonstrated at the JPIC by ESDA and IDNS personnel barely met the need. Good media kits were available, briefings were sufficiently frequent through most of the exercise, and the briefings generally avoided technical jargon. The PIOs exchanged information before starting briefings. Copies of releases from the JPIC were available promptly, although none of the releases from other locations were made available. The IDNS PIO knew his subject thoroughly and gave good, simple explanations of such difficult issues as why KI is administered. However, two important areas need improvement. First, the ESDA PIO made a number of mis-statements and, on other occasions, failed to provide complete information. For example, the evacuation routes out of



the protected areas were not announced and, when pressed, the ESDA PIO referred only to the very general routes listed in the public information brochure. Second, neither PIO used visual aids effectively. Only one map was used and it was inappropriate for a number of the briefings. For example, a map showing the plume would have been of great benefit but was never displayed.

The public instructions that came from the JPIC were not well done. Rather than use the pre-scripted messages in the plan, the releases in the JPIC were made up from scratch and omitted important information. For example, the sheltering message did not instruct people to go to their basements. Similarly, the evacuation message ignored references to the designated evacuation routes, and identified the evacuated areas in terms of sectors, rather than by boundaries that could easily be understood. These omissions could have been particularly damaging if the County PIO's release information that appeared to be different, e.g., evacuated areas defined by landmarks because the two different ways of stating the same protective action could have been very confusing.

Deficiency: G.4.a. Information released by the PIO's at the JPIC was sometimes incomplete, untimely and/or did not utilize prescribed formats.

Recommendation: The State PIO's should receive additional training on their role in the dissemination of public information.

Deficiency: G.4.b. The State PIO's located at the JPIC did not coordinate information in their briefings and press releases with the County PIO's in the EOC's

Recommendation: The PIO's located at the JPIC should coordinate their releases with County PIO's and incorporate County news release information into their briefings.

The function of the JPIC would be improved enormously if County spokespersons or representatives were present. A great deal of the inaccuracy and confusion evident at this location might have been avoided by establishing this as a true JPIC, which it presently is not. At a minimum, the local news releases, should be coordinated with the JPIC in advance and copies of the County EBS messages and news releases should be available in the JPIC.

Deficiency: G.3.a. The JPIC facility at the EOF is inadequate to function as a media information center.

Recommendation: The State of Illinois should work with Commonwealth Edison Company to develop a suitable location for the JPIC.

#### Recovery and Reentry

Recovery and reentry operations were implemented by the State of Illinois at 1111. Policy and procedures were developed on allowing reentry to the evacuated areas. The following pre-cautionary

measures were recommended by the Governor: (1) Destroy all exposed food. Wrapped, canned or packaged foods are safe for human consumption. (2) Dispose of all milk. (3) Thoroughly vacuum the interior of all homes, businesses and other shelters. And (4) It is no longer necessary for milk producing animals to be on stored feed. Relaxation of protective actions were based on data indicating safe levels of radiation. Recovery and reentry decisions were communicated to all response organizations and the media was provided hard copy news releases for dissemination to the public.

#### Scenario

The scenario was sufficient to initiate emergency response by the State organizations and to evaluate the capability of these emergency response organizations. Further, the scenario allowed for the full demonstration of the objectives selected for this exercise by the State of Illinois. It is recommended that future exercises which utilize a time jump contain a message explaining the time jump and the events assumed to have occurred during the period.

#### Grundy County

##### Activation and Staffing

The Grundy County EOC staff was notified to activate the EOC after the Site Area Emergency notification was received. The EOC Director called the City of Morris Mayor and the Grundy County Board Chairman. The County EOC staff was contacted by the sheriff's dispatcher. The balance of the EOC staff was contacted by the city police dispatcher. The alternate fire chief's phone numbers were not listed in the call list and the Mayor's phone number was under a separate heading. The EOC was staffed by people knowledgeable about their EOC organization. In that this was only an exercise, some primary staff were off on official business. The Superintendent of Schools was out of town on official business, however, his position was covered by a Red Cross representative. The Coroner was unable to attend due to several cases he was working on. The Mayor and Police Chief (City of Morris) were in attendance until they had to attend to city business in court. However, both positions were filled by an alternate. The EOC Director said this situation would not exist in a real emergency. Shift change was not an objective of this exercise but personnel at many positions did change during the exercise. Communications with the EOF and JPIC was carried out with the assistance of an amateur radio operator. It is recommended that the city police dispatcher be provided an updated call list.

##### Emergency Operations Management

The ESDA coordinator was designated by the County Board Chairman to be in charge of the EOC operations room. He was very effective in the management of the operation. He was knowledgeable of the plan,



gave regular briefings, conferred with other participants on decisions to be made, asked for regular updates on the situation from participants and kept the County Board Chairman informed. There was written procedures available for each of the participants and they were used. The EOC was notified via NARS of the Alert classification at 0520, the Site Area Emergency at 0640, and General Emergency at 0815.

#### Facilities

The Grundy County EOC is located in the basement of the County Building. The County Sheriff's dispatcher is a 24-hour operation located in another part of the building. The NARS phone is located in the Sheriff's dispatcher's office but while the EOC is activated this line is run directly into the EOC operations room. Facilities were sufficient to support a fully activated EOC. The status board and maps met requirements. All were covered with a clear plastic material which facilitated marking and updating as necessary. A separate map was on display at the EOC showing both primary and backup shelter center locations. The facility could maintain prolonged operations.

The ESDA Coordinator explained that at the last exercise the Red Cross people had an old EPZ sector map which had sector A being split by the North/South line. The Red Cross organization now has a new EPZ sector map which has sector A completely to the left of the North/South line. Now the Red Cross and the EOC EPZ maps are indicating population by sector correctly and have been recently updated.

#### Communications

The primary system for communicating with the State, utility, Kendall and Will Counties is the NARS system with radio as the backup. Communications with the local jurisdictions is by commercial telephone with radio backup.

The EOC staff is able to communicate with the EOF, EBS Station, media center, hospitals and ambulances by commercial telephone and radio. The radio network consisted of ESDA frequencies, RACES frequencies and RACES portable units. Conferencing capability exists through the use of telephone and radio. Hard copy capability is available within the EOC. The capability to communicate with the ambulance service was demonstrated during this exercise.

#### Dose Assessment and Protective Action Recommendation

Not an objective of this exercise for Grundy County

## Public Alerting and Instruction

The NARS message upgrading the accident to General Emergency and to activate the alert and notification system was received at 0815. The Sheriff's Dispatcher notified the municipalities of Morris, Coal City and Minooka by commercial telephone. The EBS system was activated at 0823 with a call to the radio station by the ESDA Coordinator. The ESDA Coordinator called the Sheriff dispatcher and ordered the sirens to be activated at 0827. There was also a call made to Will County via NARS to coordinate the activation of the sirens. The messages to the EBS Station were prescribed and were clear and concise. The ESDA Coordinator simulated dissemination of information to the public several times via the EBS system.

The new "Emergency Information - 1985" booklet was mailed recently to homes. A spot check during the exercise indicated that the Gebhard State Park and the Holiday Inn, Morris have sufficient supplies of the booklet. FEMA Region V has been informed by Commonwealth Edison Company that distribution of the public information brochure has been completed.

## Protective Action

The Sheriff dispatched two cars to sectors R, A and B in the 0-2 mile radius and three cars to sectors R, A and B in the 2-5 mile radius for route alerting which is used to supplement the alert and notification system.

The County Sheriff indicated the manning of traffic access and control points was primarily the responsibility of the Illinois State Police. The Grundy County Sheriff controls only one traffic access and control point. All others are covered by the Illinois State Police. The Illinois Department of Transportation was alerted (simulated) and was available for assistance. Maintaining open roadways would be accomplished with both County and State equipment.

## Media Relations

The ESDA Coordinator was designated to serve as the PIO by the County Board Chairman. A press conference was held in the County Board room at 0908. The conference was attended by persons from ESDA and FEMA and the County Board Chairman. The purpose of the conference was to inform the local news media about the conditions at the plant and of the events that had taken place; such as protective actions required and classification level. The media were updated on all the significant events that had taken place since the Unusual Event was declared.

The information released was relayed to the Media Center by the ESDA Coordinator. The ESDA Coordinator was very efficient in his presentation.

## Recovery and Reentry

Relaxation of PAGs was based on data supplied by ESDA and IDNS. This information was passed on to all response organizations. A simulated EBS message, formulated at the EOC, contained information requiring minimal safety or low-level exposure precautions. The State plan covers requests for compensation for financial losses.

## Scenario

The scenario provided an adequate test for the Grundy County EOC staff. It provided sufficient activity, was realistic, and tested prior objectives selected for this exercise.

## Coal City

The City EOC staff displayed enthusiasm, dedication, and knowledge to fulfill staffing for emergency management. The full staff was never mobilized nor round-the-clock staffing realized. The staff satisfactorily demonstrated the ability to sustain an effective and vital response force.

All aspects of the EOC in emergency operations management were notable. The Police Chief has an unusual talent for leadership and is respected by all his staff. The staff was attentive, enthusiastic and knowledgeable.

The Coal City EOC is located in the Coal City Firehouse. The dispatcher is located in the police station about five blocks away. The ideal conditions would have these two elements combined in one building in separate rooms. The EOC has satisfactory facilities and is centrally located in the village. About 10 firefighting and rescue vehicles and two boats are on stand-by readiness in this building. Current maps were posted and used. Obtaining the Dresden Station EPZ Special Map A, Rev.1, 4/85 and an overall County map might prove useful.

The communications were satisfactory. Some improvement in shortening the time delay between the Police Station dispatcher and the EOC could be achieved if these two elements were co-located in the same building. Basic communications are via low band to squads (traffic control, vehicle to vehicle, etc.). High band allows patching in to other local EOCs through the Communications Center.

For improvement, the EOC staff should strive for greater accuracy and consistency in logging times of events, status board posting and on the NARS form. All three should have the same time for significant events.

Dosimeters, chargers and recordkeeping cards are ready for use. There were 30 dosimeters available. Emergency squad members have been trained and are knowledgeable of the dosimeters use and other radiological control methods.

## Minooka

The evaluator's arrival did not allow for observation or evaluation of the alerting and staffing of the EOC.

Emergency operations management was satisfactorily demonstrated. The Police Chief was effectively in charge. He was knowledgeable and was ably assisted by his staff (3 persons). Several maps were displayed including the Dresden Station EPZ Special Map A, Rev.1, 4/85. A County map was also available.

Three shifts were verified by roster for round-the-clock staffing. Staff familiarization with procedures is needed on upgrading the accuracy (actual time logging) and conciseness of the events log, status board and NARS form. All three items should be reasonably close in actual recorded time and event description for common events. Some confusion existed in tracking times.

The EOC is in the Minooka Police Station and is large and spacious. It could not support extended operations because of lack of facilities. The Fire House could be used for bunking, etc. The EOC is centrally located within the City of Minooka.

Six radio channels are available at the Police Station for emergency communications. Communications capability was demonstrated.

Four fire vehicles were dispatched for supplemental emergency alerting purposes. Round trip for all four vehicles was 38 minutes to complete the public alerting.

## Will County

### Activation and Staffing

The EOC staff set up and operated out of the alternate EOC, located in the County Courthouse Annex, downtown Joliet, as a result of simulated flooding that was affecting the regular EOC in Plainfield, Illinois. Will County civil defense personnel arrived and began setting up the alternate EOC at approximately 0545.

The direct communications link to the utility is located in the Plainfield Police Dispatch Center, where the primary County EOC is located in the basement of the same building. The communications link is continuously monitored by the Plainfield Police dispatchers. During the exercise, a Will County ESDA dispatcher was situated in the Plainfield Police Dispatch Center to accept incoming NARS messages for relaying to the alternate EOC and municipalities. The alternate EOC was "officially activated" via an announcement by the Will County ESDA Coordinator at approximately 0650. The activation was effected upon receipt of the Site Area Emergency classification from the Plainfield EOC dispatcher. The Will County ESDA Director notified the Plainfield



ESDA EOC dispatcher to initiate 100% call-up of all County EOC staff and instruct them to report to the alternate EOC. The EOC call-up of personnel was completed at 0720. The EOC was fully staffed at 0931 (2 hours and 11 minutes later). The delay in staffing was caused by the tardiness of representatives of the American Red Cross and the County Schools. The individuals and organizations represented at the EOC were the County Board, the Health Department, County Schools, the Highway Department, the Coroner's Office, County and State ESDA, the Illinois Department of Nuclear Safety, the American Red Cross and the Civil Air Patrol.

There was a demonstration of a shift change of personnel (via roster and staff) for all organizations represented in the EOC except the County Highway Department and the Red Cross. The EOC staff on both shifts demonstrated adequate training and knowledge of their respective roles within the EOC. The relief staff was routinely briefed by the first shift individual they relieved and/or the County ESDA Coordinator.

Deficiency: A.4. The County did not completely demonstrate the capability to maintain staffing around the clock.

Recommendation: During the next scheduled Dresden exercise, Will County needs to demonstrate a complete EOC staff shift change of a fully staffed County EOC.

Deficiency: A.1.e. The Plainfield EOC reported to officials at the alternate EOC that the notification to report to the alternate EOC had been completed to all EOC staff at 0720. The EOC was not fully staffed until 0931 (a period of two hours and 11 minutes later).

Recommendation: The concern is that principal participants did not arrive at the alternate EOC in an expedient manner. Prompt activation and staffing needs to be demonstrated during the next scheduled Dresden exercise.

#### Emergency Operations Management

The Will County ESDA Coordinator was the individual effectively in charge of the EOC operations. There were periodic briefings held to update staff on the progress of the operation. The staff was actively involved in decision-making and reported on the progress of the operation as it pertained to their respective organizations. Copies of the plan were available in the EOC. The staff also had copies of the procedures and checklists that pertained to their respective organizational involvement. Message logs were kept. There was hard copy message capability within the EOC. The messages were reproduced and efficiently distributed to personnel as appropriate. EOC access was controlled by County ESDA personnel via a sign-in roster, a checklist and badge system.



## Facilities

The alternate EOC is located in the lower level of the County Annex Building in Joliet. The operations room was set up from an empty room to a furnished room, complete with tables, chairs, status boards, wall maps, telephones and other furnishings within 30 minutes. Backup power is not inherent but the mobile communications van has its own power so continued communications is possible. A flip-chart was used to post message information and a status board was available to post significant events.

Emergency classifications were posted above the status board at the front of the room. The status board could be more fully utilized to disseminate information to those entering the EOC throughout the course of the emergency.

The noise level was acceptable and did not detract from the implementation of procedures. The facility, in that it is an alternate, does not provide for extended living accommodations. All maps and charts were periodically posted with current information. The County Highway Department, through the Sheriff's office, arranged for the posting of access control points manned with barricades. The IDNS continuously updated a map of monitoring points and provided information on plume exposure pathway.

## Communications

The initial NARS messages were to the Plainfield EOC dispatcher and relayed to the alternate EOC. All other communications were by telephone and State radio. The County Sheriff's mobile communications van has radio capability throughout the County organization. The van was positioned outside the County alternate EOC throughout the exercise. A fax machine was available in the operations room. News releases were received from the News Media Center keeping the EOC staff informed.

Telephone was used as the primary means for communications with radio as backup. There were some instances where radio was primary. As an example, radio is permanently established between the State EOC and all County ESDA organizations including the Will County alternate EOC in Joliet.

## Dose Assessment and Protective Action Recommendation

This was not an objective to be demonstrated by Will County.

## Public Alerting and Instruction

The Will County alternate EOC was responsible for activation of the Prompt Alert and Notification System. The recommendation to activate the system was transmitted via NARS from the State EOC in Springfield to the Plainfield police dispatch and then relayed by open line telephone to the Will County alternate EOC. The call

from the Plainfield EOC was received at 0820. The sirens were sounded (simulated) at 0826 by order of the Will County ESDA Coordinator. The sounding (simulated) was confirmed at 0830 by telephone from Plainfield where the activation control is located. The initial EBS message was telephoned to the EBS station (WJOL) at 0834. At the recommendation from the State ESDA to Will County the sirens were sounded a second time due to additional protective actions. The sirens were sounded (simulated) the second time at 0859 and verified to the alternate EOC by the Plainfield EOC at 0901 by telephone. The second EBS message was given to WJOL at 0858. In both instances, the messages were simulated going out over the radio.

#### Protective Action

The activation of traffic control points were promptly ordered and initiated by the County Sheriff's Department and coordinated with the County Highway Department who assisted by dispatching Highway Department vehicles with barricades. The County Sheriff, County Highway and the County Forest Preserve Departments have appropriate resources in terms of vehicles, equipment and personnel to keep evacuation routes clear during bad weather or in the event of stalled or wrecked vehicles.

The traffic control and barricaded points were set up at the intersections of Coal City Road and Route 129 and at Strip Mine Road and Route 129. There was a partial evacuation of 42 students from the Channahon Junior High School (Will County) to the Kankakee West High School (Kankakee County). The evacuation was via Will County School District buses which were escorted to the County line at Kankakee by a patrol of the Will County Sheriff's Department. The escort to the Kankakee reception/congregate care center was via a Kankakee County Sheriff's Department car. There are enough buses belonging to the respective school districts and contracted private bus services to evacuate the residential population of Will County within the 10 mile EPZ of the utility. The EOC initiated an EBS message informing parents of the evacuated school children and where the children were being taken. The EOC also simulated the evacuation of McKinley Woods Forest Preserve. The preserve was evacuated by personnel of the Forest Preserve police and maintenance staff via patrol vehicles and privately owned automobiles.

Enroute a simulated bus break down occurred at Junction 129 and 113. A replacement bus was requested thru the Will County Sheriff radio. The replacement arrived and the transporting continued. However, this simulated bus breakdown radio transmission was monitored by Braidwood rescue personnel who responded unaware that it was an exercise. It is recommended that all exercise communications be prefaced and terminated with the language "this is a drill".

## Radiological Exposure Control

Available in the alternate EOC are 50 high-range dosimeters, a CD-777 kit which has two chargers and instructions. Dose record-keeping cards, film badges and an immediate supply of potassium iodide are stored in the EOC office. In the Will County alternate EOC, exposure devices were not handed out in that the plume did not affect the EOC because the alternate EOC is beyond the 10-mile EPZ.

## Media Relations

A press briefing room was set up with telephones, desks and an intercom system on the third floor of the alternate EOC. The County Public Information Officer provided a briefing for representatives from DeWitt County, Clinton and Braidwood (serving as the press). They were ESDA guests for orientation to radiological emergency exercising in preparation for the forthcoming Braidwood and Clinton exercises. The briefing was accurate and complete, and void of technical jargon for the understanding of the participants. The information released was consistent with the information coming from other spokespersons.

## Recovery and Reentry

Upon receipt of the NARS message to commence reentry, the staff was briefed by the County Coordinator. All departments notified their units of government. Press releases were distributed which were initiated by the IDNS and released by ESDA. The releases were guidance on actions to take upon entering into the previously evacuated area. The County Coordinator carried out a discussion on what are the potential problems associated with returning to the plume area.

## Scenario

The scenario was realistic and provided enough activity to effectively drive the exercise objectives. It tested areas of earlier deficiency.

## Braidwood

Based on message logs, the initial notification came at 0659, "Site Area Emergency." The dispatcher's calls to emergency personnel were completed at 0710. The EOC was fully manned at 0830. The three principle organizations playing in the exercise for Braidwood were the Fire Department, the Police Department and the School Superintendent. The Water and Sewer Department, the Streets and Alleys Department and the Mayor did not participate in the exercise. The staff (the Fire Chief, the Police Chief, and the School Superintendent) had sufficient knowledge and training. The ability to maintain emergency coordination and staffing around the clock was not demonstrated. The Fire Chief, who is also the ESDA Coordinator, provided his regular roster for the fire department rotation as evidence of around the clock staffing capability.

The ESDA Coordinator/Fire Chief was the emergency coordinator for Braidwood. He was the key official in control, but he took on all of the responsibility. One example is that instead of assigning someone to keep the message board and the emergency status display up-to-date, he took it upon himself to maintain those boards, although there were more than enough personnel to maintain the status board. It is recommended that specific EOC staff be assigned to posting written communication to keep the message boards current.

There was sufficient space in the area reserved for the EOC to conduct emergency operations. Only one phone was in the area for emergency operations use. The facilities, lighting, displays were sufficient to conduct emergency operations. A status board, message board and emergency classification posting were all used during the exercise to keep staff and emergency workers informed of the station status.

Communications at the Braidwood EOC relies primarily on the commercial phone system. All messages to and from the Will County EOC were via phone. The disadvantage of this was apparent when the dispatcher tried to verify the reentry and recovery notification. It took almost 1/2 hour to get through to the Will County EOC to verify the message. Communication to the school systems would also rely on the phone. The ambulance and fire radio system are the primary means for ambulance and hospital communications. As noted, reliance on the commercial phone system as the primary means of external communication could slow necessary communication functions.

Braidwood emergency operations provided support during a bus breakdown of a school evacuation from Channahon to Kankakee. The Braidwood EOC requested a school bus from the local school district. The driver was asked to stop by the EOC and was given instructions along with dosimetry. Fire Department support was also provided.

At the Braidwood EOC, high-range (0-200R) self-reading pocket dosimeters were issued along with TLDs. Record keeping cards were maintained by the Police Chief and instructions were given to personnel. All dosimetry was signed out.

#### Channahon

The Channahon municipal EOC is located in the village Municipal Building. The area is staffed by a Police/Fire Dispatcher around the clock. The dispatcher who received the notification call followed the correct procedures which were present at the dispatch center. All incoming calls were registered on appropriate forms and properly verified. The activation procedures were correctly followed and the EOC was quickly manned by appropriate designated staff.



The city ESDA Coordinator was the first to arrive. He assumed leadership of the EOC and continued in this role throughout the exercise. All participants appeared to be knowledgeable and were concerned about what was occurring and also what would occur during an actual incident. There was a roster of current phone numbers of individuals and their alternates who may be required to staff the EOC.

The EOC was effectively managed under professional leadership. The Mayor and other municipal officials were kept abreast of what was occurring and all participated in critical decisions. The organization and operations at this facility are effective and efficiently run. All maps, message boards and other such items were present and effectively used during the exercise.

Being a municipal EOC, all communication came in by landline telephone. There are extra telephones available and they were used during the exercise. They were used by the Superintendent (alternate) of Schools, Mayor, Street Department, Water Department and others present.

Upon receiving a call from the Will County EOC, the ESDA Coordinator activated the fire department (simulated). They were directed to drive the supplemental alerting routes in Fire Department vehicles which were equipped with public address systems. The area of alerting has been set up in sectors. The response crews were directed to respond to particular sectors and to alert residents in the area. All vehicles are provided printed messages which are to be read aloud during the evacuation.

Dosimetry equipment was available (mostly high-range). This equipment was supplied to emergency staff that were in the field and also all EOC personnel. Instructions were given on how to read the instruments and the requirements for recording the readings.

#### Elwood

The call to activate the EOC is received at a private residence. The resident is not always home. The message to activate the EOC came at 0730. The first to arrive at the EOC (Fire Station) was the Elwood ESDA Coordinator (0825). All calls came by phone in the private residence and were relayed to the Fire Department. Most members of the EOC staff were at their employment thereby not able to participate. After 1700, most would be home and available. More training and direction is needed with regard to their responsibility and obligations. There are no sleeping accommodations at this location and there is limited cooking facilities.

A minimal amount of furniture was available (two tables), lighting is adequate and there is sufficient space if the fire apparatus is moved outside. The noise level was acceptable when the fire apparatus was not running. It is unlikely that the facility could support extended operations in that it is mainly a garage. Required maps were present in frames and were laying against the walls.



Telephone is the primary means of communications. Two-way radio is used principally between the Elwood EOC and the fire and ambulance vehicles.

One of the first functions that was performed by the Elwood ESDA Coordinator was to direct fire personnel to drive a fire truck equipped with a PA system through the community and broadcast a prescribed message.

#### Joliet

A system was in place to promptly carry out activation and staffing. The Joliet ESDA Coordinator reported that activation was initiated after notification by the County at 0702. Following verification, eight municipal officers were contracted by telephone. The Joliet EOC was operational by 0751 and fully staffed by 0820. A Police Dispatch Center provided 24-hour notification capabilities and a second shift of alternative staff was available for 24-hour operations. An actual shift change was not observed although a roster was present.

Joliet EOC staff demonstrated knowledge and training to carry out their assignments. They were familiar with the established procedures for effective operation of the EOC and actions to protect the public.

The Joliet EOC was managed by the Joliet ESDA Coordinator with support from the Joliet City Manager. The staff was clearly involved in the decision-making and frequently referenced the municipal plan and associated SOPs. Message logs were maintained and distributed to appropriate staff. The Police Department was responsible for access control.

The Joliet EOC staff received notification of the Site Area Emergency at 0702 and the General Emergency at 0827. Protective actions were carried out for a limited portion of the city of Joliet at the recommendation of the County. This recommendation was for sheltering and a recommendation for evacuation was not issued.

The Joliet EOC is located in a multi-purpose municipal building. The EOC was small although the lighting, furniture and telephones were satisfactory for an emergency office. Extended operations could be supported by the available bunks, showers, kitchen and portable generator in case of an electrical outage. The required maps and status boards were present and graphics were of good quality. Posted information on mylar overlays were kept up-to-date including emergency classification, NARS messages and plume location.

The communications network at the Joliet EOC operated effectively. This network was comprised of a primary dedicated line that inter-linked other County municipalities and the County EOC. Backup

communications for these locations was provided by radio. The EOC landline was available to contact the utility, EOF, and Media Center should the need arise. However, contact with these organizations is not expected to be part of the routine operation of the Joliet EOC.

Communication with service organizations such as local schools, and hospitals was made using the landline with backup support available from squad car messengers. City operated ambulances would be contacted via the fire radio system that is currently in place.

Although the current network interlinking this municipality with other emergency organizations functioned well during the exercise, there were limitations. Both the primary and secondary systems were strongly dependent upon the integrity of existing phone lines. Under some emergency situations, lines may down and disfunctional, affecting the efficiency of message transmissions. Moreover, a phone line might also receive excess demand leading to time delays. This was the case when the Joliet EOC called the County to verify the 1118 NARS message. Verification time was in excess of 15 minutes.

The Joliet EOC had minimal involvement with demonstration of public alerting and instruction capabilities. An evacuation did not take place and sheltering recommendations were limited to one section of this community.

A supplemental public alerting system was in place and included the following components: route alerting with mobile sirens and PA systems, notification to local schools and hospitals, notification to hotels and motels in the area that could be impacted by a radioactive release and simulated sounding of five sirens not controlled by the County. The notification procedure was not based on prescribed messages. Verbal instructions were given to the field staff. The content of the messages appeared to be clear and included pertinent information on sheltering procedures.

#### Shorewood

The Shorewood EOC was activated after notification of Site Area Emergency was received by the Chief of Police at 0710. Notification was transmitted from the Plainfield County Communications Center. This notification was verified and the key person for contacting the EOC staff was then called. All calls were taken from current call list and made over the landlines which are available during normal working hours. The Shorewood EOC does not maintain a dispatcher with 24 hour monitoring capabilities. The duty officer would be notified by phone or radio during off-hours and would contact the Police Chief.

The EOC staffing was completed by 0830. Due to the schedules of municipal employees, some staff positions were simulated. Four of seven staff members were present in the EOC. Round-the-clock staffing could be demonstrated by the presentation of a roster. The staff members that participated performed their assignments promptly. Written plans and lists were frequently checked for references.

The Shorewood EOC was activated initially by the Chief of Police who managed incoming staff and assignments. Following the arrival of the Village Administrator, operational activities were managed by this official. Message logs were maintained and information was distributed to the appropriate participants. Access was controlled by municipal staff when the municipal building was opened for normal business. The EOC staff that participated demonstrated their ability to make decisions and to coordinate emergency activities.

The Shorewood EOC is located in the city municipal building. Facilities are adequate as to furniture, lighting, organization of existing space, telephones, emergency power and traffic flow. Additional work areas, typewriters, copy machines and telephones are present in the offices upstairs and would be available during an emergency situation. Although extended facilities such as bunks showers are not available in this building, they could be arranged in a local school. Quality maps showing the plume EPZ, evacuation routes, traffic control points, relocation centers, population and route alerting were available. A status board with mylar overly was updated at appropriate intervals. The available facilities and displays were adequate to support emergency operations.

The communications system that was available consisted of landlines for primary contacts and radio for secondary and backup. During the exercise, the landlines and a County radio were in place although the radios for the fire, police, and street department were simulated. Backup was also provided by squad car messengers who would be dispatched on an as needed basis. The systems that were in place and the supplemental radios provided adequate communications with all appropriate locations and organizations.

Communications procedures were acceptable. Logs were maintained and major messages were posted on the status board. All NARS messages were recorded on a specified form and calls were verified.

The Shorewood EOC staff demonstrated their ability to alert the public within their jurisdictions and disseminate an initial instructional message. Public alerting procedures were in place and simulated during the exercise. These procedures included supplemental route alerting with squads equipped with PA system and a message on local Cable TV. Route alerting was estimated to be completed within 25 minutes of start times and had been field tested previously. Local schools would also be contacted in an emergency situation. All information was verbally transmitted and prescribed messages were not utilized.

#### Wilmington

The Wilmington police dispatcher received initial notification at 0710 of a Site Area Emergency. The call was verified by the dispatcher. The dispatcher began calls to mobilize the EOC. The Deputy Coordinator was the first person to receive the notification call and told the dispatcher to only contact the Police Chief and the ESDA Coordinator. The dispatcher made those calls and after 10

minutes realized that despite the Deputy Coordinator's instruction she should complete her dispatcher's SOP. The last call to mobilize the EOC was made at 0745. Staffing of the EOC was completed at 0825. The EOC was fully staffed and represented. The EOC staff displayed knowledge of their procedures and referred to their procedures when there were any questions.

The Deputy Emergency Coordinator was in charge of the Wilmington EOC. This is the first exercise in which he has participated. The Mayor/ESDA Coordinator was in charge of EOC operations. The Mayor is the emergency coordinator for Wilmington. No briefings were held during the period the EOC was observed from 0615-0900. Briefings should be conducted after activation to apprise staff of the emergency situation.

Toward the conclusion of the exercise, the Deputy Coordinator took a more active management role and held staff briefings. There was a distraction to the emergency operations due to necessary police operations relating to a murder case in the town.

All individuals representing various functions had a copy of the SOPs. No logs of messages were maintained other than the NARS messages from the County EOC.

There was sufficient space in the area reserved for the EOC to conduct emergency operations for Wilmington. The facilities, furniture and lighting were sufficient. With the exception of telephones, a more demanding scenario might have caused some problems since there was only one phone in the emergency operations area. This facility could not support extended operations, but the fire station in town could.

During the initial period of the exercise, the status board was not used, there was no posting of the emergency classifications and no message board was available. Upon returning shortly before the exercise termination the status board was being used and an emergency classification was posted. All maps with the necessary information on evacuation routes, EPZ sectors, relocation centers, access control points and population by sector were posted.

Communications at the Wilmington EOC relies primarily on the commercial phone system. All messages from the Will County EOC were via phone. Communications to the school system would also rely on the phone. The ambulance and fire radio system are the primary means for ambulance and hospital communications. Wilmington police and fire personnel along with ESDA volunteers carry radio pagers for prompt notification of emergency personnel. Given a more demanding scenario, the use of the commercial phone system as the primary means of external communications could slow necessary communication functions.



## Kendall County

### Activation and Staffing

The Alert classification message was received at 0526 by the Sheriff's dispatcher. The call from Illinois ESDA was via commercial phone as the NARS instrument was malfunctioning at this time. The message was verified and the County ESDA Coordinator initiated activation procedures using a current written call list. All required department representatives, except the Red Cross, had reported to the EOC or were on standby at their operational base by 0643. A complete shift change was not demonstrated.

Deficiency: A.4. The ability to maintain around the clock operations was not demonstrated.

Deficiency: A.1.e. The EOC was not fully staffed by all designated agencies.

Recommendation: It is necessary that, during the next scheduled Dresden exercise, the County EOC staff demonstrate a complete shift change and fully staff the EOC with the designated agency personnel.

### Emergency Operations Management

The County Board representative, as designated in the plan, was the person in charge of and responsible for emergency operations. The ESDA Coordinator functioned as "Chief of Staff" and directed emergency operations. Periodic briefings were held and the staff was involved in the decision-making process. The County emergency plan was available for reference and written checklists were used by department representatives. A log was kept of NARS messages but messages received over the fax machines were not logged. Messages were reproduced and distributed to the operations room staff.

Kendall County should establish procedures for the logging of all messages. Additionally, procedures should be developed for committing to writing, information received by telephone so that viable records exist as to when, how, and from whom all operational information is received.

The County dispatcher was notified of the Unusual Event at 0425 and the ESDA Coordinator was notified. The notice of the Alert was at 0525 and the ESDA Coordinator began staff activation procedures. Site Area Emergency was received at 0644. At 0725 a Sheriff's squad was dispatched to close and secure Baker Woods and Houses Grove Forrest Preserve park areas. The squad reported at 0733 that the areas had been cleared, gates closed and locked. General Emergency was received at 0822. Protective actions were implemented at the receipt of the General Emergency classification.



## Facilities

The operations/communications room that comprise the EOC are adequate for the conduct of emergency operations by the Kendall County staff. The emergency operations levels were posted. The status board was centrally located and kept up-to-date with significant events. All necessary and required maps were displayed and posted with current operational conditions. The fax machine should be moved into the communications room of the EOC.

## Communications

Kendall County has the necessary communications equipment in the EOC for the conduct of emergency operation with one notable exception. They have commercial phone, Sheriff's radio, State Police radio, State CD radio, local hospital and ambulance radio, HAM radio and a fax capability to the JPIC. The exception there is no NARS extension in the EOC. The delay in message transmission between Grundy County and Kendall County was noted as a deficiency in the September 1983 exercise. The corrective action for this deficiency was the installation of NARS extension in the Sheriff's Communications Center and the EOC. The installation in the Sheriff's Communications Center has been completed but the extension has not been installed in the EOC.

Deficiency: F.1. The NARS extension has not yet been installed in the EOC.

Recommendation: The NARS extension should be installed in the EOC as soon as possible.

## Dose Assessment and Protective Action Recommendation

Dose assessment and protective action recommendations were not exercise objectives to be accomplished by Kendall County.

## Public Alerting and Instruction

Protective action recommendations were to take shelter 0-2 miles in all directions and 2-5 miles in sectors R, A, and B. While population protective actions did not apply to Kendall County, they were notified by Grundy County that Grundy County would be activating the common siren system to alert their citizens living in the risk area. Kendall County officials activated the EBS system. At this time, Kendall County Health Department notified USDA that dairy cattle in sectors R, A, and B out to 10 miles should be placed on stored feed. At 0848, a NARS message was received recommending population sheltering out to 10 miles in sectors R, A, and B.

Operations staff re-notified the EBS station for broadcast of emergency information for citizens of Kendall County. pre-scripted messages describing the area at risk in familiar terms were used for this process. The Lisbon/Seward Fire Department and the Sheriff's department undertook supplemental route alerting. Again, pre-scripted messages were used.

## Protective Action

The scenario did not require an evacuation on the part of Kendall County citizens. The County demonstrated the ability to control access into a sheltered, risk area. There are no hospitals or nursing homes in that part of Kendall County. A survey by the County shows that no mobility impaired persons, needing assistance, reside in this area. There are no schools in that part of Kendall County at risk from the Dresden Nuclear Power Station.

## Radiological Exposure Control

Radiological exposure control was not an exercise objective for Kendall County.

## Media Relations

Space has been set aside on the second floor of the EOC building for media briefings. No briefings were prepared or presented. It is important preparations be made to meet the criteria requirement and a demonstration of the capabilities, as stated in the plan, is necessary.

Deficiency: G.4.a. No media briefings were conducted at the Kendall County EOC.

Recommendation: Objectives #24 and #25 should be demonstrated at the next scheduled Dresden exercise.

## Recovery and Reentry

The NARS message received at 1111 announced commencement of recovery and reentry activities. The procedures described in 2-SOP-11 were followed. The USDA was advised that feeding restrictions for dairy animals had been removed, the Highway Department removed barricades and the EBS station was notified.

## Scenario

The scenario did drive the exercise, however, it did not stress the Kendall County EOC staff. There were extensive periods of time when there was no activity. Exercise controllers should be provided with free play messages that will involve all participants, stimulate communications between EOCs and maintain exercise activity.

Summary Listing of Deficiencies

UTILITY: Dresden Nuclear Power Station  
Summary Listing of Deficiencies

Illinois  
(State)

April 23, 1985  
(Date)

Illinois  
(Community)

A. Deficiencies Affecting Public Health and Safety

<u>NUREG</u> <u>Item</u>	<u>Narrative Statement</u> <u>of Deficiency</u>	<u>Corrective Action</u> <u>Proposed</u>	<u>Scheduled</u> <u>Date</u>	<u>Actual</u> <u>Date</u>
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NONE

UTILITY: Dresden Nuclear Power Station  
Summary Listing of Deficiencies

Illinois  
(State)

April 23, 1985  
(Date)

Illinois  
(Community)

B. Other Deficiencies

<u>NUREG Item</u>	<u>Narrative Statement of Deficiency</u>	<u>Corrective Action Proposed</u>	<u>Scheduled Date</u>	<u>Actual Date</u>
G.3.a.	The JPIC facility at the EOF is inadequate to function as a media information center.			
G.4.a.	Information released by the PIO's at the JPIC was sometimes incomplete, untimely and/or did not utilize prescribed formats.			
G.4.b.	The State PIO's located at the JPIC did not coordinate information in their briefings and press releases with the County PIO's in the EOC's.			



UTILITY: Dresden Nuclear Power Station  
Summary Listing of Deficiencies

Illinois  
(State)

April 23, 1985  
(Date)

Illinois  
(Community)

C. Recommendations

1. The State of Illinois is currently revising the NARS form. It is suggested consideration be given to sequentially numbering the messages produced for quick reference and accountability and modifying the box designators from a letter to possibly a number to reduce confusion, especially in #8 wind direction data and #9 recommended protective actions.
2. The capability for hard copy transmission of news releases and color graphics displays between the REAC and the JPIC should be considered to augment informational capabilities of the IDNS staff at the JPIC.
3. It is recommended that the rationale for the use of potassium iodide be provided to the local governments along with the decision to utilize it.
4. It is recommended that future exercises which utilize a time jump contain a message explaining the time jump and the events assumed to have occurred during the period.

UTILITY: Dresden Nuclear Power Station  
Summary Listing of Deficiencies

Illinois  
(State)

April 23, 1985  
(Date)

Grundy County  
(Community)

A. Deficiencies Affecting Public Health and Safety

<u>NUREG</u> <u>Item</u>	<u>Narrative Statement</u> <u>of Deficiency</u>	<u>Corrective Action</u> <u>Proposed</u>	<u>Scheduled</u> <u>Date</u>	<u>Actual</u> <u>Date</u>
	NONE			

UTILITY: Dresden Nuclear Power Station  
Summary Listing of Deficiencies

Illinois  
(State)

April 23, 1985  
(Date)

Grundy County  
(Community)

B. Other Deficiencies

<u>NUREG</u> <u>Item</u>	<u>Narrative Statement</u> <u>of Deficiency</u>	<u>Corrective Action</u> <u>Proposed</u>	<u>Scheduled</u> <u>Date</u>	<u>Actual</u> <u>Date</u>
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NONE

UTILITY: Dresden Nuclear Power Station  
Summary Listing of Deficiencies

Illinois  
(State)

April 23, 1985  
(Date)

Grundy County  
(Community)

C. Recommendations

1. It is recommended that the city police dispatcher be provided an updated call list.
2. Obtaining the Dresden Station EPZ Special Map A, Rev.1, 4/85 and an overall County map might prove useful. (Coal City)
3. For improvement, the EOC staff should strive for greater accuracy and consistency in logging times of events, status board posting and on the NARS form. (Coal City)
4. Staff familiarization with procedures is needed on upgrading the accuracy (actual time logging) and conciseness of the events log, status board and NARS form. (Minooka)

UTILITY: Dresden Nuclear Power Station  
Summary Listing of Deficiencies

Illinois  
(State)

April 23, 1985  
(Date)

Will County  
(Community)

A. Deficiencies Affecting Public Health and Safety

<u>NUREG</u> <u>Item</u>	<u>Narrative Statement</u> <u>of Deficiency</u>	<u>Corrective Action</u> <u>Proposed</u>	<u>Scheduled</u> <u>Date</u>	<u>Actual</u> <u>Date</u>
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NONE



UTILITY: Dresden Nuclear Power Station  
Summary Listing of Deficiencies

Illinois  
(State)

April 23, 1985  
(Date)

Will County  
(Community)

B. Other Deficiencies

<u>NUREG Item</u>	<u>Narrative Statement of Deficiency</u>	<u>Corrective Action Proposed</u>	<u>Scheduled Date</u>	<u>Actual Date</u>
A.1.e.	The Plainfield EOC reported to officials at the alternate EOC that the notification to report to the alternate EOC had been completed to all EOC staff at 0720. The EOC was not fully staffed until 0931 (a period of two hours and 11 minutes).			
A.4.	The County did not completely demonstrate the capability to maintain staffing around the clock.			

UTILITY: Dresden Nuclear Power Station  
Summary Listing of Deficiencies

Illinois  
(State)

April 23, 1985  
(Date)

Will County  
(Community)

C. Recommendations

<u>NUREG Item</u>	<u>Narrative Statement of Deficiency</u>	<u>Corrective Action Proposed</u>	<u>Scheduled Date</u>	<u>Actual Date</u>
1.	The status board could be more fully utilized to disseminate information to those entering the EOC throughout the course of the emergency.			
2.	It is recommended that all exercise communications be prefaced and terminated with the language "this is a drill".			
3.	It is recommended that specific EOC staff be assigned to posting written communication to keep the message boards current. (Braidwood)			
4.	Reliance on the commercial phone system as the primary means of external communication could slow necessary communication functions. (Braidwood, Channahon, Elwood, Joliet, Shorewood and Wilmington)			
5.	More training and direction is needed with regard to their responsibility and obligations. (Elwood)			
6.	Briefings should be conducted after activation to apprise staff of the emergency situation. (Wilmington)			
7.	Message logs should be maintained for other messages than the NARS messages from the County EOC. (Wilmington)			

UTILITY: Dresden Nuclear Power Station  
Summary Listing of Deficiencies

Illinois  
(State)

April 23, 1985  
(Date)

Kendall County  
(Community)

A. Deficiencies Affecting Public Health and Safety

<u>NUREG</u> <u>Item</u>	<u>Narrative Statement</u> <u>of Deficiency</u>	<u>Corrective Action</u> <u>Proposed</u>	<u>Scheduled</u> <u>Date</u>	<u>Actual</u> <u>Date</u>
	NONE			

UTILITY: Dresden Nuclear Power Station  
Summary Listing of Deficiencies

Illinois  
(State)

April 23, 1985  
(Date)

Kendall County  
(Community)

B. Other Deficiencies

<u>NUREG Item</u>	<u>Narrative Statement of Deficiency</u>	<u>Corrective Action Proposed</u>	<u>Scheduled Date</u>	<u>Actual Date</u>
A.1.e.	The EOC was not fully staffed by all designated agencies.			
A.4.	The ability to maintain around the clock operations was not demonstrated.			
F.1.	The NARS extension has not yet been installed in the EOC.			
G.4.a.	No media briefings were conducted at the Kendall County EOC.			

UTILITY: Dresden Nuclear Power Station  
Summary Listing of Deficiencies

Illinois  
(State)

April 23, 1985  
(Date)

Kendall County  
(Community)

C. Recommendations

<u>NUREG</u> <u>Item</u>	<u>Narrative Statement</u> <u>of Deficiency</u>	<u>Corrective Action</u> <u>Proposed</u>	<u>Scheduled</u> <u>Date</u>	<u>Actual</u> <u>Date</u>
1.	Kendall County should establish procedures for the logging of all messages. Additionally, procedures should be developed for committing to writing, information received by telephone so that viable records exist as to when, how, and from whom all operational information is received.			
2.	The fax machine should be moved into the communications room of the EOC.			
3.	Exercise controllers should be provided with free play messages that will involve all participants, stimulate communications between EOC's and maintain exercise activity.			