

JUL 30 1986

Docket No. 50-456
Docket No. 50-457

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 April 3, 1986, and associated final exercise evaluations on the offsite emergency preparedness exercise conducted on November 6, 1985. This was a full participation exercise for the State of Illinois and Grundy, Will and Kankakee Counties.

Based on the performance of the offsite agencies during the exercise, FEMA did not identify any deficiencies, but there were areas requiring corrective action, and the State has supplied a schedule of adequate corrective actions. The areas requiring correction did not detract from the overall demonstrated capability to protect the health and safety of the public.

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 Braidwood Nuclear Power 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,

"Original signed by W.D. Shafer"

8608050029 860730
PDR ADOCK 05000456
F PDR

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

Enclosure: As stated

See Attached Distribution

RIII
WBS for
Ploski/bls
yes
w/o enclosure

RIII
WBS
Snell
yes
w/o enclosure

YES
RIII
PRP for
Gardner

RIII
Shafer
7/30/86

TE35
|||

JUL 30 1986

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cc w/o enclosure:

D. Matthews, OIE, EPB

BRAIDWOOD NUCLEAR POWER STATION
Commonwealth Edison Company
Joint Exercise

Facility Location: Located in the State of Illinois in Will County near
the Town of Braidwood

Exercise Date: November 6, 1985

Date of Report: February 4, 1986

Participants: State of Illinois, Grundy County including the
communities of Coal City, Mazon, Gardner, South
Wilmington and Braceville; Will County including the
communities of Braidwood and Wilmington; Kankakee County
including the community of Essex and Commonwealth Edison
Company. This was a full participation exercise for all
jurisdictions and the utility.

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

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PDR ADOCK 05000456
F PDR

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EXECUTIVE SUMMARY

State of Illinois

The State demonstrated the ability to notify the Emergency Operations Center (EOC) staff and begin activating the EOC following the "ALERT" classification. Around the clock staffing capability was demonstrated by the presentation of a roster. The Illinois Emergency Services and Disaster Agency (IESDA) Director took charge of the situation and made decisions based on the coordinated efforts of his staff. Additional staff briefings to discuss the emergency response status would enhance operations.

The State EOC is a well maintained facility and contains the necessary amenities to support the staff over an extended period of time. The primary and secondary communication systems worked well throughout the exercise and were sufficient for contacting the appropriate organizations. Numbering the Nuclear Accident Reporting System (NARS) messages would facilitate the tracking of messages by local government officials.

The Illinois Department of Nuclear Safety (IDNS) maintained a liaison staff in the State EOC. The staff summarized major recommendations from the Radiological Emergency Assessment Center (REAC) for protective actions for the EOC staff.

IDNS supplied appropriate dosimetry for all Radiological Assessment Field Teams (RAFT) and State agencies who deployed personnel to field activities in or near the EPZ. The availability of equipment and knowledgeable RAFT personnel provided a successful demonstration of field monitoring.

Based on the potential for an iodine release, the REAC Commander simulated issuance of instructions for all emergency workers to take potassium iodide (KI).

Field monitoring teams were mobilized at the State Forward Command Post (FCP), located at the Mazon Emergency Operations Facility (EOF) site, and deployed to the preplanned radionuclide sampling points. Appropriate equipment and procedures were utilized.

Traffic and access control was procedurally demonstrated by the coordinated efforts of responsible State agencies. A simulated demonstration of disrupting this control was appropriately handled by the staff.

The State demonstrated their ability to contact the Federal Government for assistance. The IDNS provided total population dose estimates. Estimates were provided after a simulated evacuation was completed. The estimate included the population within the 1, 2, 5 and 10 mile radius of the nuclear power station.

Recovery and reentry considerations were demonstrated at the State EOC, Joint Public Information Center (JPIC) and by the field teams. Within the State EOC discussions were limited to individual agencies rather than as an integrated staff discussion.

The JPIC is co-located with the utility's EOF at Mazon. The State public information staff was prepositioned for the exercise. A shift change was not demonstrated but a roster was available. The coordination between the JPIC and the IESDA and IDNS staffs in Springfield was evident throughout the exercise. Information released at the JPIC should describe the affected areas in terms of familiar landmarks and boundaries rather than by sector designations. The State primary communications to the JPIC were demonstrated. The JPIC had one facsimile machine which was operational for the exercise. Reentry messages were coordinated by the JPIC staff with personnel in Springfield prior to release.

Will County

Will County demonstrated the ability to mobilize the EOC staff and to begin activating the EOC following receipt of the "ALERT" classification. The County emergency response was managed by the Will County ESDA Coordinator. The staff demonstrated the ability to make decisions and to coordinate emergency responses.

The County EOC served as the focal point of the exercise. The County EOC is outside the 10-mile EPZ of the Braidwood Nuclear Power Station and has an alternate power source and other amenities to sustain extended operations. The EOC also has the necessary maps and displays to support the emergency response.

The County demonstrated the ability to communicate with all appropriate locations, organizations, and field personnel. Primary communications with the State is via NARS and commercial telephones. Commercial telephone is available for communications with the utility.

The Will County officials took precautionary measures by simulating the evacuation of the incorporated areas of Braidwood and Godley. The County demonstrated through simulation, the ability to alert the public within the 10-mile EPZ and to formulate and distribute appropriate instructions.

The Sheriff's Department, in concert with the County Highway Department, simulated the establishment of traffic control points. The County Forest Preserve Police simulated confirmation of the evacuation of County recreational areas.

The County Board Chairman demonstrated the ability to brief the media in a clear and accurate manner through three press briefings. He was assisted by the County ESDA Coordinator and the IDNS representative in the County EOC.

The County conducted a partial demonstration of their ability to determine and implement appropriate measures for controlled recovery and reentry. The relaxation of protective actions by the County was based on information provided to the County by IDNS. The County emergency response agencies simulated the reentry and recovery procedures.

The emergency response demonstrated by the EOCs in Braidwood and Wilmington was effective. The emergency staffs were involved in appropriate decision-making and were effectively managed by their elected officials.

Primary communication for both EOCs to other locations is via commercial telephone. There is only one telephone line in the Wilmington EOC building available for use by the staff. An Amateur Radio Emergency Service (ARES) radio operator was dispatched to the Braidwood EOC from the Will County EOC following the "SITE AREA EMERGENCY" classification to provide a backup means of communications.

Grundy County

The Grundy County EOC staff was mobilized and the facilities activated as part of the exercise. The call to activate the EOC was received from IESDA. The capability to staff the facilities for an extended period of time was demonstrated through a partial shift change and presentation of a roster. The EOC staff made decisions relative to emergency activities and communicated with one another in making these decisions. The required facilities, displays and other amenities were available for the exercise.

The County ESDA Coordinator followed the procedures as set forth in the plan and SOPs for activation of the Alert and Notification System. The public was informed of the necessary actions to take through the use of prescribed messages which were broadcast (simulated) over the Emergency Broadcast System (EBS).

The EOC staff worked together in the discussion of how they were to handle the evacuation and impediments on the evacuation routes. Access control was simulated by the Sheriff's Department. A media briefing was held with the ESDA Coordinator acting as the PIO. The recovery and reentry procedures were implemented in a professional manner.

The local jurisdictions of Coal City, Mazon, Gardner, Braceville and South Wilmington demonstrated their capability to implement an emergency response and were effectively managed by elected officials. All jurisdictions had adequate volunteer staffing to fill the various emergency response positions. The facilities were adequate and equipped with the necessary amenities to respond to an emergency.

Kankakee County

The Sheriff's Dispatch Center is the warning point for Kankakee County. Following receipt of the "ALERT" classification, the dispatchers notified EOC staff members. The EOC was fully staffed within one hour of the decision to activate. The County Board Chairman directed operations. The County ESDA Coordinator served as Chief of Staff. Frequent staff briefings served to inform the staff and to coordinate actions. Checklists for each emergency action level were used to ensure all required actions were taken. Twenty-four hour staffing capability was evidenced by rosters.

All required maps and charts were available and used. The status board was visible to all persons in the room although important information was sometimes excluded. The operations room was supported by commercial telephone communications with law enforcement radio as back-up. A datafax machine was linked to the commercial telephone system.

Through simulation, the EOC staff demonstrated their capability to effect an evacuation of areas within the County and provide care for evacuees from other Counties as well as their own. The staff members used SOPs and checklists to ensure all recovery actions were considered and all agencies, as well as the public, were informed of recovery actions.

A protective action was ordered to place milk animals within two miles of the plant on stored feed. The County Board Chairman called the EBS station and gave a codeword to simulate transmission of a prescribed message followed by simulated sounding of the sirens. When conditions had changed to "GENERAL EMERGENCY" and protective actions changed, the sirens were again sounded and EBS was notified. Areas to be sheltered and evacuated were described using familiar boundary descriptions. It is necessary for Kankakee County to take its lead from the governor, coordinate their decision with the other two Counties and in accordance with procedure, reserve the use of sirens and EBS for notification of protective actions for the general public.

The County Board Chairman was interviewed by a press representative twice during the exercise. These interviews were conducted outside the designated briefing room. Additional assistance and training is required to prepare the EOC staff to assist the County Board Chairman in preparing information to be presented to media representatives.

The Kankakee County Sheriff's dispatchers notified the Village of Essex Fire Department of emergency action levels. Essex activated their EOC in response to the exercise situation through implementation of their emergency plan. The Chief of Police is designated in charge and provided concise updates and full information to the staff as events occurred. A status board was kept current through the day. All required maps and charts were available.

EXERCISE REPORT

Introduction

1. Exercise Background

This was the first joint exercise for the State of Illinois, Will County, Grundy County and Kankakee County resulting from a simulated accident at the Braidwood Nuclear Power Station.

2. Participating and Non-participating State and Local Governments

The 10-mile plume exposure EPZ of the Braidwood Nuclear Power Station impacts primarily on Will County. It also impacts on Grundy and Kankakee Counties. The State of Illinois and all three Counties participated in the exercise. In addition, eight municipalities within the three Counties participated. These municipalities were Braceville, Gardner, South Wilmington, Coal City, Mazon, Essex, Wilmington and Braidwood.

3. List of Evaluators

For this exercise there was a total of nineteen Federal evaluators observing off-site exercise activities. On-site activities were evaluated by a separate team from the Nuclear Regulatory Commission (NRC). Of the off-site evaluators, seven, including the off-site Exercise Director, were Federal Emergency Management Agency (FEMA) Region V staff. The balance of the team was composed of a representative from the Department of Energy (DOE), one from the Department of Agriculture (USDA), one from the NRC, one from the American Red Cross (ARC/FEMA), two from the Environmental Protection Agency (EPA), one from the Department of Transportation (DOT), one from the Food and Drug Administration (FDA) and four contract evaluators from the Argonne National Laboratory (ANL). The evaluator assignments were as follows:

Off-site Exercise Director

Gordon Wenger, FEMA

State of Illinois Evaluation Team

Robert Shapiro, Team Leader, FEMA, State EOC (Springfield)
Sue Ann Curtis, ANL, State EOC (Springfield)
Anna Hart, USDA, State EOC (Springfield)
Steve Kouba, DOE, REAC (Springfield)
Marsha Smith, NRC, State Forward Command Post (Mazon)
Jim Kraeger, FDA, State Radiological Mobile Lab (Mazon)
Pete Tedeschi, EPA, RAFT (Mazon)
Les Johnson, EPA, RAFT (Mazon)
Ray Kellogg, FEMA, JPIC (Mazon)

Will County Evaluation Team

Woodie Curtis, Team Leader, FEMA, County EOC (Plainfield)
Wiley Howell, FEMA, County EOC (Plainfield)
Bill Gasper, ANL, Braidwood and Wilmington EOCs

Grundy County Evaluation Team

Ed Robinson, Team Leader, FEMA, County EOC (Morris)
Don Hulet, ANL, County EOC (Morris)
Ed Tanzman, ANL, Coal City and Mazon EOCs plus EBS station
Norm Stoner, DOT, Braceville, Gardner and South Wilmington EOCs

Kankakee County Evaluation Team

Rick Anthony, Team Leader, FEMA, County EOC (Kankakee)
Walter O'Keefe, ARC/FEMA, County EOC (Kankakee) and Essex EOC

4. Evaluation Criteria

The plans that were 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 modules based on these criteria entitled, "Modular Format for Uniformity of Radiological Emergency Preparedness Exercise Observations and Evaluation," dated June 1983, were used for exercise evaluation.

5. Exercise Objectives

Objectives for this exercise were selected from among the FEMA thirty-five (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 eighteen objectives, including those applicable to the JPIC, 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 staffing around the clock.
3. Demonstrate ability to make decisions and to coordinate emergency activities.
4. Demonstrate adequacy of facilities and displays to support emergency operations.
5. Demonstrate ability to communicate with all appropriate locations, organizations and field personnel.
6. Demonstrate ability to mobilize and deploy field monitoring teams in a timely fashion.
7. Demonstrate appropriate equipment and procedures for determining ambient radiation levels.

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 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.

17. Demonstrate the organizational ability and resources necessary to control access to an evacuated area.

20. Demonstrate ability to continuously monitor and control emergency worker exposure.

21. Demonstrate the ability to make the decision, based on predetermined criteria, whether to issue KI to emergency workers and/or the general population.

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.

Will County selected the following thirteen 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 staffing around the clock.

3. Demonstrate ability to make decisions and to coordinate emergency activities.

4. Demonstrate adequacy of facilities and displays to support emergency operations.

5. Demonstrate 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 and orderly evacuation of all or part of the plume EPZ.

16. Demonstrate the organizational ability and resources necessary to deal with impediments to evacuation, as inclement weather or traffic obstructions.

17. Demonstrate the organizational ability and resources necessary to control access to an evacuated area.

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.

Grundy County selected the following thirteen 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 staffing around the clock.

3. Demonstrate ability to make decisions and to coordinate emergency activities.

4. Demonstrate adequacy of facilities and displays to support emergency operations.

5. Demonstrate 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 and orderly evacuation of all or part of the plume EPZ.

16. Demonstrate the organizational ability and resources necessary to deal with impediments to evacuation, as inclement weather or traffic obstructions.

17. Demonstrate the organizational ability and resources necessary to control access to an evacuated area.

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.

Kankakee County selected the following thirteen 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 staffing around the clock.

3. Demonstrate ability to make decisions and to coordinate emergency activities.

4. Demonstrate adequacy of facilities and displays to support emergency operations.

5. Demonstrate 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 and orderly evacuation of all or part of the plume EPZ.

16. Demonstrate the organizational ability and resources necessary to deal with impediments to evacuation, as inclement weather or traffic obstructions.

17. Demonstrate the organizational ability and resources necessary to control access to an evacuated area.

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.

6. Summary of Scenario

The Braidwood Nuclear Power Station radiological emergency preparedness exercise objectives and scenario for the November 6, 1985, joint full participation exercise were developed by exercise planners of the Braidwood Nuclear Power Station, IESDA, IDNS and IMPEL, a contractor for the State of Illinois. The exercise planners served as controllers during the exercise and protected the scenario from the participants of the exercise so they would not be aware of the scenario events.

FEMA Region V attended a meeting with the utility and State planners in July 1985 to select the objectives and determine the scope of the exercise. Review of previous exercise deficiencies was not necessary as this was the first exercise involving this nuclear power station. The scenario was to emphasize the alerting, mobilization and activation of staff and not to emphasize the recovery and reentry portion of the exercise. The scenario provided additional experience and training for field monitoring personnel. The scenario also provided for a demonstration of communications with the State Forward Command Post.

Submission of the scenario was according to guidelines outlined in NRC and FEMA guidance. Westinghouse Idaho Nuclear Company, Incorporated, reviewed the onsite and off-site scenario for FEMA so evaluation of the objectives selected by the State of Illinois as well as the three Counties could be accurately assessed. The exercise scenario was sufficient to initiate the emergency response by the State of Illinois and all three Counties. The scenario did allow for the demonstration and evaluation of the objectives selected for the November 6, 1985 exercise of the Braidwood Nuclear Power Station.

Plant status, as an initial condition of the exercise, showed unit 1 in operation at 100% power with a normal full power electrical lineup with the exception of the 1B Diesel Generator. Unit 2 was shutdown in Mode 5 with major steam generator maintenance in progress. Shutdown occurred within the previous 96 hours following greater than 180 full power days of operations. Secondary plant maintenance is in progress on the feedwater system and the turbine auxiliary systems. The diesel generator 1B for unit one has been out of service for 65 hours for turbocharger bearing changeout. It is estimated that three hours remain to restore it to service. Two coal powered stations on the grid have gone off the line for emergency maintenance within the past 24 hours and the Load Dispatcher has advised that maximum power should be maintained on Unit 1.

At 0715, an electrical fire develops in a non-safety cable tray which is located in the Unit 1 pump room. Heavy smoke is carried through the system and ultimately causes main board annunciation. The fire is classified as not requiring offsite assistance. This is the "UNUSUAL EVENT" and notification is required.

At 0800, a stressed weld in a bypass line cracks, allowing a leak of approximately 55 gpm to develop suddenly. This loss of primary coolant results in declaration of "ALERT" at 0815.

At 0900 the two inch cold leg bypass pipe shears with an instant load rate of 1500 gpm. The break flow is much greater than the charging pumps capacity and the Positive Displacement Pump will not start if attempted. Safety Injection may be initiated manually, or at some time later, automatically. This break causes the declaration of a "SITE AREA EMERGENCY" at 0915.

General radiation survey of containment indicates levels inside in excess of 4,000 R/hr. Coolant grab sample results delivered; (greater than 300 micro curies per gram). EAL 24 Loss of Fission Product Barriers causing the declaration of "GENERAL EMERGENCY" at 1030.

One containment purge path valve is already open. Indication of mid-position is seen for the second valve. At 1130 release path open via the remaining purge valve failing. Containment begins venting to the atmosphere through the path outlined above, an open exhaust damper and out the plant vent stack. At 1345 one purge valve returns to its shut position, thus terminating the release.

At 1430 a 24 hour time jump occurs. The plant condition is deemed stable, with sufficient subcooling and containment conditions under control. No further indications of fire in the electrical system are found and radiation levels in containment have stabilized.

The actual events followed the pre-exercise scenario. The "UNUSUAL EVENT" was declared at 0715, the "ALERT" at 0815, the "SITE AREA EMERGENCY" at 0915 and the "GENERAL EMERGENCY" at 1028. At 0934 it was recommended by the utility to place all milk producing animals located in the 0-2 mile radius on stored feed. IDNS concurred with the recommendation. At 1034 it was recommended to put milk producing animals on stored feed in the downwind sectors out to 10 miles and instruct the public to shelter 2-5 miles in the three downwind sectors and evacuate all sectors 0-2 miles. At 1102 it was recommended the sheltering be increased out to 10 miles in the three downwind sectors and at 1154 evacuate 2-5 miles in the three downwind sectors. There was a 24 hour time jump prior to recovery and reentry activity being initiated at 1455.

7. State and Local Resources Planned To Be Used in the Exercise

The State of Illinois planned to staff and demonstrate response activity at the State EOC in Springfield; the State Forward Command Post, the JPIC and the utility's EOF, collocated in Mazon; the State communications van, the IDNS REAC and RAFT (including environs teams); and the Illinois State Police van.

Will County planned to demonstrate its EOC with full emergency staff participating. The County also chose to demonstrate its capability (simulated) to activate the Prompt Alert and Notification System, the Emergency Broadcast System and access control. Evacuation of the plume EPZ was to be simulated. The municipalities of Braidwood and Wilmington activated their EOC in support of the County.

Grundy County planned to demonstrate its EOC with full emergency staff participating. The County also chose to demonstrate its capability (simulated) to activate the Prompt Alert and Notification Systems, the Emergency Broadcast System and access control. Evacuation of the plume EPZ was to be simulated. The municipalities of Braceville, Gardner, South Wilmington, Coal City and Mazon activated their EOCs in support of the County.

Kankakee County planned to demonstrate its EOC with full emergency staff participating. The County also chose to demonstrate its capability (simulated) to activate the prompt alert and notification system, the emergency broadcast system and access control. Evacuation of the plume EPZ was to be simulated. The Village of Essex in Kankakee County also activated its EOC in support of the County.

8. Exercise Findings in Past Exercises

As this was the first exercise for the Braidwood site, there were no previous exercise findings which would require corrective actions to be demonstrated during this exercise.

9. Exercise Objectives Still To Be Effectively Achieved

The State of Illinois did not completely demonstrate the following objective:

24. Demonstrate ability to brief the media in a clear, accurate and timely manner.

Will County did not completely demonstrate the following objective:

35. Demonstrate ability to determine and implement appropriate measures for controlled recovery and reentry.

Grundy County completely demonstrated all of the objectives that were selected for this exercise.

Kankakee County did not completely demonstrate the following three objectives:

3. Demonstrate ability to make decisions and to coordinate emergency activities.

4. Demonstrate adequacy of facilities and displays to support emergency operations.

24. Demonstrate ability to brief the media in a clear, accurate and timely manner.

Appropriate corrective actions will be required from the exercise participants and the above noted objectives must be demonstrated during the next biennial exercise.

The following sixteen exercise objectives were not selected for this exercise and have not yet been demonstrated in the current exercise cycle.

8. Demonstrate appropriate equipment and procedures for measurement of airborne radioiodine concentrations as low as 10 to the minus 7 uCi/cc in the presence of noble gases. (State of Illinois)
9. Demonstrate appropriate equipment and procedures for collection, transport and analysis of samples of soil, vegetation, snow, water and milk. (State of Illinois)
11. Demonstrate ability to project dosage to the public via ingestion pathway exposure, based on field data, and to determine appropriate protective measures, based on PAGs and other relevant factors. (State of Illinois)
12. Demonstrate ability to implement protective actions for ingestion pathway hazards. (State of Illinois)
18. Demonstrate the organizational ability and resources necessary to effect an orderly evacuation of mobility-impaired individuals within the plume EPZ. (Will, Grundy and Kankakee Counties)
19. Demonstrate the organizational ability and resources necessary to effect an orderly evacuation of schools within the plume EPZ. (Will, Grundy and Kankakee Counties)
20. Demonstrate ability to continuously monitor and control emergency worker exposure. (Will, Grundy and Kankakee Counties)
22. Demonstrate the ability to supply and administer KI, once the decision has been made to do so. (State of Illinois and Will, Grundy and Kankakee Counties)
23. Demonstrate ability to effect an orderly evacuation of onsite personnel. (Will County)
26. Demonstrate ability to establish and operate rumor control in a coordinated fashion. (State of Illinois and Will, Grundy and Kankakee Counties)
27. Demonstrate adequacy of procedures for registration and radiological monitoring of evacuees. (State of Illinois and Will, Grundy and Kankakee Counties)
28. Demonstrate adequacy of facilities for mass care of evacuees. (Will, Grundy and Kankakee Counties)
29. Demonstrate adequate equipment and procedures for decontamination of emergency workers, equipment and vehicles. (State of Illinois and Will, Grundy and Kankakee Counties)
30. Demonstrate adequacy of ambulance facilities and procedures for handling contaminated individuals. (Will, Grundy and Kankakee Counties)
31. Demonstrate adequacy of hospital facilities and procedures for handling contaminated individuals. (Will, Grundy and Kankakee Counties)
33. Demonstrate ability to relocate to and operate the alternate EOC. (Will, Grundy and Kankakee Counties as appropriate)

Narrative

1. State of Illinois

Activation and Staffing

The IESDA office maintains an around the clock monitoring of the communication network with all organizations providing support during emergencies. At 0715, IESDA was advised by the Braidwood Nuclear Power Station that an "UNUSUAL EVENT" had occurred. The situation escalated to an "ALERT" at 0815 and appropriate calls were made to verify the declaration and to activate the EOC. Notice of "SITE AREA EMERGENCY" was received at 0934. "GENERAL EMERGENCY" was received at 1035.

The EOC staff promptly reported to the EOC and made contact with the organizations intended to provide support to the response. The staff demonstrated their responsibilities to respond to the emergency. Each organization provided a list of names of those individuals who would be available to maintain a continuous operational capability.

REAC staff were activated by the use of "pocket pagers". Key personnel are assigned pagers with "all-call" capabilities. The IDNS dispatcher has a call list which he can use to notify those personnel who are not assigned pagers. Internal IDNS procedures are such that anyone assigned a pager who must be temporarily away from a telephone is required to notify the dispatcher. The State REAC was fully activated within 20 minutes of the staff being notified.

The ability to staff the REAC on a 24-hour basis was demonstrated by the presentation of a roster. All positions have backup. IDNS has a "personnel pool" available to fill in for any of the positions.

A telephone call from the State EOC was received by the IESDA Forward Command Post (FCP) Director at 0922. The Director had been pre-positioned at the FCP and this call was to initiate activation of the facility. Normally, the Director would report to the State EOC and be dispatched by the State EOC Director to the FCP at the "ALERT" classification if plant conditions warranted. After a thorough initial staff briefing by the State Police, IDOT, IDNS and the National Guard the FCP was declared ready for operation. The ability to maintain around the clock operations at the FCP was demonstrated by all agencies represented through double staffing.

Demonstration of mobilization of the RAFT from Springfield was not an objective of the exercise. The RAFT was prepositioned at the FCP and field monitoring teams were dispatched from this point.

Emergency Operations Management

The IESDA Director was in charge of the emergency response. He was supported by his Operations Officer as well as other members of his staff. Organization and prior training was evidenced by the manner in which the staff fulfilled their responsibilities.

The State IESDA advised FEMA Region V of the situation and requested that liaison officials report to the State EOC so that effective coordination with other Federal agencies could be maintained.

AREA RECOMMENDED FOR IMPROVEMENT: It is recommended that more frequent staff briefings be conducted in the State EOC with all members of the staff participating.

The REAC Commander was clearly in charge of the facility. This was demonstrated by periodic briefings, participation in decision making and involvement with key staff in analyzing information.

The State REAC staff also demonstrated a request for Federal assistance. REAC personnel were familiar with specific resources available from the DOE as evidenced by their request for field teams, mobile laboratories and aerial monitoring capabilities.

The State FCP was managed by the IESDA FCP Director, the person designated in the plan. He demonstrated thorough knowledge of the operational procedures of the FCP and also good management skills. One formal briefing was conducted before activation. All agencies in the FCP informally exchanged information throughout the exercise. They worked closely together and coordinated actions during the entire exercise. Copies of plans, SOPs, checklists, maps and logs were available and utilized throughout the exercise.

The NARS messages relayed to the FCP were received by radio or through the State Police. The hard copy of the NARS messages took an average of 45 minutes to reach the FCP. However, this did not adversely affect the overall operations.

There was a communications exchange between the IESDA FCP Director and the RAFT Commander. The RAFT Commander updated his staff every 15 to 20 minutes. The RAFT maintains copies of IPRA and used the SOPs continuously. The RAFT maintained a chronology of events and action items.

Facilities

The State EOC has been evaluated many times and found to have sufficient amenities to support the staff. Over the years, IESDA has made numerous improvements to their facility as well as operational procedures within the EOC. The EOC has all the necessary posted maps which can be easily referred to by the staff. A special facilities map is posted which displays the location of industries, motels, recreation facilities or any other special facility which may require special attention during an emergency.

Furniture designed with ergonomic considerations has been ordered for the recently redesigned REAC. Lighting has been designed to result in minimum eye strain. Two separate telephone systems are available to facilitate internal and external communication needs. Computers for data analysis, retrieval and storage of utility (reactor) parameters and near site environmental monitoring levels and graphic displays are state of the art.

This exercise was the first activation of the FCP at this particular site, replacing the mobile vans utilized in the past at other sites. The space, furniture, lighting and telephones were sufficient. Backup power is available through generators provided by the National Guard. Status boards were clearly visible and maps showing the evacuation routes, relocation centers, road blocks and population by sector were posted. Emergency classifications were prominently posted and maintained throughout the exercise.

The State FCP provides sufficient space for the RAFT personnel. Three telephones were maintained for communications between REAC and RAFT. RAFT personnel continuously used maps displaying monitoring points throughout the exercise.

Communications

Communications were well organized and controlled. The EOC communications room was equipped with the following systems:

<u>Primary</u>	<u>Backup</u>	<u>Location</u>
NARS	Telephone/Fax	State EOC
NARS	Telephone/Fax	Local/County EOCs
Telephone	Fax	Contiguous States
NARS	Telephone	Utility
NARS	Telephone/Fax	EOF
FENATS	Telephone	FEMA
Telephone	Teletype	JPIC

Twenty-four hour staffing is maintained providing capability for continuous operations. Conference call capability was available. The communications system personnel effectively performed their functions demonstrating their knowledge, skills and ability to successfully maintain communications with appropriate locations.

AREA RECOMMENDED FOR IMPROVEMENT: It is recommended that NARS messages being transmitted from IESDA to the recipients be identified by a message number. This is important so that recipients can readily identify a missing message.

Primary and secondary communication links between the REAC and the Utility's EOF, County EOCs, the State EOC, the JPIC and the RAFT (command vehicle for State field monitoring teams) were available and demonstrated. Facsimile capability was also demonstrated.

The FCP maintained radio communications with the State and County EOCs. Radio communication was utilized as the primary communications link. Commercial telephone was demonstrated as backup for this exercise. IDOT used only commercial telephone. Each agency had a dedicated line for their own use.

The National Guard and State Police demonstrated their communications van capabilities. The vans capability would allow for communication under adverse conditions.

The RAFT received NARS hard copy via telefax. Communication between REAC and RAFT was accomplished via telephone and between RAFT command and the field monitoring teams via radio. The RAFT communicated with medical facilities by telephone. These methods were effective.

Dose Assessment and Protective Action Recommendations

The IDNS field monitoring teams were equipped, briefed on the accident status and dispatched to predetermined field monitoring points from the RAFT at the State FCP. The time interval between the teams being dispatched and the first reported field measurements was approximately forty minutes. The plume verification officer and the field team dispatcher, through radio communications, were able to rapidly redirect the teams to various locations to define the plume, to verify radiation measurements and to provide radiation exposure control guidance to other emergency workers. Field measurements were promptly reported.

The vehicle utilized by one field monitoring team is a large van accommodating the team and equipment for expected terrain and weather. It has a GM counter and an ionization chamber rate meter, both with satisfactory range of coverage. The air sampling equipment was operated on vehicle supplied power. The air pump was calibrated and was equipped with a particulate filter and a charcoal cartridge. An air sample was taken to be read out for noble gas activity on a jelly counter.

The team members made competent readings of both ground and air sample readings with both the GM counter and the ionization chamber rate meter and took an air sample. Both members of the team were well versed in equipment operation. The map of the sampling locations was faded and it was hard to make out details. Environmental sample collection was not an exercise objective and therefore was simulated. The team had all the necessary gear to collect, package and label the samples.

AREA RECOMMENDED FOR IMPROVEMENT: The faded map used by the accident assessment team should be replaced with one that is easier to read.

The field team dispatcher was able to monitor IESDA radio communications to identify potential travel impediments to the environs teams like road closures and railroad traffic problems. Field monitoring data was recorded by three different RAFT personnel to insure accuracy and provide depth in reviewing data. This data was promptly reported to REAC for use in developing protective action guidance.

Equipment and procedures for determining ambient radiation levels were demonstrated by State field monitoring teams. In addition, the State has installed 16 Rueter-Stokes High Pressure Ionization Chambers approximately 1-3 miles from the reactor in each of the 16 compass headings described in NUREG-0654. A system to "poll" detectors periodically and display the radiation levels to REAC personnel was demonstrated.

The REAC had computer modeling available to predict the potential dosage to the public based on plant conditions and field monitoring data. The system included graphics which defined the plume and isodose lines within the plume.

Based on the potential for an iodine release, the REAC commander issued instructions recommending all emergency workers take KI. Based on release quantities, duration and predetermined population distribution, the REAC estimated a total population dose.

The IDNS maintained liaison representatives in the State EOC. These representatives transmitted the recommendations and field monitoring results from the REAC to the EOC staff. All communications were logged. Monitoring data was recorded on an EPZ map. Major recommendations and emergency events were summarized and provided to the EOC staff during periodic briefings. Technical information was presented in an easily understood format. IDNS Liaison staff effectively performed their responsibilities.

Agricultural advisories placing lactating animals on stored feed were issued at 0945 for animals in all sectors 0-2 miles and at 1045 for all sectors out to 10 miles. The protective action recommendation to evacuate 0-2 miles in all sectors and shelter in place 2-5 miles in sectors J, K, and L was issued at 1100. Advise to extend sheltering 5-10 miles in sectors J, K and L was issued at 1130 while the evacuation recommendation for sectors J, K and L for 2-5 miles was issued at 1150.

Public Alerting and Instruction

The IESDA successfully demonstrated the ability to formulate and distribute appropriate instructions to the public in a timely fashion. Evacuation procedures and operations were controlled and well-organized. The IESDA staff was professional and knowledgeable of their responsibilities.

Appropriate personnel implemented SOPs and distributed clear and concise emergency public instructions. All messages including protective actions were described in familiar terms, provided guidance on implementation and distributed at appropriate times.

Protective Action

The State EOC staff assisted the Counties in controlling access to the affected sectors in the 10-mile EPZ. These efforts were coordinated by several agencies and involved the coordination of several operational districts within agencies. The Illinois Department of Transportation (IDOT) coordinated road blockade activities with the staffing of eight traffic control points by the State Police. Supplemental staff and equipment were on stand-by with the National Guard. Traffic control points were relocated in response to the changing emergency situation.

Traffic control points were ordered activated at the "SITE AREA EMERGENCY". Traffic volume and personnel necessary to manage the evacuation process were discussed. Rail traffic was controlled through a request to the State EOC to contact the Illinois Commerce Commission. State and local personnel and vehicles are in sufficient numbers to cover initial access control. Long term conditions would require assistance from the National Guard. Discussions regarding this were conducted and a simulated request was made for National Guard resources. The combined resources of the IDOT, State Police and National Guard to keep evacuation routes clear were procedurally demonstrated.

The IDOT also notified the Federal Aviation Administration to control air traffic over the EPZ while the Illinois Commerce Commission notified the railroads to reroute trains through this area. Water traffic in recreational areas and the Kankakee River was controlled by the joint efforts of the Illinois Department of Conservation and the U. S. Coast Guard.

Radiological Exposure Control

Appropriate direct reading and permanent recording dosimetry was issued to RAFT personnel. IDNS has previously supplied personal dosimetry to other State agency emergency workers. RAFT command maintains approximately 150 dosimetry packets for other workers. KI is included in all dosimetry packets.

The field monitoring teams were equipped with protective clothing. Exposure control for the field assessment teams was very good. The use of the thyroid blocking agent was ordered at 1247 hours.

RAFT command was aware of the relocation sites and possible decontamination centers. The Environs Team Coordinator was prepared to adjust the field team composition in order to create decontamination teams if requested by REAC.

RAFT command personnel are knowledgeable of criteria and procedures for KI authorization, decontamination and exposure control methods. Emergency worker radiation exposure was continuously recorded and evaluated by RAFT command personnel. KI use was simulated as recommended by REAC based on plant status and engineering projections of further plant degradation.

Media Relations

The State did prepare a room in the State EOC to receive the media. Some media did appear at the EOC and were afforded a briefing of the EOC functions. However, the majority of the State's media relations occurred at the JPIC.

The State of Illinois was represented in the JPIC by staff from IESDA and IDNS. The utility also had spokespersons at the JPIC. County governments do not routinely send representatives to the JPIC. The State of Illinois information center staff were prepositioned near the JPIC location. The State staff arrived at the JPIC at 0955. Neither IESDA nor IDNS demonstrated a shift change but around the clock staffing capability was demonstrated by presentation of a roster.

The media briefing area is in a connected garage area and could accommodate about 100 media people with their electronic equipment. The Utility uses this area for a JPIC for Dresden, LaSalle, and Braidwood and is "always" set up and maintained as a media briefing center. Its non-emergency use is that of a classroom/training center.

The utility EOF security desk is set up in the hallway between the JPIC and the EOF operations room. This caused traffic congestion when people were checking in with security and briefers were trying to reach the briefing room.

The primary means for communications with the State EOC in Springfield and with the County EOC's is the telephone. A fax capability for hard copy is available and was demonstrated during the exercise. Only one fax machine/line was utilized, however other fax machines are available which would permit simultaneous sending and receiving of material.

Thirteen news briefings were conducted during the course of the exercise. The first at 1008 announced "SITE AREA EMERGENCY". The last briefing was at 1525 and announced unlimited movement in sheltered areas and unrestricted reentry into evacuated areas. This announcement also removed all protective actions for lactating animals.

Even though releases were coordinated before each briefing some briefings were not joint State/utility briefings. Hard copy of releases were available at the time of the briefings or shortly thereafter. On several occasions State and utility briefers were unable to answer questions from their audience. Answers were obtained for these questions and presented at later briefings.

Releases received by the JPIC staff from the State EOC described areas recommended for protective actions in terms of distances from the reactor and sectors, even though the EOC staff had the SOPs containing the area descriptions in terms of familiar landmarks and geo-political boundaries. As a result the first several messages received at the JPIC were read and distributed to the media as received using distances from the reactor and sectors. Releases transmitted to the JPIC from Springfield also contained the generic listing for the EBS station although the State staff has the specific identification for the area station. While public instruction is not a function of the JPIC the County messages are read and made available to the media representatives at the JPIC.

AREA REQUIRING CORRECTIVE ACTION: E.7 Although sector descriptions provide an easy effective means for the internal transmission of protective action recommendations, these sector descriptions should be converted to familiar geopolitical descriptions (per the SOP's) prior to release at the JPIC. Information that references the use of the EBS station should contain the call letters of the EBS station and be consistent with the listing in the public information brochure.

Even though rumor control was not an exercise objective, the JPIC staff was responsive to rumors as they occurred. They discussed and clarified inaccurate reports during media briefings.

The reentry message was prepared by the JPIC staff. It was based on recommendations from the IDNS. Because of the nature of the release, noble gases, safety precautions were not required in this message. They were excluded only after extensive discussion between the JPIC staff, the REAC and the State EOC staff in Springfield.

Recovery and Reentry

The State emergency response personnel demonstrated an ability to identify requirements, programs and resources available to implement recovery and reentry procedures. The discussion did not include agency interaction and decision-making procedures. Agency interaction provides an environment conducive to each agency identifying primary role responsibilities and possible support services and assistance.

AREA RECOMMENDED FOR IMPROVEMENT: The next scenario should include provisions for a more complete discussion by the State EOC staff of unique problems which may be experienced during the recovery and reentry phase of an emergency. The discussion should involve all members of the staff.

REAC staff participated in reentry decisions as demonstrated by their efforts to rescind a press release that gave instructions to wash foodstuffs in the plume prior to eating. REAC's decision was based on the absence of any particulate release (and therefore subsequent deposition) from the reactor. REAC's reentry decisions were coordinated with measurements made by State field teams to confirm the absence of radiation readings above background level in the plume area.

REAC requested the RAFT Commander to provide field monitoring data for use in recovery and reentry decision-making. The REAC recommendation to relax protective actions was made on the basis of simulated monitoring data indicating safe level of radioactivity.

The FCP remained activated until notification from all County EOCs, as well as the State EOC, that all reentry was completed. IDOT staff did not remain at the FCP throughout the recovery and reentry activity. Road blocks were removed at the notification of unrestricted reentry and State Police presence remained until reentry was completed.

AREA RECOMMENDED FOR IMPROVEMENT: IDOT staff should remain at the FCP until it is certain that they no longer have a role in the recovery and reentry procedures.

2. Will County

Activation and Staffing

The Will County EOC, currently located in Plainfield, was activated following the receipt of the "ALERT" notification over the NARS at 0832. Alerting of the emergency staff and mobilization procedures were demonstrated. An up to date written call list was used to complete staffing of the EOC at "SITE AREA EMERGENCY". The Plainfield Police Department's dispatch center receives the NARS messages. The dispatch center is staffed 24 hours by the Plainfield Police Department personnel. Verification of NARS messages is over commercial telephone, as specified in the plan.

The EOC was fully staffed and operational with the required personnel by 0959. The capability for a continuous operation at the County EOC was demonstrated by a partial shift change of some agencies and the presentation of a roster for the others. Both first and second shift personnel displayed training and knowledge in their respective roles. Incoming personnel were briefed on the current status and activities.

Emergency Operations Management

Emergency operations were effectively managed by the Will County ESDA Coordinator. Periodic briefings were conducted including status reports by appropriate agency representatives. The staff was involved in decision making as directed by the ESDA Coordinator. Written procedures were used; message logs were kept; messages were reproduced and distributed to EOC staff. The EOC was notified of the "ALERT" at 0832, the "SITE AREA EMERGENCY" at 0934 and the "GENERAL EMERGENCY" at 1034.

Appropriate protective action recommendations were received by the County. The recommendation to place milk producing cows within 2 miles of the station on stored feed was received at 0943. At 1034, simulated evacuation of a two mile radius and sheltering in sectors J, K and L downwind 2-5 miles was recommended and implemented. At 1102, simulated shelter recommendations were extended out to 10 miles for sectors J, K and L along with the continuing 2 mile radius evacuation. At 1154, the simulated evacuation was increased to include the 2-5 mile portions of sectors J, K and L with simulated shelter recommendation remaining for 5-10 miles in sectors J, K and L.

Facilities

The facilities available at the Will County EOC were sufficient for the County's operations. The operations area was somewhat limited in space due to the number of agencies represented. The facility has the capability to provide for extended operations through the use of a kitchen and sleeping area. The EOC is to be moved to a newly remodeled building in the business district of Joliet. The move is expected in 1986.

All required maps and displays were posted for use by the emergency staff (i.e. plume EPZ with sectors, evacuation routes, relocation centers, access control points, radiological monitoring points and population distribution by evacuation area). Emergency classification levels were posted and changed as necessary throughout the exercise. A status board was maintained with current significant events.

Communications

The ability to communicate with all appropriate locations, organizations and field personnel was demonstrated by the Will County EOC staff. Primary communications with the State is via the NARS and commercial telephone lines. A toll free number over commercial land lines is available for communications with the utility. Commercial telephones were used to notify the Towns of Braidwood and Wilmington of changes in emergency classification levels and protective action recommendations (i.e. NARS messages). Commercial telephones with radio as backup are used to communicate with other appropriate locations. The mutual aid fire radio net is the primary link to support hospitals and ambulances. A data fax machine provides hard copy capability between the EOCs, the EOF and the JPIC.

Will County has a communications van that has the ability to communicate with all agencies required for operation of the EOC. The van is self contained. It has two cellular telephones for contact with agencies not having radios. The van can duplicate all dispatch centers in Will County, i.e. Sheriff's Dept, County Road, Fire Dept. etc. The van has a bank of batteries that will allow for up to eight hours continuous operation even if there is a failure of the self contained generator. The van has radio coverage for all frequencies from the CB range up to UHF for contact with aircraft on emergency frequencies. The van can have up to 15 hard line telephone lines dropped by the telephone company so that commercial telephones would be available for emergency operation.

Dose Assessment and Protective Action Recommendations

These activities are objectives for the State of Illinois only.

Public Alerting and Instruction

Will County officials ordered the precautionary evacuation of the Towns of Braidwood and Godley at 1059, after receiving notification of the "GENERAL EMERGENCY" at the Braidwood Nuclear Power Station from IESDA at 1034. The Towns of Braidwood and Godley would be the only Will County incorporated areas impacted by the "GENERAL EMERGENCY" sheltering and evacuation order. The evacuation of the two communities via school buses and contracted buses was termed precautionary because of the report of two fires in an auxiliary building at the Station. The IESDA reported there had been no radioactive release from the utility but the decision was made by the County to evacuate.

The County activated the siren system in Will County at 1045 after receiving notification of a "GENERAL EMERGENCY" from the IESDA at 1034. The EBS (WJOL-AM 1340 and WLLI-FM 96.7) was activated at 1046 to issue public alerting and instructions. The County used modified prescribed messages and real time messages received from the State for dissemination of public instructions.

Protective Action

The County EOC staff from the County Sheriff's Department and the County Highway Department simulated the manning of check points for ingress and egress of the evacuated areas. The County Sheriff's, assisted by municipal police departments, would man the checkpoints and the County Highway Department would be responsible to provide barricades for the closing of designated roads per the County SOP. Emergency worker personnel would be permitted as necessary into areas once they are evacuated. A determination of which emergency workers would be allowed into the area would be determined on an individual basis through the County EOC in consultation with the respective municipal police departments and the County Sheriff's Department.

The Sheriff's representative, in cooperation with the County Highway Department, simulated the establishment of traffic control points to facilitate the evacuation. Traffic and access control points were established by State Police at Interstate 55 (Northbound) and route 47; the intersection of Route 113 (eastbound) and route 47; Interstate 55

(Southbound) and Interstate 80 and Interstate 55 (Southbound) and Route 6. Traffic and access control points established by the County Sheriff were at County Line and Essex Roads; Smiley and Essex Road; Coal City and Novy Road, and Coal City Road and North Central Avenue. The Will County Forest Preserve Police and County Highway Departments were reportedly assisting in the evacuation.

The County Highway Department had simulated the dispatch of County Highway personnel with trucks and barricades for assisting with setting up roadblocks and the removal of stalled vehicles blocking the evacuation routes. The Forest Preserve Police was ensuring the evacuation of the recreation areas. The County initiated activation of a reception center at the Joliet Junior College in a timely fashion (1050). The Center was simulated to be manned by the Red Cross, an ESDA shelter manager, ham and citizens band radio operators and other personnel per the County SOP. The EOC staff had access to a listing of individuals in Will County that are mobility impaired. The listing included information as to the particular special needs of each individual listed. The Will County ESDA Coordinator contacted the ESDA Coordinators in Braidwood, Wilmington and Godley for notification and evacuation of the mobility impaired individuals needing assistance per the County SOP.

As part of the "SITE AREA EMERGENCY" notification from the IESDA at 0934, the County was advised that IDNS recommended as a precautionary measure that all milk producing livestock within a two mile radius of the Station should be placed on stored feed. The EOC staff coordinated with the IDNS representative in the EOC for updates and the progress of the State's notification of farmers in Will County.

At 1236, the County was notified of a release of radioactive gas which began at 1223 at the Station. The areas in Will County affected by the release (all sectors 0-2 miles, 2-5 and 5-10 miles downwind sectors J, K and L) had already been evacuated or sheltered as a precautionary measure. The County simulated recommending County emergency workers take KI based upon the recommendation from IDNS. The message indicated that IDNS was monitoring the release and that no contamination was expected but that taking KI was precautionary.

Radiological Exposure Control

Although not an exercise objective for Will County, two County personnel were issued high range dosimeters (0-200R), simulated TLDs, record keeping cards and KI. The two personnel were dispatched from the EOC by the County Dosimetry Control Officer with verbal instructions on the recording of information on the dose record cards, telephone and/or radio call-back to the EOC regarding dosages and instructions on the use of KI. The two workers initiated calls back to the EOC giving the Dosimetry Control Officer readings from the dosimeters. The dosimeter readings were entered on a dosimetry control log by the Dosimetry Control Officer. There was also simulated distribution of dosimetry, KI, and record keeping cards to personnel of the County Sheriff's Department, the Highway Department and the Will County Forest Preserve Police.

Media Relations

There were three press briefings held for the media by the County. The County Boardroom is the area designated for press briefings. Other EOC personnel acted as media representatives for press briefings provided by the County Board Chairman in concert with the Will County ESDA Coordinator and the IDNS representative. The press briefings were accurate and complete and consisted of information provided to the County by the State ESDA, information released to the EBS, and County information that was provided to the State FCP and the JPIC at Mazon.

Recovery and Reentry

The relaxation of protective actions by the County was based on information provided to the County by IDNS. The County was notified by the IDNS that the radioactive gas release from the Braidwood Station had terminated effective at 1418 hours and the "GENERAL EMERGENCY" classification remained in effect. The County's news release to the EOF and JPIC erroneously stated that residents in the City of Wilmington had been directed to evacuate when, in fact, it should have been Braidwood. The error was recognized at the JPIC and the information was not released to the media.

Reentry decisions were discussed by the EOC staff and relayed to participating emergency response organizations by their respective EOC staff representatives. The agencies simulated the reentry and recovery procedures being implemented by their respective organizations. There was no discussion of arrangements to provide the public with information on safety precautions, possible health effects of low level radiation exposure and the availability of compensation for the financial losses sustained.

AREA REQUIRING CORRECTIVE ACTION: M.1 Reentry and recovery should be more fully demonstrated by the County during the next exercise to include arrangements to provide the public with information on safety precautions, possible health effects of low level radiation exposure and the availability of compensation for financial losses.

Local Government Response

The emergency response function of Braidwood and Wilmington within Will County is under the responsibility of the County. Their emergency response enhances the County's program. There are improvements which could be made. While they are not singled out for specific action, it is Will County's responsibility to work with both jurisdictions to resolve the problems cited below to ensure a unified and effective emergency response.

3. Braidwood

Notification of an incident at the Braidwood plant is received from the Will County EOC by the Town of Braidwood Police Department's dispatcher in the Police Station. The dispatch center is manned 24 hours a day by police personnel. Upon receipt of notification, the dispatcher initiates a call down procedure using a written list with work and home telephone numbers of emergency staff. Some phone numbers were incorrect but corrections were rapidly made. Verification of calls from Will County was difficult to obtain. The Will County EOC phone was either busy or no one answered. This led to delays of up to 15 minutes.

Mobilization of the emergency staff was demonstrated with personnel reporting to the EOC in "real" time. The EOC was fully staffed and operational at 1044, following the "SITE AREA EMERGENCY" notification. The notification of "UNUSUAL EVENT" was not received at the Braidwood dispatch center. The first message from Will County came at the "ALERT" declaration at 0840.

The Braidwood EOC was effectively managed by the ESDA Coordinator. Periodic briefings were conducted and the staff was involved in appropriate decision making. Internal message handling was effective with each staff member receiving hard copy of appropriate messages. Logs of incoming and outgoing messages were maintained.

The Braidwood EOC is in the Fire Department Building. There is ample space and amenities to support an emergency response. Displays and maps (excluding population distribution) were used and updated following each significant activity. An additional clerical person to assist in the posting and updating of the status board would be helpful. This would relieve the EOC Director of this duty.

At 1056, the Will County EOC recommended that Braidwood EOC relocate their operations to Wilmington. This activity was simulated. The relocation site would be separate from the Wilmington EOC.

Primary communications for all EOC contacts (excluding Police and Fire) are over commercial telephone. There is no back-up system available at the EOC. An ARES operator was deployed from the County following the declaration of "SITE AEA EMERGENCY" and was set up to provide back-up communications. Communication with ambulances and fire and police personnel is via radio. Commercial telephones are used to contact schools and hospitals.

The Braidwood EOC is responsible for supplemental public alerting and provision of instructions to the incorporated public through route alerting and notification of schools. These items were demonstrated through simulation and discussion. There are resources available to support these functions.

The Braidwood Police Department is responsible for the traffic and access control duties within the incorporated area. There are resources in terms of equipment and manpower available to support traffic control activities. The State Police is also available to assist if needed. The control points were activated (simulated) following the recommendation for the evacuation of Braidwood.

The locations and special requirements of mobility impaired under the jurisdiction of the Braidwood staff are known by officials. Proper steps were followed to provide assistance to these individuals.

There are sufficient dosimeters, 0-200 R and TLDs available for the EOC staff. EOC personnel have been trained in dosimetry use. KI is stockpiled in the EOC and procedures for its distribution and use are known by the ESDA Director.

4. Wilmington

Activation and initial staffing procedures demonstrated at the Wilmington EOC were not observed. A full complement of staff (according to the plan) was at the EOC. The call list used to alert the emergency staff contained inaccurate telephone numbers. The wrong telephone numbers were quickly identified and rectified. Plan and call list should be revised to reflect this.

Twenty four hour staffing was demonstrated by the presentation of a duty roster. All responding organizations represented at the EOC have backup personnel available.

The Mayor of Wilmington was the official in charge of the EOC. He effectively managed the emergency staff and coordinated discussions and decision making between agency representatives. Periodic briefings were held among the EOC staff and the staff was kept up to date on significant events. Copies of plans and written procedures were available for reference. Written logs were maintained for messages and response activities. A security guard was posted at the entrance to the EOC to control access.

Overall emergency operations management demonstrated a timely and efficient response by the EOC staff. All agencies participating were involved in the EOC activities (i.e. briefings, decision making, tabletop discussions, etc.)

The facilities used by the Wilmington EOC staff were sufficient in providing the required resources to perform their expected duties. The area utilized during this exercise has not been evaluated before. Ample room, lighting and furniture are available. One telephone line with four extensions was set up in the EOC operations room. This one telephone line had to be shared by everyone. This was the primary means of communications with other (outside) responding emergency teams. Additional lines have been ordered. The only back-up system to the telephones is an ARES operator who was dispatched to the EOC following the "SITE AREA EMERGENCY" declaration. He was able to establish communications with the Will County EOC ARES operator.

With the exception of population distribution by sectors, all required maps and displays were posted in the EOC operations room. It is suggested that a population distribution map be obtained and posted. A status board was maintained with current updates being posted promptly. Emergency classification levels were displayed.

There was a sufficient supply of dosimetry equipment available at the EOC. Dosimeters and TLDs were issued prior to arrival of the evaluator. KI was available for distribution, if warranted, by the EOC Director in Wilmington.

Recovery and reentry activities demonstrated in Wilmington were tabletop only. The staff discussed their responsibilities and possible requirements which could result during recovery and reentry.

5. Grundy County

Activation and Staffing

The County has the capability via NARS to communicate directly with the Braidwood Station and the line is monitored around the clock. The call informing the County the accident was upgraded to "SITE AREA EMERGENCY" was received by the County dispatcher at 0934 from IESDA. The dispatcher took the appropriate action per the dispatcher SOPs and made the calls to the municipalities and the emergency workers. The dispatcher worked from a written call list which was up to date. The EOC was activated by 1020. A roster was presented with the names of the people assigned to the second shift. There was also a partial shift change. The Coroner did not participate in this exercise due to other pressing business.

Emergency Operations Management

The management of the EOC was demonstrated by the County ESDA coordinator. Briefings were held periodically. They were informative and timely. The staff was effectively used during the exercise and all agencies had written procedures. Messages were handled effectively and logs for messages were kept. Special police were stationed at the door of the EOC to check IDs before entry was permitted.

Exercise controllers were observed coaching exercise participants. At future exercises controllers should be instructed to limit their remarks to participants to controller functions only and not coach the participants.

AREA REQUIRING CORRECTIVE ACTION: N.l.a. Controllers should take care so as not to become a part of the participant emergency response through coaching. (State of Illinois)

Facilities

The County EOC included working space, communications, equipment, maps and visual aids and a status board. Maps included plume EPZ, evacuation routes, relocation centers, access control points, radiological monitoring points and population distribution. A status board was clearly visible and emergency classifications were posted at the top of the board.

Communications

The primary communications system with the State and utility is the NARS. Commercial telephone, radio and data fax are the primary communications used to contact other areas within the EPZ.

There is the capability to contact sheriff squad cars, municipal fire departments, hospitals and ambulances by radio. This capability was demonstrated by the County ESDA Coordinator.

Dose Assessment and Protective Action Recommendations

These activities are objectives for the State of Illinois only.

Public Alerting and Instruction

The County ESDA Coordinator issued the instructions to the Sheriff dispatcher to activate the alert and notification system at 1046, which was 12 minutes after receiving the initiating call from IESDA. The EBS station was contacted at 1044. The County ESDA Coordinator informed the EBS station of the incident at the Braidwood Station.

The EBS stations for the Braidwood ten mile Emergency Planning Zone, WJOL-AM and WLLI-FM, demonstrated that they are capable of receiving and broadcasting EBS messages to the affected communities. Since both stations are collocated and operated together, broadcasts of EBS messages can take place simultaneously. A person trained in EBS procedures and aware of the particular responsibilities in the Braidwood emergency plan is present at all times.

The receipt of several simulated EBS messages at the stations was observed during the exercise. The message that corresponded to the recommendation to place animals on stored feed was received from Kankakee County at 0946. The message that corresponded to the declaration of "GENERAL EMERGENCY" was received at 1046 from Grundy and Kankakee Counties, at 1047 from Will County, and at 1051 from the State. In all cases, the proper code word was used by the caller. Subsequent simulated EBS messages were received between 1111 and 1118 and between 1201 and 1206 from the various EOCs participating in the exercise.

The EBS Station Manager demonstrated a keen interest in the responsibilities of the stations under the Braidwood Emergency Plan. He had a copy of the Memorandum of Understanding between the stations and ESDA and knew its contents. He considered how to handle various contingencies, such as the receipt of a call to activate the EBS system from one County, but not the State or other Counties. He explained the array of equipment that would be used to record and air the EBS messages, concluding that the EBS messages of several jurisdictions could be recorded simultaneously given enough people to answer the telephones, and that a message could be broadcast within about a minute and a half after it was recorded.

However, no general training of station personnel about the Braidwood Emergency Plan has been conducted. During the exercise, a number of questions were asked by the station manager which suggests that training of station personnel would improve their familiarity with the procedures, and that some discussions with station management would answer their questions about how the EBS is to be activated under various anomalous circumstances which do not appear to them to be covered under the Memorandum of Understanding.

AREA RECOMMENDED FOR IMPROVEMENT: The IESDA should consider familiarization training and the dissemination of information for the EBS station staff on the Braidwood Emergency Plan and Procedures. The Memorandum of Understanding could be discussed and modified by the IESDA, the Counties and the EBS station.

The alert and notification system consists of sirens as the primary means of alerting the public to tune to the local EBS radio station listed in the public information brochure. There are tone alert radios in institutions, factories and schools. The County also has in place a backup system of route alerting, whereby they use police vehicles to alert the population.

Protective Action

Traffic control points were promptly established by the Sheriff's Deputies and the County Highway Department. Impediments to the normal flow of traffic, snow or vehicle breakdown on highways could be handled effectively by the Highway Department. Actions were simulated by both departments.

As part of the "SITE AREA EMERGENCY" notification from the IESDA at 0934, the County was advised that IDNS recommended as a precautionary measure that all milk producing livestock within a two mile radius of the Station should be placed on stored feed. The EOC staff coordinated with the IDNS representative in the EOC for updates and the progress of the State's notification of farmers in Grundy County.

At 1236, the County was notified of a release of radioactive gas which began at 1223 at the Station. The areas in Grundy County affected by the release (all sectors 0-2 miles, 2-5 and 5-10 miles downwind sectors J, K and L) had already been evacuated or sheltered as a precautionary measure. The County simulated recommending County emergency workers take KI based upon the recommendation from IDNS. The message indicated that IDNS was monitoring the release and that no contamination was expected but that taking KI was precautionary.

Radiological Exposure Control

Not an objective for Grundy County during this exercise.

Media Relations

The County Boardroom on the first floor of the County Building was used as the news media center. The room is large enough to accommodate the local news media. If other than local news media were seeking information, they would be directed to the JPIC at Mazon. The County ESDA Coordinator served as the PIO. Also present for the briefings were the County Board Chairman and Sheriff's Department representative. The briefings were to the point and covered the necessary areas of interest to the general public. The PIO was knowledgeable of the content of the public information brochure.

Recovery and Reentry

The County simulated recovery and reentry procedures. Recovery and reentry decisions and implementation guidance were provided by the State EOC and IDNS. Restrictions that were in place during the exercise were removed and instructions were given to returning evacuees. Road blocks were removed and evacuation centers closed. IDNS field monitoring teams surveyed evacuated areas before reentry was permitted.

Local Government Response

The emergency response function of Coal City, Mazon, Gardner South Wilmington and Braceville within Grundy County is under the responsibility of the County. Their emergency response enhances the County's program. There are improvements which could be made. While they are not singled-out for specific action, it is Grundy County's responsibility to work with all jurisdictions to resolve the problems cited below to ensure a unified and effective emergency response.

6. Coal City

The Coal City EOC staff demonstrated a capability to protect the citizens of Coal City in the event of an accident at the Braidwood Nuclear Power Station. The EOC staff was activated, as planned, from the police dispatch office when the "SITE AREA EMERGENCY" was declared. They reported to the EOC at the "fire barn". The EOC is a facility with spacious accommodations for extended operations. It has a full complement of maps, backup power, and a status board.

Both the Mayor and the Assistant Mayor were present at the EOC to direct the emergency response. A number of volunteers took time off from their regular employment to participate in the exercise. Each EOC staff person was provided with a set of procedures tailored to their responsibilities. A list of the mobility-impaired was available and the staff was aware of its significance. They planned for the contingency of evacuating 1500 students from various schools in Coal City. The Police Chief was aware of his responsibility to participate in traffic control, and discussed the deployment of a squad car to the traffic control point for which he is responsible, as well as the placement of barricades by the Street Department. The problems that would be posed by a snowstorm or other traffic obstruction were discussed, and the Street Department representative planned how he would respond.

Two problems were observed. Most important, the EOC only has one telephone line available for staff use. Some additional two-way radio frequencies could be made available at the EOC. A portable radio could be brought in to serve as a base station for the buses that would be used to evacuate school children. The lack of sufficient telephones for the EOC staff could be a handicap. It is recommended that a telephone line and an instrument be procured for each EOC staff person.

7. Mazon

The Mazon EOC staff demonstrated a capability to protect the citizens of Mazon in the event of an accident at the Braidwood Nuclear Power Station. The EOC is well suited to its purpose. Located in the Mazon Fire Station, it has sufficient accommodations for an extended operation, a full complement of maps, backup power, a status board and a telephone for each staff person.

The entire EOC staff, including the President of the Village Board and a number of volunteers, participated in the exercise. Each staff person was provided with a set of procedures tailored to their responsibilities. A list of the mobility-impaired was available and the staff was aware of its significance. The EOC staff planned for the contingency of evacuating the entire Village, including its schools.

8. Gardner

The NARS notification of "SITE AREA EMERGENCY" declaration was received in Gardner at 0956. By 1020, most of the EOC staff had arrived and the facilities were in final preparation. Upon the Mayor's arrival at 1035 the EOC was fully staffed and declared fully operational. The County EOC was so advised. The EOC staff was effectively led by the Mayor, who methodically conducted staff briefings and discussions of their responsive actions. As protective action recommendations were received the EOC staff discussed the various facets of their response actions which included: notification of mobility impaired, mobilization of Municipal and Township workers, dispensing dosimetry equipment, notification of industries (who may need extra time for orderly shutdown), dispatching of mobile PA units to advise the public of protective action, and notification of school administrators. The EOC staff anticipated contingencies and possible developments of the nuclear accident. The EOC facilities were sufficiently equipped with telephones, wall maps, status board and classification signs.

9. South Wilmington

The NARS notification, upgrading the "GENERAL EMERGENCY" to include the recommendation to simulate evacuation of the South Wilmington area, was received at 1213. At that time the EOC was fully staffed and operational. Upon receipt of the recommendation to evacuate the EOC, staff initiated action to simulate evacuating the general public, the school population, and the mobility impaired. The staff discussed appropriate evacuation routes, relocation centers, and local traffic control measures. The EOC staff was directed by the Acting Mayor of South Wilmington. The EOC staff activity was supplemented by free play problems inserted by the State Controller which gave the staff some real world complications with which to cope. Upon evacuation of the general population the EOC staff contacted the County EOC for instructions and were advised to evacuate the staff. The EOC facilities were sufficiently equipped with telephones, wall maps, status board and classification signs.

10. Braceville

Upon receipt of the NARS notification of "UNUSUAL EVENT" at 0804, the EOC staff was notified. The staff began arriving at the EOC at 0822. The EOC was staffed and operational by 0915. The County EOC at Morris was advised that the Braceville EOC was operational at 0925. The EOC staff is familiar with the plan and used it for clarification when questions arose. The EOC facilities were sufficiently equipped with telephones, wall maps, status board and classification level signs. Presently, the dispatcher has to go to the opposite end of the Community Hall to make copies. This causes a delay and causes the dispatcher to be away from the communication lines. Plans are underway to put a copier at the dispatcher's desk. Because of the exercise scenario the EOC was taken out of play (evacuated) early.

11. Kankakee County

Activation and Staffing

The Sheriff's Dispatch is located in the basement of the County Sheriff's Building in downtown Kankakee. The Kankakee County EOC is located in the County Office Building next door to the Sheriff's Department Building. Notification of the "UNUSUAL EVENT" and, later, changes in status were received by the Sheriff's Dispatcher over the NARS line from the State EOC in Springfield. The Dispatcher was able to verify the calls through call back procedure within one to two minutes after receipt. The dispatchers referred to prepared call lists and initiated calls indicated for each Emergency Action Level classification. The EOC staff members were notified following receipt of the "ALERT" classification at 0836. The EOC was fully staffed at 0920.

Most positions were double or triple staffed. Twenty four hour capability was demonstrated by this multiple staffing or by presentation of rosters.

Emergency Operations Management

The County Board Chairman directed operations. He was assisted by the County ESDA Coordinator, who served as Chief of Staff. Staff briefings were conducted at intervals ranging from 15 minutes to 35 minutes during the initial hours. This interval was extended during the later hours of the exercise when events also slowed. The staff members participated in the briefings to advise others of the status of emergency activities. A copy of the current plan and individual checklists were used throughout the day. The checklists were designed for each classification level and were used at the appropriate times. Message logs were kept by the administrative staff. Messages were copied and distributed to all staff members. Changes in emergency classification were "ALERT" as of 0832, "SITE AREA EMERGENCY" as of 0934 and "GENERAL EMERGENCY" as of 1040. Protective actions were implemented at 0945, 1040, and 1202.

Facilities

A sign-in-and-out station was setup near the entrance to the operations room in a hallway. The station was operated by Sheriff's Officers and Auxiliary Police. The operations room is approximately 14' by 24'. A central table with 19 chairs provided work space for 21 staff members and 4 observers (including the FEMA evaluators). Movement around the room was limited to an aisle approximately 30 inches wide around the periphery. This aisle was restricted on one side by the datafax machine. A cable was dropped from the ceiling to provide connection for 19 telephones that were taken from a locker within the room.

AREA RECOMMENDED FOR IMPROVEMENT: The County should consider locating a larger area for the operations room or relocating some functions, such as message control and the datafax machine, into the adjacent room within the secure area.

All required maps and charts were available and were used to post information. The status board at the rear of the room was visible to everyone in the room. Significant events occurring throughout the day were posted on the board. Frequent briefings kept the staff abreast of events but there was little information written down for later referral.

AREA REQUIRING CORRECTIVE ACTION: H.3 The status board should be used to display key information such as actions taken by the County and the Town of Essex in addition to changes in emergency classification levels.

Communications

The County communications system gives priority to support of the emergency operations. Telephone is the primary means of communications with Police and Fire radios as the back-up system. The main communication center is the County Sheriff Radio Room in the County Building. The operations room is supported by commercial telephone and law enforcement radio. A datafax machine was linked to commercial telephone.

Dose Assessment and Protective Action Recommendations

The activities are objectives for the State of Illinois only.

Public Alerting and Instruction

At 0934, the County was notified by the State EOC that plant conditions had changed to "SITE AREA EMERGENCY". A protective action was ordered to place milk animals within two miles of the plant on stored feed. The County Board Chairman called the EBS station at 0945 and gave a codeword to simulate transmission of a prescribed message. Sirens were simulated sounded at 0947. At 1043, when conditions had changed to "GENERAL EMERGENCY" and protective actions changed, the sirens were again sounded and EBS was notified. The sirens were sounded again at 1202 when protective actions changed. Each notification to the EBS included simulated reading of prescribed messages taken from the plan SOPs, concerning school children, location of shelters, and preparations individuals should make prior to evacuating. Areas to take shelter and be evacuated were described using familiar boundary descriptions. These instructional type messages were periodically repeated between changes to protective actions.

AREA REQUIRING CORRECTIVE ACTION: E.6 The sounding of sirens in conjunction with agricultural protective actions is highly conservative. It is necessary for Kankakee County to take its lead from the governor, coordinate their decision with the other two Counties and in, accordance with procedure, reserve the use of sirens and EBS for notification of protective actions for the general public.

Protective Action

The evacuation to two miles of the plant at 1040 did not affect Kankakee County. Traffic control points were plotted on the basis of the protective action order and in anticipation that further evacuation could occur. At 1012, Sheriff's Officers and State Police were dispatched (simulated). At

1154, evacuation to five miles in sectors J, K, and L was ordered and traffic control was established by 1215. Discussions among EOC staff indicated sufficient resources were available to control traffic and access. Snow removal equipment and wreckers were available to remove impediments to traffic flow. The IESDA representative was requested to divert rail traffic from the line going through Essex. Air traffic and recreational boating was diverted by the State EOC.

At 0957, the American Red Cross representative alerted reception center staff to standby for possible activation. The center at Pontiac High School was simulated activated at 1045 to support evacuation from Will County. Law enforcement, the School representative and the County Highway Department representative discussed management of traffic in the area of schools in the event evacuation became necessary. The EOC staff was directed to review actions required in the event of a wind change necessitating alteration of the evacuation areas.

Radiological Exposure Control

Although not an objective of this exercise, there were discussions regarding issuance of dosimetry and TLDs to emergency workers. The order to issue KI to emergency workers was relayed to personnel in the field.

Media Relations

A media briefing room separate from the operations room is reserved for use. The County Board Chairman was interviewed by a press representative twice during the exercise. These interviews were conducted outside the designated briefing room. The first interview, at 1129, was reported to the JPIC at 1140. The second interview, at 1350, was coordinated with the JPIC at 1355.

AREA REQUIRING CORRECTIVE ACTION: G.4.a Additional assistance and training is required to prepare the EOC staff to assist the County Board Chairman in preparing information to be presented to media representatives. It is necessary that the information be coordinated with the JPIC prior to release. There is need for visual aids to support the briefings.

Recovery and Reentry

When the order was received, the County ESDA Director and County Board Chairman conferred, checked the written instruction and requested from each participant organization a resume of what their procedure would be and how they would handle recovery and reentry.

Local Government Response

The emergency response function of Essex within Kankakee County is under the responsibility of the County. Its emergency response enhances the County's program. There are improvements which could be made. While they are not singled-out for specific action, it is Kankakee County's responsibility to work with the community to resolve the problems cited below to ensure a unified and effective emergency response.

12. Essex

The Kankakee County Sheriff's dispatcher notified the Village of Essex Fire Department of emergency classifications. Essex activated their EOC in response to the exercise situation through implementation of their emergency plan. The Chief of Police was designated in charge during the exercise and provided concise updates and full information to the staff as events occurred. A status board was kept current through the day. All required maps and charts were available.

AREA REQUIRING CORRECTIVE ACTION: N.l.a The Illinois ESDA Controller was prompting the staff throughout the exercise. His enthusiasm provided subtle assistance that sometimes preceeded demonstration and may have unnecessarily precluded the initiative of the EOC staff. (State of Illinois)

The procedures for alerting and instructing the public are also used in the event of impending bad weather, hazardous materials accidents and other dangers to the public health and property.

The EOC staff acted upon instructions from the State and Kankakee County. Commercial telephone with police radio backup provided the communications links. Planned actions were coordinated with the County. Procedures for handling news media contacts were described by the Chief of Police. The Essex EOC staff exhibited knowledge of their functions and of the procedures to carry out their assigned tasks.

SUMMARY LISTING OF EXERCISE FINDINGS

UTILITY: Braidwood Nuclear Power Station
Summary Listing of Exercise Findings

1. Deficiencies

November 6, 1985
(Date)

Illinois
(State)

Illinois
(Community)

<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: Braidwood Nuclear Power Station
Summary Listing of Exercise Findings

2. Areas Requiring Corrective Action

Illinois
(State)

November 6, 1985
(Date)

Illinois
(Community)

<u>NUREG</u> <u>Item</u>	<u>Narrative Statement</u> <u>of Weakness</u>	<u>Corrective Action</u> <u>Proposed</u>	<u>Scheduled</u> <u>Date</u>	<u>Actual</u> <u>Date</u>
E.7	Sector descriptions should be converted to familiar geopolitical descriptions prior to release at the JPIC. Call letters of the EBS station should be consistent with the listing in the public information brochure.			
N.1.a	Controllers should refrain from becoming a part of the participant emergency response through coaching.			

UTILITY: Braidwood Nuclear Power Station
Summary Listing of Exercise Findings

3. Areas Recommended For Improvement

Illinois
(State)

November 6, 1985
(Date)

Illinois
(Community)

1. More frequent staff briefings be conducted in the State EOC with all members of the staff participating
2. NARS messages being transmitted from IESDA be identified by a message number.
3. The faded map used by the accident assessment team be replaced with one that is easier to read.
4. IDOT staff should remain at the FCP until it is certain that they no longer have a role in the recovery and reentry procedures.

UTILITY: Braidwood Nuclear Power Station
Summary Listing of Exercise Findings

1. Deficiencies

Illinois
(State)

November 6, 1985
(Date)

Will County
(Community)

<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: Braidwood Nuclear Power Station
Summary Listing of Exercise Findings

2. Areas Requiring Corrective Action

Illinois
(State)

November 6, 1985
(Date)

Will County
(Community)

<u>NUREG Item</u>	<u>Narrative Statement of Weakness</u>	<u>Corrective Action Proposed</u>	<u>Scheduled Date</u>	<u>Actual Date</u>
M.1	Recovery and reentry should be more fully demonstrated during the next exercise to include arrangements to provide the public with information on safety precautions, possible health effects of low level radiation exposure and the availability of compensation for financial losses.			

UTILITY: Braidwood Nuclear Power Station
Summary Listing of Exercise Findings

3. Areas Recommended For Improvement

Illinois
(State)

November 6, 1985
(Date)

Will County
(Community)

None

UTILITY: Braidwood Nuclear Power Station
Summary Listing of Exercise Findings

1. Deficiencies

Illinois
(State)

November 6, 1985
(Date)

Grundy County
(Community)

<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: Braidwood Nuclear Power Station
Summary Listing of Exercise Findings

2. Areas Requiring Corrective Action

Illinois
(State)

November 6, 1985
(Date)

Grundy County
(Community)

<u>NUREG</u> <u>Item</u>	<u>Narrative Statement</u> <u>of Weakness</u>	<u>Corrective Action</u> <u>Proposed</u>	<u>Scheduled</u> <u>Date</u>	<u>Actual</u> <u>Date</u>
	None			

UTILITY: Braidwood Nuclear Power Station
Summary Listing of Exercise Findings

3. Areas Recommended For Improvement

Illinois
(State)

November 6, 1985
(Date)

Grundy County
(Community)

1. Personnel at the EBS station requested familiarization with the complete Braidwood plan. The memorandum of understanding could be discussed and modified as part of this action.

UTILITY: Braidwood Nuclear Power Station
Summary Listing of Exercise Findings

1. Deficiencies

Illinois
(State)

November 6, 1985
(Date)

Kankakee County
(Community)

<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: Braidwood Nuclear Power Station
Summary Listing of Exercise Findings

2. Areas Requiring Corrective Action

Illinois
(State)

November 6, 1985
(Date)

Kankakee County
(Community)

<u>NUREG Item</u>	<u>Narrative Statement of Weakness</u>	<u>Corrective Action Proposed</u>	<u>Scheduled Date</u>	<u>Actual Date</u>
E.6	The sounding of sirens in conjunction with agricultural protective actions is highly conservative. It is necessary for Kankakee County to take its lead from the governor, coordinate their decision with the other two Counties and in accordance with procedure, reserve the use of sirens and EBS for notification of protective actions for the general public.			
G.4.a	Additional assistance and training is required to prepare the EOC staff to assist the County Board Chairman in preparing information to be presented to media representatives. It is necessary for the information be coordinated with the JPIC prior to release. There is need for visual aids to support the briefings.			
H.3	The status board should be used to display key information such as actions taken by the County and the Town of Essex in addition to changes in emergency classification levels.			

UTILITY: Braidwood Nuclear Power Station
Summary Listing of Exercise Findings

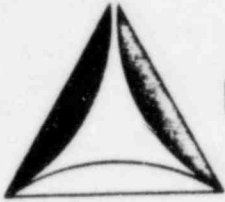
3. Areas Recommended For Improvement

Illinois
(State)

November 6, 1985
(Date)

Kankakee County
(Community)

1. The County should consider locating a larger area for the operations room or relocating some functions, such as message control and the datafax machine, into the adjacent room within the secure area.



Illinois Emergency Services and Disaster Agency

110 East Adams Street, Springfield, Illinois 62706

March 7, 1986

Mr. Wallace Weaver
Chief, Technological Hazards Branch
Region V, Federal Emergency
Management Agency
300 S. Wacker Drive
Chicago, IL 60606

Dear Mr. Weaver:

This letter is in response to your letter of February 6, 1986 and the accompanying Report of the Braidwood Nuclear Power Station exercise conducted on November 6, 1985.

Attached is our Proposed Corrective Action Response which indicates the schedule for correcting the deficiencies, as you requested in your letter.

Sincerely,

Jana S. Fairrow
Radiological Emergency
Planning Supervisor

JSF/jk

Enclosure

cc: Gordon Wenger

UTILITY: Braidwood Nuclear Power Station
Summary Listing of Exercise Findings

November 6, 1985
(Date)

Illinois
(State)

2. Areas Requiring Corrective Action

Illinois
(Community)

<u>REG em</u>	<u>Narrative Statement of Deficiency</u>	<u>Corrective Action Proposed</u>	<u>Scheduled Date</u>	<u>Actual Date</u>
7	Sector descriptions should be converted to familiar geopolitical descriptions prior to release at the JPIC.	The county EBS messages are made available to State EOC and JPIC personnel. These messages contain the geopolitical descriptions of the EPZ sectors which will be incorporated into news releases prepared at the State EOC and issued from the JPIC.	Next offsite Braidwood exercise, October 14, 1987.	
	Call letters of the EBS station should be consistent with the listing in the public information brochure.	The State agrees that the EBS stations designated for the Braidwood Station EPZ should be identified in news releases instead of the generic EBS station listing. During the next offsite Braidwood exercise, news releases will contain the call letters and frequencies of the designated local EBS stations.	Next offsite Braidwood exercise, October 14, 1987.	
.1.a.	Controllers should refrain from becoming a part of the participant emergency response through coaching.	Controllers will be instructed to refrain from coaching exercise participants.	Prior to the next offsite Braidwood exercise, October 14, 1987.	

UTILITY: Braidwood Nuclear Power Station
Summary Listing of Exercise Findings

November 6, 1985
(Date)

Illinois
(State)

2. Areas Requiring Corrective Action

Will County
(Community)

<u>REG em</u>	<u>Narrative Statement of Deficiency</u>	<u>Corrective Action Proposed</u>	<u>Scheduled Date</u>	<u>Actual Date</u>
1	Recovery and re-entry should be more fully demonstrated during the next exercise to include arrangements to provide the public with information on safety precautions, possible health effects of low level radiation exposure and the availability of compensation for financial losses.	Re-entry will be emphasized by Will County during the next offsite Braidwood exercise. Discussions will include the provision of information to the public regarding safety precautions, possible health effects of low level radiation exposure and the availability of compensation for financial losses.	Next offsite Braidwood exercise, October 14, 1987.	

UTILITY: Braidwood Nuclear Power Station
Summary Listing of Exercise Findings

November 6, 1985

(Date)

Illinois

(State)

2. Areas Requiring Corrective Action

Kankakee County

(Community)

<u>UREG Item</u>	<u>Narrative Statement of Deficiency</u>	<u>Corrective Action Proposed</u>	<u>Scheduled Date</u>	<u>Actual Date</u>
6	The sounding of sirens in conjunction with agricultural protective actions is highly conservative. It is necessary for Kankakee County to take its lead from the Governor, coordinate their decision with the other two Counties and in accordance with procedure, reserve the use of sirens and EBS for notification of protective actions for the general public.	Training will be provided to the Kankakee County EOC staff regarding the sounding of sirens and EBS activation for public notification and will include discussions about the Governor's decision making role, use of information on the NARS form and coordination with the other Counties.	Next training sessions conducted for the Braidwood EPZ, October or November, 1986.	
G.4.a	Additional assistance and training is required to prepare the EOC staff to assist the County Board Chairman in preparing information to be presented to media representatives.	Training will be provided to the Kankakee County EOC staff regarding preparation for press briefings.	Next training sessions conducted for the Braidwood EPZ, October or November, 1986.	
	It is necessary for the information to be coordinated with the JPIC prior to release. There is need for visual aids to support the briefings.	The Kankakee County Board Chairman/ESDA Coordinator will coordinate with the JPIC prior to issuing press releases and will utilize visual aids to support the briefings during the next offsite Braidwood exercise.	Next offsite Braidwood exercise, October 14, 1987.	
H.3	The status board should be used to display key information such as actions taken by the County and the Town of Essex in addition to changes in emergency classification levels.	Training will be provided to the Kankakee County EOC staff regarding more effective use of the status board.	Next training sessions conducted for the Braidwood EPZ, October or November, 1986.	