

U.S. NUCLEAR REGULATORY COMMISSION

REGION 111

Report Nos. 50-456/92002(DRSS); 50-457/92002(DRSS)

Docket Nos. 50-456; 50-457

License Nos. NPF-72; NPF-77

Licensee: Commonwealth Edison Company  
Opus West III  
1400 Opus Place  
Downers Grove, IL 60516

Facility Name: Braidwood Nuclear Generating Station, Units 1 and 2

Inspection At: Braidwood Station, Braceville, Illinois

Inspection Conducted: January 13-17, 1992

Inspector: H. Simons *H. Simons*

2-5-92  
Date

Accompanying Personnel: G. Smith

Approved By: *J. W. McCormick-Barger*  
J. W. McCormick-Barger, Chief  
Emergency Preparedness Section

2/5/92  
Date

Inspection Summary

Inspection on January 13-17, 1992 (Report Nos. 50-456/92002(DRSS); No. 50-457/92002 (DRSS))

Areas Inspected: Routine, announced inspection by two inspectors of the following aspects of the Braidwood Station's Emergency Preparedness (EP) program: operational status of the EP program (IP 82701) and actual emergency plan activations (IP 82701).

Results: Two violations of NRC requirements pertaining to the EP training program were identified. There was a significant turnover in the licensee's onsite EP staff which had a negative impact on the EP training program; however, the other areas of EP program continue to be well maintained. The emergency response facilities were maintained and minor improvements had been made to enhance the facilities. Emergency plan implementing procedure revisions to support a major revision of the emergency plan were thorough and timely; however, not all associated lesson plans had been updated in a timely manner in accordance with an emergency plan commitment. Actual events were properly classified, and timely notifications were made to State and NRC officials.

## DETAILS

### 1. Persons Contacted

K. Kofron, Braidwood Station Manager  
K. Aleshire, Generating Station Emergency Plan (GSEP) Coordinator  
K. Appel, Assistant GSEP Coordinator  
L. Holden, NSEP GSEP Program Administrator  
D. O'Brien, Technical Superintendent  
E. Carroll, Regulatory Assurance staff  
A. Pusztai, Nuclear Quality Programs (NQP) Engineer  
A. Checca, Training Supervisor  
R. Flessner, Station Partner  
R. Legner, Service Director  
E. Roche, Health Physics Supervisor  
J. Lewand, Regulatory Assurance Staff  
M. Egner, MIS Department  
M. Lohmann, Administrative Department  
A. D'Antonio, NQP Supervisor  
A. Haeger, Regulatory Assurance Supervisor  
K. Bartes, DNS Administrator

All of the above listed individuals attended the NRC exit interview held on January 17, 1992.

The inspectors also contacted other licensee personnel during the course of the inspection.

### 2. Emergency Plan Activations (IP 82701)

Licensee and NRC records of actual emergency plan activations for the period May 1991 through December 1991 were reviewed. These records included summaries generated by NRC Duty Officers; Nuclear Accident Reporting System (NARS) forms; Emergency Notification System (ENS) worksheets; State update forms; Control Room logs; event checklists; deviation reports; Licensee Event Reports; and the licensee's self-evaluation of each event. The licensee's self-evaluations were thorough and included documentation of minor problems which were identified. Appropriate corrective actions were implemented.

During this time period, the licensee declared four Unusual Events. All of these situations were correctly classified in a timely manner per the licensee's Emergency Action Level scheme. Initial notifications to State, local, and NRC officials were completed within regulatory time limits following each declaration.

- o On May 11, 1991, an Unusual Event was declared at 2200 hours when a Technical Specifications shutdown was required due to a failed containment leak rate test.
- o On July 17, 1991, an Unusual Event was declared at 0645 hours when a Technical Specifications shutdown was required due to the inoperability of four control rods in shutdown bank A.

- ° On September 24, 1991, an Unusual Event was declared at 1347 hours due to the loss of commercial, NARS and ENS telephones.
- ° On November 14, 1991, an Unusual Event was declared at 1510 hours due to the loss of all diesel generators associated with a unit.

No violations or deviations were identified.

### 3. Operational Status of the Emergency Preparedness Program (IP 82701)

#### a. Emergency Plan and Implementing Procedures

On March 1, 1991, the licensee implemented Revision 7 of the generic Generating Station Emergency Plan (GSEP). This revision included many changes to the structure of the plan, clarification of commitments and policies, and enhancements to the structures of the response organizations in the Technical Support Center and the Emergency Operations Facility. A complete review of the GSEP, Revision 7, was completed by NRC Region III staff. Revision 7 was determined to be acceptable.

Appropriate emergency plan implementing procedures (EPIPs) were revised to be consistent with Revision 7 of the GSEP. These revisions were thorough and completed in a timely manner. Other EPIPs were revised to incorporate the implementation of the Emergency Response Data System.

Current copies of the emergency plan and implementing procedures were found to be maintained and readily available in the emergency response facilities and the control room.

No violations or deviations were identified.

#### b. Emergency Facilities, Equipment, Instrumentation and Supplies

Tours were conducted through the Control Room (CR), Technical Support Center (TSC), Operational Support Center (OSC), Emergency Operations Facility (EOF) and the GSEP environmental monitoring van. All facilities appeared to be in an acceptable state of operational readiness. A small, representative sample of emergency equipment, instrumentation and supplies did not reveal any problem areas.

The licensee continued to make improvements to the emergency response facilities. In the CR, an evacuation briefcase was added to aid in CR evacuation. A second dedicated fax machine had been added to the TSC. One fax machine is used solely for receiving transmissions while the other is dedicated to transmitting. In the EOF, the executive management center had been completed and the entire facility had been carpeted.

Emergency communications systems surveillance records for the emergency response facilities were reviewed and found to be complete and thorough. Monthly, quarterly and annual communications tests

were conducted as outlined in established procedures. The inspectors observed a monthly communications drill. The drill was successfully completed; however, problems were noted with the Nuclear Accident Reporting System (NARS) telephone lines. Repairs were quickly initiated and the NARS telephone was operable later that day.

The licensee's inventory records for emergency supplies were reviewed and found to have been completed as required by procedure. These inventories included supplies for the TSC, OSC, EOF, assembly areas, ambulance emergency kit, environmental monitoring, and first aid kits. When the inventories occasionally revealed minor deficiencies, timely corrective actions were taken.

No violations or deviations were identified.

c. Organization and Management Control

Overall organization and management control of the Emergency Preparedness (EP) program is unchanged from the last routine inspection. However, there have been changes in staffing which affect the onsite EP program.

In June 1991, a new EP coordinator was assigned to the program after the previous coordinator received a promotion. The new coordinator was previously a health physicist in the Radiation Protection Department at Braidwood Station. In January 1992, a part-time assistant coordinator was added to the onsite EP staff. The assistant is assigned to perform EP duties three days a week and assigned to the As Low As Reasonably Achievable (ALARA) program the other two days of the week. Neither of these changes had a negative impact on the EP program.

In August 1991, the training instructor responsible for EP training received a promotion to a different department. However, he continued to perform EP training, while also responsible for performing his new duties until, a new EP trainer was assigned. The new EP trainer was not chosen until mid-December 1991. The lack of a specifically assigned EP training instructor for about four months had a negative impact on the implementation of the EP training program, as evidenced by the training concerns identified in Section 3.d of this report.

The onsite emergency response organization has remained well staffed, with at least three individuals identified for director level positions. Communicators and status board plotters are more numerous and generally staffed by Tech staff or training department personnel. At least 10 persons were qualified for each key and support position in the Emergency Operations Facility (EOF) organization, with three to five individuals per position being pre-designated to respond to the EOF specifically for an emergency occurring at Braidwood Station.

No violations or deviations were identified.

d. Emergency Preparedness Training

The current onsite emergency preparedness (EP) training program was reviewed with the previous EP Training Instructor and the EP Coordinator. This review included an evaluation of the training matrix requirements, lesson plans and training qualifications.

The required annual EP training for director level members of the emergency response organization (ERO) consisted of classroom sessions and required reading of EPIPs and sections of the emergency plan relevant to their specific ERO positions. A review of training records indicated that all personnel assigned to director level positions had been properly trained in accordance with the EP training matrix.

In reviewing the EP training program, it was determined that the only training provided to personnel who would be assigned to repair and damage control teams during an emergency was training module No. 19, "Station Emergency Plan Training", which is provided to all station employees during Nuclear Station General Employee Training (NGET). This module provides the following general information about the emergency plan: the purpose and scope of the emergency plan; the purpose of event classification; types of classifications; emergency facilities; the purpose of protective action recommendations for the off-site public; protective measures for the onsite worker; and the reasons for exercises and drills. The Generating Station Emergency Plan (GSEP) states that repair and damage control teams are trained each year as part of their duty specific training and that additional emergency preparedness information is provided as part of NGET. The licensee was not providing training in emergency response as part of their duty specific training as stated in the emergency plan and required by 10 CFR Part 50 Appendix E. This is a Severity Level IV violation (Violation No. 456/92002-01).

In October 1991, the corporate EP department issued a revision to the EP training guidance recommendations. This guidance recommendation was intended to be general guidance for each of the stations to use in developing or revising their EP training programs. This revised guidance recommendation included a new training matrix with a new training module to provide specialized training for repair and damage control teams. This guidance also included lists of standard learning objectives which should be understood after completing each module. Through discussions with cognizant licensee personnel, the inspectors learned that EP training at Braidwood will be revised and modeled after this revised training guidance recommendation; however, the resources had not been dedicated to this project at the time of the inspection.

Subsequent to the inspection, the licensee informed the inspectors of their proposed corrective actions. These actions included revising the EP training given during NGET and that given to repair and damage control teams to be consistent with the revised corporate guidance recommendations, completely reviewing all training

materials to ensure consistency with Revision 7 of the GSEP and other corporate guidance, revising training materials as necessary, and conducting additional training with repair and damage control teams.

EP training lesson plans were reviewed. The inspectors noted that the following lesson plans had not been appropriately revised to incorporate changes which were made in Revision 7 of the GSEP: Module No. 19, "Station Emergency Plan Training"; Module No. 27, "Acting Station Director"; Module No. 35, "Rad/Chem Director"; and Module No. 37, "Station Director's Communicator". Section 8.5.7 of the GSEP states that EPIPs and corresponding lesson plans shall be developed consistent with the GSEP within four months of any GSEP revision. Revision 7 of the GSEP was implemented in March 1991. Thus, these lesson plans had not been updated for over 9 months since the implementation of Revision 7. Since the licensee is required to maintain and follow their emergency plan per 10 CFR Part 50.54(q), this is a Severity Level IV violation (Violation No. 456/92002-02).

The following onsite EP drills took place during 1991 per the requirements in the Emergency Plan: semi-annual augmentation drills; an annual accountability and assembly drill; semi-annual health physics drills; and an annual medical drill. Records indicated that all required EP drills had been successfully conducted, critiqued and documented during 1991.

Two violations were identified in the review of this program area.

e. Independent Reviews/Audits

The inspector reviewed the 1991 audit "Facility Emergency Plan", Report No. 20-91-13, performed by the Nuclear Quality Programs (NQP) Department. All records were readily available and complete. This audit fulfilled the requirements of 10 CFR 50.54(t). Audit findings were properly addressed by the EP coordinator. Appropriate corrective actions were taken to correct these findings.

The inspectors also reviewed Nuclear Safety Audit 20-91-1 performed by the licensee's corporate Quality Assurance staff. Emergency Preparedness (EP) was one of several areas inspected during this audit. The audit was thorough and carefully planned to ensure it did not overlap the specific EP areas reviewed in the NQP audit mentioned above.

Routine EP surveillances, which the licensee called field monitoring reports (FMRs), were performed frequently. A total of 39 FMRs were performed in 1991, covering a wide variety of activities, such as drills, exercises, real emergency plan activations, meetings with the offsite agencies and routine EP activities.

No violations or deviations were identified.

4. Exit Interview

The inspectors met with licensee representatives denoted in Section 1, on January 17, 1992. The inspectors reviewed the scope and findings of the inspection. The licensee was informed that two violations of NRC requirements pertaining to EP training were identified as a result of the inspection. There was a significant turnover in the licensee's onsite EP staff which had a negative impact on the EP training program; however, the other areas of the EP program continue to be well maintained.

On February 3, 1992, the licensee informed the inspectors of the proposed corrective actions relating to the identified training concerns via a teleconference between NRC Region III staff, cognizant Braidwood Station personnel, and the licensee's corporate EP staff.

The licensee indicated that the information discussed on January 17 and February 3 was not of a proprietary nature.