

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Reports No. 50-295/95005(DRSS); 50-304/95005(DRSS)

Docket Nos. 50-295; 50-304

Licenses No. DPR-39; DPR-48

Licensee: Commonwealth Edison Company
Opus West III
1400 Opus Place
Downers Grove, IL 60515

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

Inspection At: Zion Site, Zion, IL

Inspection Conducted: March 6-10, 1995

Inspectors: J. Foster
J. Foster

3/17/95
Date

B. Jickling
B. Jickling

3/17/95
Date

Approved By: James R. Creed
James R. Creed, Chief
Safeguards & IR Section

3/22/95
Date

Inspection Summary

Inspection on March 6-10, 1995 (Reports No. 50-295/95005(DRSS); 50-304/95005(DRSS))

Areas Inspected: Routine, announced inspection of the operational status of the Zion Nuclear Generating Station's emergency preparedness (E.P.) program (IP 82701) by two inspectors and follow-up on licensee actions on previously identified items (IP 82301/82701).

Results: No violations or deviations were identified. The overall status of the emergency preparedness program was excellent. Response facilities were in an excellent state of operational readiness. Audits and surveillances of the program satisfied the requirements of 10 CFR 50.54(t). The emergency planning organization was adequately staffed.

DETAILS

1.0 Licensee Action on Previously Identified Items (IP 82301)

(Open) Inspection Followup Item No. 50-295/93012-01; 50-304/93012-01:

During the 1993 exercise, several problems were noted in plant-wide announcements. The Alert announcement did not include the reason for the declaration or the need to activate onsite emergency facilities. The assembly siren was not followed by a statement indicating that personnel should report to assembly areas. Discussion with plant personnel indicated that revisions to procedures and additional training had addressed these problems, but the announcement procedure remained to be modified. This item will remain open.

(Closed) Inspection Followup Item No. 50-295/93012-02; 50-304/93012-02:

During the 1993 exercise, the protective measures group exhibited problems utilizing plant status information to develop or validate dose calculations. This item was closed in the 1994 LaSalle Exercise Inspection report.

(Closed) Inspection Followup Item 50-295/94004-01; 50-304/94004-01:

A single emergency lighting unit was present in the EOF, and this unit failed to light when tested. Inspection of the EOF indicated that several new emergency lighting units had been installed and were functional. This item is closed.

2.0 Operational Status of the Emergency Preparedness (EP) Program (IP 82701)

2.1 Actual Emergency Plan Activations

Since February 1994, the licensee had activated its emergency plan on two occasions.

On April 3, 1994, a Unusual Event was declared 6:30 a.m. due to a fire in the Unit One generator bus ducts which required offsite firefighting assistance. Offsite notifications were completed at 6:51 a.m., partially due to complications in obtaining meteorological data for the state Nuclear Accident Reporting System (NARS) form. Also, the Rad Waste Supervisor, who acts as the NARS communicator, was assisting with getting equipment to the fire scene and had to be paged to come to the Control Room. The event was terminated at 9:05 a.m., the same date, when the fire was extinguished.

On July 2, 1994, an Unusual Event was declared at 12:05 p.m. due to a fire in the same Unit One bus duct as the above event. The fire was extinguished at 12:15 p.m., and the event was terminated at 12:45 p.m.

Records indicated that the emergency declarations were correct and timely. NRC was initially notified in a timely manner following

the both emergency declarations and event terminations. The licensee's self-assessment of the events was very good, utilizing procedure EPGR-OP 0301, Revision 1, "Actual Emergency Event Review Checklist." File information was very complete, including shift logs.

Field Monitoring Report (FMR) 22-94-04-005 reviewed the documentation generated during the Unusual Event declared April 3, 1994. It was concluded that event classification and all notifications were properly executed.

Records reviewed indicated that classifications and notifications had been made properly and in a timely manner. Each event had been critiqued, and recommendations made for overall program improvement. Documentation packages for each event were highly detailed, complete, and technically correct.

No violations or deviations were identified.

2.2 Emergency Plan and Implementing Procedures

Emergency plan implementing procedures reviewed included EPIP 100-1, Rev. 4, "Acting Station Director/Station Director" and EPIP 100-2, "ERDS Operations," in which inconsistent instructions regarding the timing of activation for activation of the Emergency Response Data System (ERDS) were identified. 10 CFR 50.72(a)(4) states in part "...The licensee shall activate the ERDS as soon as possible but within one hour after declaring an emergency class of alert, site area emergency, or general emergency." Licensee personnel indicated these procedures would be reviewed for consistency with the regulation and modified as necessary.

Discussion with licensee personnel indicated that work on the Severe Accident Guidelines (SAMs) was nearing completion. Plant personnel were a part of the group working on the Nuclear Energy Institute (NEI) 91-04, "Severe Accident Closure Issues."

The inspector reviewed EPIP 100-3, "Recovery, Reentry, and Termination", Corporate Emergency Plan Implementing Procedure (CEPIP) 2011-01, "Recovery, Return and Termination," and portions of the generic GSEP which address Recovery. Procedures were adequate for determination of termination of an emergency class, and declaration of Recovery, but did not address the organization or the needs which would exist during Recovery. CEPIP 2011 specifically describes Recovery as an event-oriented program. A procedure was needed which would provide guidance as to post-accident organization, liaisons to such facilities as the Federal Radiological Monitoring and Assessment Center (FRMAC), and the special post-accident interests of the NRC (document preservation, failed equipment analysis, personnel interviews, space for a

considerable NRC site contingent). Development of a guidance procedure for the Recovery Phase will be tracked by Inspection Followup Item No. 50-295/95005-01; 50-304/95005-01.

No violations or deviations were identified.

2.3 Emergency Response Facilities, Equipment, Instrumentation and Supplies

Tours were conducted through the Control Room, Technical Support Center (TSC), Operational Support Center (OSC), and Emergency Operations Facility (EOF). Each facility was well maintained and in an operational state of readiness. The inspectors verified that adequate numbers of current copies of the Generating Stations Emergency Plan (GSEP) and Emergency Plan Implementing Procedures were present in each emergency response facility.

The "GSEP" van was stored in a shelter near the plant entrance. A new van had been procured, with an interior designed to accommodate power supplies, communications equipment, survey instrumentation and tools. Backup van kits "A" and "B" were available, in addition to the kit in the van itself. A sample of van kits, containing instrumentation and supplies, did not indicate any problems.

Documents reviewed indicated that emergency equipment inventories and maintenance were generally very good, with timely corrective actions taken where deficiencies were identified. No problems or concerns were identified.

Siren availability data indicated that the cumulative siren availability for 1994 was 97.3%, with the lowest monthly availability being 93.3%, well above Federal Emergency Management Agency requirements.

Discussion with licensee representatives indicated that communications systems included the Nuclear Accident Reporting System, commercial telephone lines, a microwave link to the Bull Run Power Operations group, and radios maintained for the offsite field monitoring teams. Due to the site's nearness to the city of Zion, field monitoring team radios would easily supplement offsite communications was needed.

No violations or deviations were identified.

2.4 Organization and Management Control

The individual filling the position of Emergency Preparedness Coordinator (EPC) was unchanged since the last inspection. A new full-time EP Instructor/Assistant EPC (EPI) had been appointed. The EPC also had very limited responsibilities for the Radiological Environmental Monitoring Program (REMP).

The EP Instructor reported to the EP Coordinator, who reported to the Radiological Protection Director. Station experience with this organization has been very positive. The Radiological Protection Director reported to the Station Manager, who reported to the Site Vice-President.

No violations or deviations were identified.

2.5 Training

Lesson Plan S-110, "NRC Incident Response Training", was reviewed and discussed in detail with the EP Trainer. A training session utilizing this and other lesson plans was observed, and clarifications made to various portions of the presentation.

Two individuals with key positions in the TSC were interviewed regarding their emergency response responsibilities. They demonstrated a thorough grasp of the duties and responsibilities assigned to them in the Emergency Plan and Emergency Plan Implementing Procedures.

Records indicated that drills and exercises were formally critiqued, and significant critique items selected for corrective action, as appropriate.

The inspector reviewed the May 10, 1994 GSEP Pre-Exercise Findings and Observation report for the May 4, 1994 Pre-Exercise. Of 145 objectives evaluated, 13 were considered as Minor Problems, and 3 were evaluated as Weak.

The inspector reviewed the June 2, 1994 "GSEP Exercise findings & Observations report for the May 5, 1994 utility-only exercise. Of 138 objectives evaluated, only 4 were evaluated as minor problems, with the remainder being evaluated as satisfactory or better. Since there were no objectives evaluated as Weak or Not Met, there were no Potential Problem Areas generated nor any Corrective Actions proposed.

Both exercises featured the necessity to activate the Backup EOF at the Corporate Center, and Minor Problems were observed regarding the Emergency Notification System (ENS) and field team sampling strategies.

No violations or deviations were identified.

2.6 Audits

Aspects of the audit and surveillance program were discussed with the lead auditor for the EP functional area. Records of audits and surveillances conducted since the 1994 inspection were also reviewed and discussed.

3.1 Key Persons Contacted

Commonwealth Edison Company

- A. Broccolo, Station Manager
- K. Hansing, Site Quality Verification Director
- D. Murphy, Site Quality Verification
- L. Minejevs, Site Quality Verification
- K. Dickerson, Regulatory Assurance - NRC Coordinator
- R. Johnson, Emergency Preparedness Trainer
- A. Nykiel, Emergency Preparedness
- B. Robinson, Radiological Protection
- L. Laspisa, Training Supervisor

The above and other licensee staff attended the exit interview. The inspectors also contacted other licensee personnel during the inspection.