

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Report Nos. 50-454/92004(DRSS); 50-455/92004(DRSS)

Docket Nos. 50-454; 50-455

License Nos. NPF-37; NPF-66

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

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

Inspection At: Byron Site, Byron, Illinois

Inspection Conducted: February 10-14, 1992

Inspectors: H. Simons

H. Simons
2/28/92
Date

C. Cox
C. Cox

2/28/92
Date

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

2/28/92
Date

Inspection Summary

Inspection on February 10-14, 1992 (Report Nos. 50-454/92004(DRSS); 50-455/92004(DRSS))

Areas Inspected: Routine, announced inspection of the Byron Nuclear Generating Station's Emergency Preparedness (EP) Program including the following areas: followup on actual emergency plan activations (IP 82701) and operational status of the EP program (IP 82701). This inspection involved two inspectors.

Results: One violation was identified concerning the failure to revise emergency plan implementing procedures following a revision to the Byron Annex to the Generating Station Emergency Plan. This resulted in inconsistencies between the Byron Annex and the emergency plan implementing procedures. Other facets of the EP program were well implemented. Emergency response facilities were well maintained. The EP training program had been improved by the EP trainer being assigned to EP training duties full-time and functionally reporting to the EP Coordinator.

DETAILS

1. Persons Contacted

R. Pleniewicz, Station Manager
J. Kudalis, Services Director
S. Barrett, Radiation Protection Supervisor
B. McNeill, Emergency Preparedness Coordinator
R. Colglazier, Regulatory Assurance staff
A. Chernick, Training Supervisor
W. Grundmann, Nuclear Quality Programs Superintendent
W. Dean, Nuclear Safety Staff
R. Carson, NSEP Operations and Onsite Programs Supervisor
P. Elkmann, NSEP Health Physicist
W. Pirnat, Operating Experience Administrator
A. Javorik, Chemistry Supervisor
J. Madai, Chemistry staff

All of the above listed individuals attended the NRC exit interview held on February 14, 1991.

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

2. Licensee Action on Previously Identified Items (IP 82701)

(Open) Open Item No. 50-454/91006-01: During the 1991 annual emergency preparedness (EP) exercise, some information provided in the Joint Public Information Center (JPIC) during news briefings was untimely and unclear. This item will remain open until JPIC performance is observed in the next annual EP exercise.

(Open) Open Item No. 50-454/91019-01: During the 1991 medical drill, there was a failure to adequately direct available personnel to expedite the response of the ambulance crew. The licensee had initiated additional training in their response to medical emergencies. The inspectors attended portions of this training. This item will remain open until demonstrated in a drill or exercise.

3. Emergency Plan Activations (IP 92700)

Since the last routine emergency preparedness inspection in August of 1991, the licensee had activated their emergency plan on two occasions.

At 0154 hours on October 27, 1991, an Unusual Event (UE) was declared due to reactor coolant system leakage in excess of a technical specifications limit.

At 1505 hours on November 14, 1991, an UE was declared when both diesel generators on both units were declared inoperable.

The licensee's records for each of the above emergency plan activations were reviewed. Appropriate classifications were made, and notifications to State officials and the NRC were accomplished within required time limits.

The licensee conducted an event review for each activation. This review included gathering copies of applicable documents such as Shift Engineer logs, Nuclear Accident Reporting System (NARS) forms, Emergency Notification System (ENS) worksheets, deviation reports and Licensee Event Reports. An evaluation was then made to determine whether the classification was accurate, notifications were timely and whether the emergency plan and associated procedures were properly implemented. From this evaluation, corrective actions were initiated if needed.

No violations or deviations were identified.

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

a. Emergency Plan and Implementing Procedures

The inspectors reviewed the Generating Station Emergency Plan (GSEP), the Byron Annex to the GSEP, and selected emergency plan implementing procedures (EIPs). The Emergency Preparedness (EP) Coordinator had made minor changes to enhance several EIPs.

Several inconsistencies were noted between Emergency Action Levels (EALs) in the Byron Annex and those in EIP BZP 200-A1, "Byron Emergency Action Levels".

Six EALs under Condition 6, "Natural and Destructive Phenomena", relating to the river level, were inconsistent. Through discussion with cognizant licensee personnel, it was determined that this inconsistency originated from an administrative error in updating the Byron Annex. During the revision of the Byron Annex, no change was planned for these EALs; however, someone inadvertently inserted EALs from previous revisions into the current revision.

Two EALs under Condition 8, "Security Threat", were upgraded in the Byron Annex; however, they were not updated in the EIP BZP 200-A1. Specifically, in the Byron Annex, an armed or forced protected area intrusion should be classified as an Alert; however, per the procedure this would only be classified as an Unusual Event. According to the Byron Annex, armed or forced vital area intrusion should be classified as a Site Area Emergency; however, per the procedure this would only be classified as an Alert.

An EAL was added to the Byron Annex; however, it was not added to BZP 200-A1. This EAL deals with a bomb device being discovered inside a vital area.

All three of these inconsistencies were the result of a lack of administrative control in updating the Byron Annex. The fact that

these changes were made was not communicated back to the person responsible for writing the summary of changes which was to accompany the Byron Annex. This resulted in EPIP BZP 200-A1 not being updated within 4 months of the Annex revision as required in GEP Section 8.5.7. In addition, the Byron Annex was not marked with an effective change date. The date on the Annex was January 1991; however, the effective change date was July 15, 1991. The GSEP, Section 8.5.6, states that revised pages of the Byron annex to the GSEP will be dated with the effective change date and marked to show where changes have been made unless the extent of changes is broad enough to warrant a summary of changes included with the document's distribution. Since 10 CFR Part 50.54(q) requires the licensee to follow their emergency plan, this is a violation (Violation No. 50-454/92004-01; 50-455/92004-01).

In order to correct these problems and prevent recurrence, the licensee plans to write a corporate EPIP to cover the control and revising of Station Annexes. When performing all future revisions, the licensee will use revision bars or some other unique method to ensure all changes are identified. They intend to develop a unique numbering sequence for drafts. Finally, a change log will be used to track changes to the annexes, and one person will be responsible for changes to the annexes.

The corporate EP group plans to get input from each station on what should be included in this procedure and they tentatively plan to have this procedure completed by the end of April, 1992. The corporate EP group is also in the process of comparing each station annex and the relevant EPIP containing EALs at each station to ensure that there are no inconsistencies at the other stations. Since the EAL changes were made solely in the Byron Annex, the EAL philosophy document attached to the Annex was not updated to reflect the changes that were made. Therefore, there is also an inconsistency between the EALs and the EAL philosophy document that was being addressed by the licensee.

Current copies of the GSEP and EPIPs were found to be maintained and readily available in the emergency response facilities and the Control Room.

One violation was identified.

b. Emergency Facilities, Equipment, Instrumentation and Supplies

An inspection tour was conducted through the Technical Support Center (TSC), Operational Support Center (OSC), Control Room (CR), and the Dixon Emergency Operations Facility (EOF). Each of the facilities was found to be clean, orderly and ready for use. Supply cabinets were well maintained and held complete inventories of all necessary supplies. One noted improvement was the addition

of a 100 Watt radio to the environmental monitoring vehicle to improve communications with field teams; the old radio had frequently experienced radio dead spots.

Emergency communications systems surveillance records for the emergency response facilities were reviewed and found to be complete and thorough. These surveillances are conducted monthly and include the NARS phones, GSEP radios, GSEP microwave phone system connections, NRC ENS and Health Physics Network (HPN) phones, and other inplant phone system extensions maintained for emergency use and not used in normal work activities.

The licensee's inventory records for emergency supplies were reviewed and had been completed as required. The inventories reviewed included supplies for environmental sampling, TSC, OSC, EOF, CR, hospital, ambulance, fire and first aid. The Emergency Preparedness (EP) Coordinator had a computer program to track deficient inventory supplies to ensure timely correction.

The TSC ventilation system was tested and inspected per plant surveillance procedures. The procedures met the testing requirements recommended in ANSI N510-1980 and endorsed by REG Guide 1.140. Review of the records indicated that the surveillance frequency of once every 18 months was being met and the surveillance requirements were being tracked by the station surveillance scheduling program.

No violations or deviations were identified.

c. Organization and Management Control

Overall organization and management control of the EP program was unchanged from the last routine inspection. The EP trainer is now dedicated full-time to EP training and functionally reports to the EP coordinator. Previously the EP trainer had other training responsibilities in addition to EP training and did not functionally report to the EP Coordinator. This change had a positive impact on the EP training program as evidenced by the improvements in training which are discussed in Section 4.d of this report.

The EP Coordinator had developed a tracking program for EP related items. This program tracked the training status of personnel assigned to the Emergency Response Organization (ERO), deficient emergency supplies, and improvement items to enhance the EP program.

Adequate numbers of personnel had been identified for specific lead and support positions in the onsite ERO. The licensee maintained at least three qualified individuals to fill ERO positions. The ERO staff was experienced and has been very stable.

No violations or deviations were identified.

d. Emergency Preparedness Training

The EP training program was reviewed with the EP trainer and the EP Coordinator including a review of the training matrix requirements, lesson plans, training records and recent improvements to the program.

The inspectors reviewed the training matrix requirements and training records and concluded that all personnel currently assigned to the Emergency Response Organization were properly qualified. EP training for each position had been consolidated so that for each position all necessary modules were combined and given at one time. Therefore, it was only necessary to track one training date. The computerized training tracking system had been fully implemented, and all the minor problems with the system had been worked out. The program tracked the training of all personnel assigned to the ERO and efficiently sorted those persons who would need training by the end of a calendar quarter and those who were deficient in training.

Numerous lesson plans were reviewed and found to be adequate in scope and depth. The inspectors also noted that all of these lesson plans had recently been revised to adequately reflect changes in the EP program. The EP trainer also expanded the questions in the test bank for EP modules.

The licensee continued to hold monthly EP enhancement training sessions which were in addition to the annual requalification training. For personnel not able to attend this training, the EP trainer prepared a reading package and sent it out to all members of the ERO who were absent. During one recent training session, the Radiological Assistance Program (RAP) Team from Argonne National Laboratory gave a presentation on their role and capabilities during a radiological emergency.

The inspectors attended portions of a medical training course taught by a contractor for response to medical emergencies. This training was very good and included detailed discussions along with a hands on demonstration.

Six randomly selected members of the ERO were interviewed. All were knowledgeable of their emergency response duties.

Records of the emergency preparedness drills held since the last inspection were reviewed. The second semi-annual augmentation drill had been successfully completed. Drill records were complete and indicated that critiques were conducted and performance was evaluated. Relevant findings originating from drills were included in the annual retraining program.

No violations or deviations were identified.

e. Independent Reviews/Audits

Since the last EP inspection, Nuclear Quality Programs (NQP) had performed two surveillances relating to the evaluation of State interface with Byron for emergency preparedness and Byron Station's 1991 annual offsite agency meeting. The surveillances were found to be adequate in scope and thorough in their critique.

In addition, NQP evaluated a monthly training session and a communications drill which were documented in field monitoring reports. These evaluations provided a good evaluation of the EP program in support of the annual audit required by 10 CFR Part 50.54(t).

No violations or deviations were identified.

6. Exit Interview

The inspectors met with licensee representatives denoted in Section I, on February 14, 1992. The inspectors reviewed the scope and findings of the inspection and indicated that the licensee continues to have a well maintained EP program; however, one violation was identified concerning the failure to revise CIPs within four months of the revision to the Byron Annex to the GSEP. The inspectors noted the improvement in the EP training program.

The licensee indicated that the information discussed was not of a proprietary nature.