U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Reports No. 50-373/93003(DRSS); 50-374/93003(DRSS)

Docket Nos. 50-373; 50-374 Licenses No. NPF-11; NPF-18

Licensee: Commonwealth Edison Company
Post Office Box 767
Chicago, IL 60690

Facility Name: LaSalle County Station, Units 1 and 2

Inspection At: LaSalle Couniy Station, Marseilles, Illinois

Inspection Conducted: January 4 through 8, 1993

Inspector: Patrick L. Louden 1/20/93
P. L. Louden Date
Radiation Specialist

Approved By: William Snell 1/20/93
William Snell, Chief Date
Radiological Controls Section 2

Inspection Summary

Inspection on January 4 through 8, 1993 (Reports No. 50-373/93003(DRSS); 50-374/93003(DRSS))
Areas Inspected: Routine announced inspection of the licensee's radiation protection (RP) program (Inspection Procedure (IP) 83750), including changes in organization, internal exposure control, external exposure control, maintaining occupational exposures as-low-as-reasonably-achievable (ALARA), radiological events, and review of concerns received at the Region III Office.
Results: One non-cited violation for a licensee identified event involving a high radiation area not properly barricaded and posted. The station's enhancement to the Engineering and Construction (ENC) department with an ALARA coordinator to aid in the processing and facilitating of RP reviews and RP department interface was viewed as an improvement to the overall station radiological controls program. The station Quality Verification (QV) group continued to perform in the field observations of RP procedural compliance with substantive findings and is considered a licensee strength. The station was near the end of the Unit 1 refueling outage at the conclusion of the inspection and dose projections indicated that exposure totals would be an outage low for the station.

DETAILS

1. Persons Contacted

Licensee staff

*D. Carlson, Regulatory Assurance, NRC Coordinator
*G. Diederich, Acting Site Vice President
*J. Dietz, Radiation Protection Shift Supervisor
*M. Friedman, Technical Lead Health Physicist
*D. Hieggelke, Health Physics Services Supervisor
*W. Huntington, Superintendent, Technical Services (outgoing)
*M. Ingold, Radiation Protection Technician
*K. Kociuba, Superintendent, Quality Verification
*J. Lewis, Operational Lead Health Physicist
*J. Lockwood, Supervisor, Regulatory Assurance
*L. Oshier, Corporate, Radiation Protection Liaison
*M. Reed, Superintendent, Technical Services (incoming)
*J. Schmeltz, Superintendent, Production Services
*G. Spedl, Station Manager
*J. Terrones, Quality Verification Inspector
*D. Trager, Training Department

Illinois Department of Nuclear Safety

*J. Roman, Resident Engineer

Nuclear Regulatory Commission

*C. Phillips, Resident Inspector

The inspector also interviewed other licensee personnel in various departments in the course of the inspection.

*Indicates those present at the exit meeting on January 8, 1993.

2. Changes (IP 83750)

The RP department has undergone minor personnel changes since the last inspection. One member of the technical health physics group has transferred to Dresden Station. This individual's responsibilities, which included calibration of an assortment of monitors and meters, and completion of radioactive waste shipment documentation, will be dispersed between two other members of the technical health physics staff. A corporate health physicist is also temporarily assigned to the station to aid in the turnover of these activities. The inspector noted no negative effects on the RP department as a result of this change.

No violations or deviations were identified.

3. Audits and Appraisals (IP 83750)

The inspector reviewed recently completed audits and field monitoring reports which focused on RP issues.

The first audit reviewed was audit number 01-92-03, a full audit of the Technical Services department which includes RP activities. The audit identified one concern with respect to the evaluation process for some lead shielding packages used during outages. The audit identified an isolated case where lead was hung without a thorough engineering review of the effects the lead may have on systems in the area. The recommendations and corrective action appeared to address the root cause of the occurrence and corrective actions were still ongoing at the time of the inspection.

The second audit reviewed was number 01-92-006, which focused on vendor laundry activities of the station's protective clothing. The audit team included a member of the station RP department and a member of the corporate RP staff. The results of the audit concluded that the vendor was performing adequate segregation of laundry to avoid possible cross contamination from other user stations and good RP practices were used overall.

Field monitoring reports (FMRs) reviewed addressed observations made specifically to focus on RP procedural adherence in the field. The FMRs high light both good and bad practices observed. Several good practices were noted and only minor bad observations were identified, such as down postings and improper wearing of secondary dosimetry. Overall, the FMR program continues to work well in identifying potential weak areas with RP procedural compliance, and corrective actions to QV concerns are immediately resolved.

The inspector found the findings of the above mentioned audits and FMRs to be substantive and technical in origin. Overall, the station QV department continues to perform as a licensee strength.

No violations or deviations were identified.

4. Internal Exposure Controls (IP 83750)

The inspector reviewed the results of the licensee's whole body counting system's calibration and daily quality control checks. The yearly calibration performed by the vendor providing the equipment and reports were reviewed and found to be accurate and in order. Quality control checks were performed according to station procedures and all checks reviewed fell within acceptable limits.

No violations or deviations were identified.

5. External Exposure Controls (IP 83750)

The inspector reviewed selected standing and special Radiation Work

Permits (RWPs) for appropriateness of the radiation protection requirements based on work scope, location, and radiological conditions. All RWPs reviewed conveyed accurate information regarding radiological information based on recent survey results and had undergone appropriate supervisory review.

No violations or deviations were identified.

6. Contamination Control (IP 83750)

Contaminated area in the station did not significantly increase since the last inspection. The station is continuing its policy to address source term reduction efforts prior to performing decontamination of large areas which are contaminated with low levels (< 1,000 dpm/100cm^2) of contamination.

Personnel contamination events (PCEs) recorded for 1992 totaled 235 versus a goal of 295 for the year. The station's 1993 PCE goal is 150, 12 PCEs had occurred for the year at the time of the inspection.

No violations or deviations were identified.

7. Maintaining Occupational Exposures ALARA (IP 83750)

Total station dose for 1992 was 1,067 person-rem versus a goal of 1,213 person-rem. Current exposure data for the Unit 1 outage was continuing to be below projected goals. Exposure totals at the time of the inspection for the Unit 1 outage were 360 person-rem, with a projection that the final totals for the outage will be less than the outage goal of 390 person-rem. The completion of this outage under the established goal appears to be the realization of station efforts to involve contract personnel in the early stages of ALARA planning incorporating improvements from lessons learned in previous outages, and successful hydrolazing activities to reduce general and local area dose rates. The station's exposure goal for 1993 is still undetermined due to outage work scope uncertainties for the 1993 fall Unit 2 outage.

The inspector reviewed the changes made to ALARA staffing during the Unit 1 outage with respect to the enhanced interface of the contract staff and the RP department. The ENC group has hired on a full time ALARA coordinator. This individual's responsibilities include providing the early ALARA reviews of work to be performed by the contract staff and subsequently perform the associated ALARA pre and post job reviews for such activities. Overall, the inclusion of such an individual has been an improvement and the inspector will continue to follow the development of this new program at the station.

No violations or deviations were identified.

8. Radiological Events

LER 92-014-00 High Radiation Area Boundary Violation

Event:

On November 11, 1992, at 1730 hours the Unit 1 reactor building 673' elevation watertight door leading into the Low Pressure Core Spray/Reactor Isolation Cooling Room (LPCS/RCIC Room) was discovered tied open. This door allowed access to high radiation areas, and the entry did not have the appropriate postings and barriers in place. The open door was discovered by radiation protection technicians (RPTs) performing their routine surveys in the area. The door had apparently been tied open by a non-licensed operator who was routing a drain hose to the reactor building northeast drain sump. This was a violation of 10 CFR 20.203(c), which requires a conspicuous posting identifying the high radiation area.

Corrective Actions:

Immediate corrective actions were taken by the RPTs by properly posting and barricading the entrance to the high radiation area, and informed the shift engineer in the control room.

Other corrective actions included communication sessions with operating staff to reinforce the need to contact RP when tieing doors open or moving radiological postings.

The inspector discussed specifics of the event with licensee staff and informed the licensee that due to their identification of the violation and prompt and long term corrective action efforts, that the event would not be cited as the criteria in Section VII.B of the Enforcement Policy had been satisfied. This LER is closed.

One non-cited violation was identified.

9. Concern Review: AMS-RIII-92-A-0145

Background:

A concern was received at the Region III Office in which the individual expressed concern with multiple examples of inadequate RP procedures at multiple Commonwealth Edison stations. The specific concern with LaSalle station involved the individual's entrance whole body count showing a positive identification of Cr-51. The individual was concerned that since the Cr-51 was detected during his entrance whole body count, could his home be contaminated. In immediate response to the concern, the Region dispatched two inspectors to perform independent measurements at the individual's home to ascertain if contamination existed within his home. The results of the independent surveys were negative.

Station Review:

The inspector reviewed the whole body count system's calibration and procedure records used during the time frame in which the concerned

individual started work at LaSalle Station. All reviews indicated that the whole body count system was functioning correctly and that the RP staff involved with the incident at the time performed all actions according to station procedures. The inspector reviewed the actual whole body count records and determined that the identification of the Cr-51 photopeak was an error. The associated error with the identified peak was greater than fifty percent. Licensee staff agreed with this assessment that the identification was an error.

Findings:

The LaSalle Station aspect of this concern could not be substantiated. The inspector discussed possible changes to current station procedures to help preclude recurrence of such false identification, and specific actions RPTs should take if such suspect identifications occur in the future. However, the overall concern will remain open until concerns at two other Commonwealth Edison stations can be resolved.

No violations or deviations were identified.

10. Tours

During the course of the inspection the inspector made several tours of the radiologically controlled area. The inspector also observed several ongoing work activities during the inspection. All radiation monitoring equipment observed during the tours were in good working order and current calibration. Minor posting and housekeeping problems observed by the inspector were immediately resolved by licensee staff.

No violations or deviations were identified.

11. Exit Meeting

The scope and findings of the inspection were discussed with licensee representatives (Section 1) at the conclusion of the inspection on January 8, 1993. Licensee representatives did not identify any documents or processes reviewed during the inspection as proprietary. Specific items discussed at the meeting were as follows:

* The non-cited violation associated with LER-92-014 concerning a high radiation boundary violation.

* The initial findings of the concern review.

* The effectiveness of the addition of ALARA coordinating staff to the ENC group.

* The good performance of the station during the current Unit 1 outage.