U.S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

REGION III

Report No. 50-254/79-14; 50-265/79-12

Docket No. 50-254; 50-265 License No. DPR-29; DPR-30

Licensee: Commonwealth Edison Company
P. O. Box 767
Chicago, IL 60690

Facility Name: Quad-Cities Nuclear Power Station, Units 1 and 2

Inspection At: Quad-Cities Site, Cordova, Illinois
Jane Lamb Hospital, Clinton, Iowa

Inspection Conducted: May 30, 1979

Inspectors: A. G. Januska 6/26/79

R. J. Greer 6/25/79

Approved By: T. H. Essig, Chief 6/28/79
Environmental and Special
Projects Section

Inspection Summary

Inspection on May 30, 1979 (Report No. 50-254/79-14; 50-265/79-12)
Areas Inspected: Routine, unannounced inspection of the response by the licensee's organization and offsite support agencies during a scheduled drill conducted by the licensee's Emergency Medical Contractor. The inspection involved 11 inspector-hours on site by two NRC inspectors.
Results: For the area inspected, no items of noncompliance or deviations were identified.

DETAILS

1. Persons Contacted

Principal Licensee Employees

*N. Kalivianakis, Station Superintendent
*J. Gudac, Station Assistant Superintendent
*R. Flessner, Rad/Chem Supervisor
V. Chaney, GSEP Coordinator, (CECo)

*Denotes those present at the exit interview.

Interview held by telephone on June 1, 1979.

2. Drill

The inspectors observed the response by the licensee organization and selected offsite support agencies during a scheduled drill conducted by the licensee's Emergency Medical Contractor on May 30, 1979. Site personnel and an ambulance crew responded to the simulated accident and hospital personnel were guided through decontamination and medical treatment. Radiation Management Corporation (RMC) personnel prepared the victim and directed the hospital segment of the drill.

a. Site Actions

The drill consisted of two plant employees being injured and contaminated when a hose transferring miscellaneous Waste Evaporator Bottoms ruptured. Some confusion was noted by an inspector as to whether the patient should be taken to the ambulance on the station's stretcher or the ambulance's stretcher/cart should be brought to the site of the accident and used.

b. Control Room Actions

Communications with the scene of the accident were established and were noted as being acceptable. Control room personnel, in reporting the injury to the hospital, contacted the Emergency Room instead of the House Supervisor as prescribed in the RMC Procedures Manual.

c. Hospital Actions

Inspectors who observed the portion of the drill conducted at Jane Lamb Hospital noted the following:

During Room Preparation

- The designated room was not properly equipped or set up in that (1) there was only one container for contaminated materials, (2) the plastic liner for the above container was too small, (3) there was no delineation of the controlled section from uncontrolled section of the room, and (4) some medical supplies were missing.

- The RMC representatives directed the preparation of the room. Some of the preparations by hospital personnel were not according to the RMC Procedures Manual and were immediately corrected by RMC personnel. In the event of an emergency, hospital personnel will have no one to assist in this preparation.

- Hospital personnel did not know how to zero or use dosimeters.

During Patient Handling

- Although hospital personnel were trained the previous day by RMC, they were directed by the RMC physician in decontamination and medical sample collection procedures.

- The dock door to the room was left open, which defeats the contamination control. No mention was made at the beginning of the phase of the drill that the door was "simulated" to be closed.

- The RMC physician "threw" a potentially contaminated metal stretcher onto the receiving dock.

- One of the decontamination solutions in the RMC decontamination kit was not what it should have been.

- No one was assigned the responsibility of periodically checking personnel exposure by reading the assigned dosimeters. In this drill with the victim contaminated to 3R/hr, the assigned dosimeters would have been off scale and personnel exposure data lost. Higher range dosimeters would be appropriate.

- When room occupants changed their outer gowns after the initial decontamination of the victim, they handled their own dosimeters with contaminated gloves. Contamination on the dosimeters will result in erroneous personnel exposure data.

- The hospital physician did not participate in the drill.

- The hospital personnel were not allowed to test the training they received but were constantly directed during the entire drill by the RMC physician.

3. General Comments

Hospital and station personnel involved in the patient decontamination/ medical treatment of the victim were not allowed to test the training tney had received on May 29, 1979. The RMC physician's total involvement in directing the operation rather than observing and either noting errors during a critique or explaining the proper procedure when an error was noted during the operation resulted in this "drill" being no more than an extension of the training provided on May 29, 1979.

The hospital personnel attitude reflected the difficulty of attaining realism in response to a known simulated condition. It was stated that they performed more professionally during a real contamination/ medical incident that had resulted from the station's operation.

4. Hospital Critique

The Medical Contractor held a critique with the hospital personnel and station personnel involved in the hospital portion of the drill following the drill. Some of the comments stated above were discussed.

5. Exit Interview

The inspectors held an exit interview by telephone with licensee representatives (denoted in Paragraph 1) on June 1, 1979. Observations made during the emergency were discussed.

The licensee agreed to (1) provide high range dosimeters and a high range portable monitor to the hospital equipment and (2) resolve the point of notification between the Station and the Hospital.