



Commonwealth Edison

Quad Cities Nuclear Power Station
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Telephone 309/654-2241

GGC-94-111

August 22, 1994

U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Attn: Document Control Desk

Subject: Quad Cities Power Station Units 1 and 2;
NRC Docket Number 50-254 and 50-265;
NRC Inspection Report Numbers 50-254(265)/94013

Reference: W. L. Axelson letter to E. Kraft dated August 3, 1994,
transmitting Notice of Violation.
Inspection Report 50-254/94013; 50-265/94013

Enclosed is Commonwealth Edison's response to the Notice of Violations (NOV) transmitted with the referenced letter. The NOV cited two Severity Level IV violations. The violations were 1) Failure of the station to perform surveys to comply with 10 CFR 20.1003 and 2) Failure to establish, maintain and adhere to Radiation Protection procedures.

The following commitments are being made by this letter:

- 1) QFP 100-9, "Refueling Pool Inventory Control" will be submitted as a QCAP block procedure since the requirements are applicable to all work groups, not just the fuel handling department. In addition, QFP 100-9, will be revised to include the reactor/cavity/open reactor vessel as a refueling pool. (NTS 254-200-94-03101)
- 2) A new procedure will be written to identify all necessary procedure training for future contractor personnel working on the refuel floor. (NTS 254-200-94-03102)

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In addition to the above response, information was requested concerning the station's Torus Recoat Project. The Torus information will be sent in a separate letter. If there are any questions, please refer them to Ron Baumer, Regulatory Assurance Department at (309) 654-2241 extension 3102.

Respectfully,

COMMONWEALTH EDISON
QUAD CITIES NUCLEAR POWER STATION

D. B. Cook for

Guy G. Campbell
Station Manager

GGC/RB/kjv

Enclosures

cc: J. Martin, Regional Administrator, RIII
C. Patel, Project Manager, NRR
C. Miller, Senior Resident Inspector, Quad Cities

VIOLATION 1:

10 CFR 20.1501 requires that each licensee make or cause to be made surveys that may be necessary for the licensee to comply with the regulations in Part 20 and that are reasonable under the circumstances to evaluate the extent of radiation levels, concentrations or quantities of radioactive materials, and the potential radiological hazards that could be present.

Pursuant to 10 CFR 20.1003, survey means an evaluation of the radiological conditions and potential hazards incident to the production, use, transfer, release, disposal, or presence of radioactive material or other sources of radiation.

Contrary to the above, on two occasions the licensee did not make surveys to comply with the regulations in Part 20. Specifically,

- a. On April 20, 1994, the licensee did not make surveys to assure compliance with 10 CFR 20.1201, which requires that licensees control the occupational total effective dose equivalent of adults to 5 rem annually. Specifically, an evaluation of the actual concentrations of radioactive material in air was not conducted during lapping of a valve.
- b. On May 13, 1994, the licensee did not make surveys to assure compliance with 10 CFR 20.1201, which requires that licensees control the occupational total effective dose equivalent of adults to 5 rem annually. Specifically, a worker entered the #2 dust collector tent area, on the 623' elevation of the Unit 1 Reactor Building, without an external exposure survey having been performed.

This is a Severity Level IV violation (Supplement IV).

Note: The NRC does not require a response to the above violation per the following information provided in NRC Inspection report 94-013:

"Inspection report 94-013, showed that steps had been taken to correct violation No. 1 and to prevent recurrence. Consequently, no reply to violation No. 1 is required by the NRC and they have no further questions regarding the matter."

VIOLATION 2:

Technical Specification 6.3 requires that radiation protection procedures be established, maintained, and adhered to.

Interim Procedure 670, "Refueling Pool Inventory Control," states, in part, that radioactive equipment or items stored in the refueling cavity that can cause a whole body exposure greater than 100 millirem/hour and are readily accessible must be conspicuously labeled to warn personnel of the radiation hazard.

Contrary to the above, on June 8, 1994, an irradiated part from a source range monitor or intermediate range monitor stored in a bucket in the refueling cavity that could cause a whole body exposure greater than 100 millirem/hour and was readily accessible was not conspicuously labeled to warn personnel of the radiation hazard. The contact dose rate of the irradiated part was about 5170 rem/hour.

This is a Severity Level IV violation (Supplement IV).

REASON FOR THE VIOLATION:

ComEd acknowledges the above violation. The investigation (PIR 2542009403100) into the above event cited the following causes for the event:

- 1) Poor Radiological Work Practices
- 2) Inadequate Training/Qualifications for the contractor personnel involved
- 3) Written Communications (Procedural Weakness)
- 4) Poor Verbal Communications between Fuel Handling and GE personnel

CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED:

The station has taken and completed the following immediate corrective actions:

- 1) The event was reviewed with all personnel involved with repairs in the reactor to ensure a heightened level of awareness with respect to the seriousness of this event.
- 2) QCAP 270-2, "Controls to Prevent Overexposure and Contamination While Working on the Refuel Floor", has been revised to add a requirement to maintain a minimum of five (5) feet of water shielding to allow movement of radioactive material underwater. If the 5 feet minimum cannot be achieved or when moving material around obstacles in the path, then a Radiation Protection Technician will be required to be in attendance for the move. In addition, a requirement was added

with respect to the maximum dose rate allowed for an object to be placed on the bulkhead. This procedure was reviewed with all personnel that are granted unescorted access to the Foreign Material Exclusion Area on the refuel floor.

3) QFP 100-9, "Refueling Pool Inventory Control", has been revised to ensure all items tied off in the refueling pools are labeled conspicuously, regardless of their dose rates. This procedure was reviewed with all personnel that are granted unescorted access to the Foreign Material Exclusion Area on the refuel floor.

4) The RWP's associated with the jet pump repair and refuel floor general access were revised to require a review of QFP 100-9 and QCAP 270-2 prior to logging in under these RWP's.

5) An expectation was conveyed to the fuel handling department that all components removed from the reactor vessel that are not to be used again shall be disposed of in a proper long term storage container as soon as practicable. Long term storage in buckets is no longer acceptable.

6) Expectations have been developed for the Refuel Floor Area Coordinator position and those expectations were conveyed to the individuals filling this position.

7) All existing items tied off in the refueling pools were identified with a conspicuous label, with item description and dose rate information.

CORRECTIVE STEPS TAKEN TO AVOID FURTHER VIOLATION:

The station will take the following long term corrective actions:

1) QFP 100-9, "Refueling Pool Inventory Control" will be submitted as a QCAP block procedure since the requirements are applicable to all work groups, not just the fuel handling department. Future RWP's associated with cavity and fuel pool work will also require a review of this new QCAP as well as QCAP 270-2.

2) QFP 100-9, "Refueling Pool Inventory Control", will be revised to include the reactor cavity/open reactor vessel as a refueling pool.

3) A new procedure will be written to identify all necessary procedure training for future contractor personnel working on the refuel floor.

4) Review all Fuel Handling procedures for vague procedure steps or ambiguities (e.g.: "maintain adequate shielding above items underwater" versus "maintain a minimum of 5 feet of water shielding above items underwater...").

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED:

Full compliance will be achieved with the completion of the required procedure

revisions and implementation of the new procedures prior to the next refuel outage.