



Commonwealth Edison
Quad-Cities Nuclear Power Station
Post Office Box 216
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50-254



NJK-74-393

November 26, 1974

Mr. John F. O'Leary, Director
Directorate of Licensing Regulation
U. S. Atomic Energy Commission
Washington, D. C. 20545

REFERENCE: Quad-Cities Nuclear Power Station
Docket No. 50-254, DPR-29
Appendix A, Sections 1.0.A.3, 3.8.D.3 and 6.6.B.1.a

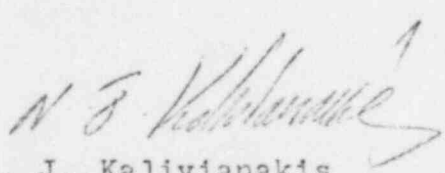
Dear Mr. O'Leary:

Enclosed please find Abnormal Occurrence Report No. AO 50-254/74-38 for Quad-Cities Nuclear Power Station. This occurrence was previously reported to Region III, Directorate of Regulatory Operations by telephone on November 17, 1974 and to you and Region III, Directorate of Regulatory Operations by telecopy on November 18, 1974.

This report is submitted to you in accordance with the requirements of Technical Specification 6.6.B.1.a.

Very truly yours,

COMMONWEALTH EDISON COMPANY
QUAD-CITIES NUCLEAR POWER STATION


N. J. Kalivianakis
Station Superintendent

NJK/JZM/lk

cc: Region III, Directorate of Regulatory Operations
J. S. Abel

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REPORT NUMBER: 50-254/74-38

REPORT DATE: November 26, 1974

OCCURRENCE DATE: November 16, 1974

FACILITY: Quad-Cities Nuclear Power Station
Cordova, Illinois 61242

IDENTIFICATION OF OCCURRENCE:

The "A" floor drain sample tank had an uncontrolled, but monitored discharge to the river.

CONDITION PRIOR TO OCCURRENCE:

Prior to the occurrence, both units were in the RUN Mode. Unit 1 was in operation at 780 MWe and Unit 2 was at 267 MWe.

The Radwaste Operator was in the process of discharging the "A" Floor Drain Sample Tank to the river. The Floor Drain Collector was ready to be processed.

DESCRIPTION OF OCCURRENCE:

On November 16, 1974 at 9:55 a.m. the "A" Floor Drain Sample Tank ("A"FDST) was started discharging to the river. At 4:00 p.m., the radwaste operator started processing the Floor Drain Collector inadvertently to the "A" FDST instead of "B" FDST. This continued for fifteen minutes which allowed an input of about 1000 gallons of unknown quality water into the "A" FDST. At 4:15 p.m. the radwaste operator noticed the level increasing on the "A" FDST tank level indicator and checked the valving line up. Realizing the mistake, the discharge to the river was stopped. The inlet valve to the "A" FDST was shut and the Shift Engineer was notified. Approximately 90 gallons of this uncontrolled, yet monitored effluent was discharged to the river over this fifteen minute period.

Samples were taken at the floor drain collector filter effluent and on the "A" FDST after it had been recirculated. The floor drain filter effluent concentration was 1.2×10^{-3} $\mu\text{Ci/ml}$. The "A" FDST activity analyzed for the original batch release was 2.93×10^{-3} $\mu\text{Ci/ml}$.

DESIGNATION OF THE APPARENT CAUSE OF OCCURRENCE:

Operator Error

The violation was caused by operator error. Between the time the "A" FDST discharge was initiated and the pumping of the

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floor drain collector to the discharging tank, there had been a shift change. Following the shift change, the new operator made a valving error while processing the Floor Drain Collector.

ANALYSIS OF OCCURRENCE:

After the occurrence, the floor drain filter effluent was sampled and showed a concentration of 1.2×10^{-3} $\mu\text{Ci/ml}$. The "A" FDST was recirculated and sampled; it showed a concentration of 1.8×10^{-3} $\mu\text{Ci/ml}$. The tank was being discharged based on an "A" FDST sample which showed a concentration of 2.93×10^{-3} $\mu\text{Ci/ml}$. This yielded a discharge rate of 6 gpm. Therefore, the effluent from the floor drain filter was of lower activity such that the "A" FDST was being diluted while being discharged to the river. The discharge rate is based on the activity of the tank being discharged and the dilution flow available. For a fixed dilution flow, the higher the activity in the tank, the smaller the discharge rate will be. In this occurrence the activity of the water coming from the Floor Drain Collector was less than that being discharged. This meant that the resulting water in the "A" FDST could have been discharged at a higher rate than originally determined.

Even though there was an uncontrolled release, it was still monitored by the radwaste discharge monitor continuously. Based on the above, there were no effects on the health and safety of the public, nor on the safe operation of the plant related to this occurrence.

CORRECTIVE ACTION:

The radwaste operator took the proper initial corrective action after the error was discovered. As soon as the problem was noted the discharge was stopped and resampling of the tanks was completed.

To prevent repetition of the occurrence, the incident will be discussed with the operating personnel to make sure the procedures are being properly followed.

FAILURE DATA:

A similar occurrence happened on March 29, 1973 when an operator accidentally opened the inlet to the "A" FDST instead of the "B" FDST while processing water from the Floor Drain Collector Tank. The "A" FDST was being discharged to the river at the time of the occurrence.

In both occurrences there were no health or safety problems to the public nor to the plant personnel. The applicable limits in 10 CFR20 were not violated due to inherent safety limitations designed into the discharge procedure.