



Commonwealth Edison

One First National Plaza, Chicago, Illinois Regulatory

Address Reply to: Post Office Box 767
Chicago, Illinois 60690

File Cy.

50-237

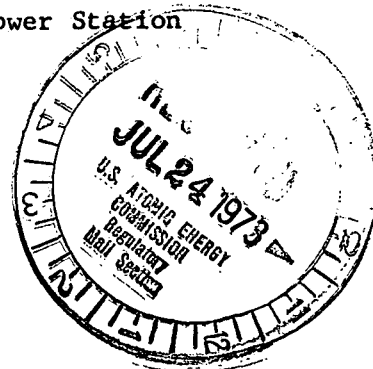
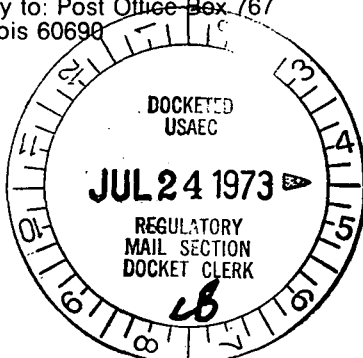
249

Dresden Nuclear Power Station

R. R. #1

Morris, IL 60450

July 20, 1973



WPW Ltr. #527-73

A. Giambusso
Deputy Director for Reactor Projects
Director of Licensing
U.S. Atomic Energy Commission
Washington, D.C. 20545

SUBJECT: LICENSE DPR-19-25, DRESDEN NUCLEAR POWER STATION, UNIT 2 AND UNIT 3, SECTION 6.6.B.3 OF THE TECHNICAL SPECIFICATIONS

High Activity in B Floor Drain Sample Tank

References: 1) Notification of Region IV of AEC Regulatory Operation.

Telephone: H. Dance 1430 hours 7/12/73

Telegram: B. Grier 1545 hours 7/12/73

2) Letter from W. P. Worden to A. Giambusso dated July 17, 1973 concerning High Activity in Above Ground Floor Drain Sample Tank B.

3) P & ID M-44,

Dear Mr. Giambusso:

This letter is to report a condition relating to the operation of Unit 2/3 Radwaste at about 0650 hours on July 12, 1973. At this time B Floor Drain Sample Tank (an above ground tank) was found to contain 0.8 curies. This radioactivity content exceeds the limit of 0.7 curies specified in section 3.8.0 of the Unit 2/3 Technical Specifications. This problem was corrected within 8 hours and consequently a limiting condition for operation was not exceeded. Therefore, our report is unnecessary. However, in order to complete the reporting sequence begun by our telephone call (reference 1), this letter is being submitted. Similar unnecessary reports are discussed in our letter of July 17, 1973 (reference 2).

PROBLEM

At 0650 hours on July 12, 1973, the processing of water to "B" Floor Drain Sample Tank from the Floor Drain Collector was completed and the "B" Floor Drain Sample Tank was placed on recirculation for sampling.

174.1

5679

8103030657

The sample analysis completed at 0835 hours indicated a beta-gamma radioactivity in the tank of 1.1×10^7 pCi/l. This concentration combined with a tank level of 91% full resulted in a total radioactivity content of 0.83 curies in the "B" Floor Drain Sample Tank.

At 1430 hours on July 12, 1973 some of the "B" Floor Drain Sample Tank water was transferred to the "B" Neutralizer Tank (underground) for temporary storage. This lowered the total curie content of the "B" Floor Drain Sample Tank.

At 1529 hours "B" Floor Drain Sample Tank was placed on recirculation for sampling. The sample results indicated a beta-gamma radioactivity of 9.5×10^6 pCi/l, with a tank volume of 49%, corresponding to a radioactivity content of 0.2 curies. This result is within Technical Specifications limits.

INVESTIGATION

The performance of the floor drain filter has been marginal. An investigation of the filter performance has been underway for some months and is continuing. However, at this time, no clear reason for this marginal performance is evident. A manufacturer representative has been consulted and is working with the Station to improve this filter performance. A similar occurrence on July 9, 1973 prompted the review of an operating procedure which requires the Floor Drain Collector to be analyzed for beta-gamma activity before processing. Unfortunately all personnel involved in the Unit 2/3 Radwaste operation had not been able to review this procedure before July 12, 1973. Therefore, it appears that this procedure was not followed correctly in that the Floor Drain Collector was not sampled and analyzed prior to being processed. Had this sample been taken, a different plan for processing this water probably would have been employed.

Besides having a marginal filter and a procedural misunderstanding, there is also a problem of residual radioactivity sludge in the flat bottomed Floor Drain Sample Tank. When the recirculation pump is started this radioactive sludge is stirred up into the water which is then sampled and analyzed.

CORRECTIVE ACTION

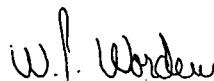
In addition to the immediate corrective action of draining the "B" Floor Drain Sample Tank to the "B" Neutralizer Tank, a review of the station operating procedure concerning the beta-gamma analysis of Floor Drain Collector water prior to processing with the personnel involved will be continued until the procedure is clearly understood. The investigation of the Floor Drain Filter performance also continues. On July 17, 1973 the "B" Floor Drain Sample Tank was opened for inspection. About 3 inches of black sludge was found in the bottom. Arrangements are being made to have the tank cleaned as soon as possible. Until the tank can be cleaned, an operating order has been issued requiring that the "B" Floor Drain Sample Tank be filled up to only 60% full. The tank was cleaned out on July 18, 1973 with a total curie count below the 0.7 curies Technical Specification limit.

EVALUATION

The presence of 0.8 curies in the "B" Floor Drain Sample Tank did not produce a hazard to the public since all the 20,020 gallons of water was not directly released to the river and the tank beta-gamma radioactivity was reduced to less than Technical Specifications requirements within 8 hours. If a failure (as described in Amendment #9, section V.C.1 of the S.A.R.) had occurred, and the radioactive water in the tank had been released to the aquatic environment, the limits as specified in 10CFR20.106 would not have been exceeded when averaged over one year.

The immediate corrective actions were appropriate and corrected the problem in a timely manner. These actions will also reduce the probability of future problems similar to this. There are no safety implications to the continued operation of Radwaste and the units.

Sincerely,



W. P. Worden
Superintendent

WPW:slb