



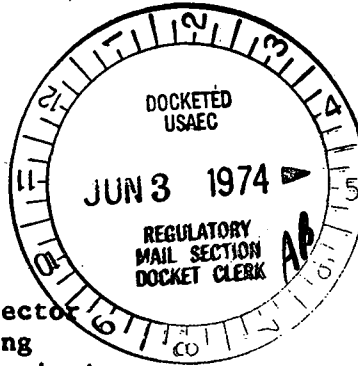
Commonwealth Edison
One First National Plaza, Chicago, Illinois
Address Reply to: Post Office Box 767
Chicago, Illinois 60690

Regulatory

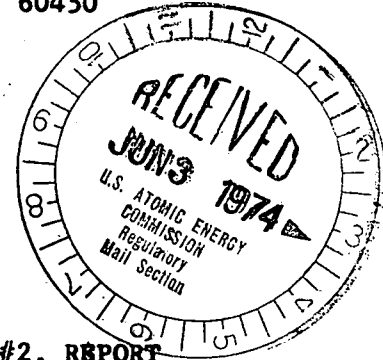
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BBS Ltr.#393-74



Dresden Nuclear Power Station
R. R. #1
Morris, Illinois 60450
May 31, 1974



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

SUBJECT: LICENSE DRR-19, DRESDEN NUCLEAR POWER STATION, UNIT #2, REPORT OF ABNORMAL OCCURRENCE PER SECTION 6.6.B.1.a OF THE TECHNICAL SPECIFICATIONS.
2/3 RADWASTE - WASTE SURGE TANK > 0.7 Ci FOR LONGER THAN 24 HOURS.

References: 1) Notification of Region III of AEC Regulatory Operations
Telephone: Mr. Ogg, 1620 hours on May 27, 1974.
Telegram: Mr. J. Keppler, 1700 hours on May 27, 1974.

Dear Mr. O'Leary:

This letter is to report a condition relating to the operation of Unit 2/3 Radwaste at about 2140 hours on May 23, 1974. At this time, the Waste Surge Tank was filled to a level of 65% with water subsequently analyzed to contain a beta-gamma radioactivity concentration of 6.7×10^6 picocuries per liter. This resulted in an above ground curie content in the tank of 1.3 curies. This condition was not brought into compliance within 24 hours. This condition is contrary to section 3.8.D of the Technical Specifications which requires that "the maximum amount of radioactivity in any one tank shall not exceed 0.7 curies. If these conditions cannot be met, the stored liquid shall be recycled within 24 hours to the Waste Collector Tanks or the Waste Neutralizer Tanks until the condition is met".

PROBLEM

During the week of May 20, 1974, the Unit 2/3 Radwaste Waste Collector Filters had not been operating properly due to suspected damage to the filter septums. Repairs of these filters were initiated on May 20, 1974. Due to the filter problems, water was unable to be processed at normal rates. By May 23, 1974, water had reached a level in the Radwaste basement where any further increase would have caused extensive damage to pumps and other equipment located in the basement. At approximately 2100 hours on May 23, 1974, the Shift Engineer made the decision to process

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water from the Waste Collector Tank to the Surge Tank without the use of either Waste Collector Filter or the Radwaste Demineralizer. This action was deemed necessary to save equipment in the Radwaste basement that was required to process the tank within 24 hours.

At the conclusion of the processing at 2140 hours, the Surge Tank level was 65% and at 0045 hours the tank was placed on recirc. for sample. Sample analysis results at 0255 on May 24, 1974 indicated a beta-gamma radioactivity concentration of 6.7×10^6 picocuries per liter and a curie content of 1.3 curies. The following actions were then taken to bring the curie content within Technical Specification limits:

1. On May 24, 1974 at 0830 hours, the Surge Tank was resampled and confirmed to contain greater than 0.7 curies.
2. At 2110 water from the Waste Surge Tank was processed through "B" Waste Collector Filter to "A" Waste Sample Tank. This process was completed at 2135 hours.
3. On May 25, 1974, at 0135 hours, water from the Waste Surge Tank was processed through the Waste Collector Filters to "C" Waste Sample Tank. This process was completed at 0140 hours on May 26, 1974.
4. On May 26, 1974, the waste surge tank was again sampled and contained greater than 0.7 curies.
5. On May 27, 1974 at 0150 hours, water from the Surge Tank was processed through "B" Waste Collector Filter to "C" Waste Sample Tank. This process was completed by 0215 hours.
6. On May 27, 1974 at 0445 hours, water from the Surge Tank was processed through "A" Waste Collector Filter to "C" Waste Sample Tank. This process was completed at 0445 hours. At this time, the Surge Tank level was 22%. Sample analysis indicated a beta-gamma radioactivity concentration of 1.1×10^7 picocuries per liter and a curie content of 0.7 curies. At this time the condition was corrected and the status was brought into compliance with Technical Specifications.

INVESTIGATION

The causes of the occurrence are as follows:

1. The inability of the Waste Collector Filters to properly filter water due to damaged filter septums caused the Radwaste basement to be flooded.

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2. The Shift Engineer, in an effort to save equipment necessary to process the water within 24 hours, decided to transfer water from the Waste Collector Tank to the Surge Tank.
3. Due to the inability of the Waste Collector Filters to properly filter water, the Waste Surge Tank could not be processed to below ground tank within 24 hours.

CORRECTIVE ACTION

Two appropriate corrective actions have been taken, the Shift Supervisors have been re-instructed as to the importance of noting changes in tank levels and each has reviewed the approved procedure for adding water to Unit 2/3 Radwaste above ground storage tanks. Also, the Waste Collector Filter repairs were begun on May 20, 1974. Modification to the Waste Collector Filter to provide greater capacities and better performance are in progress.

EVALUATIONS

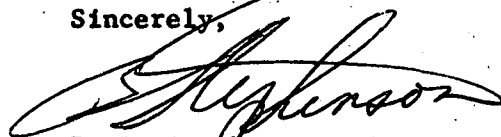
The presence of 1.3 curies of beta-gamma radioactivity in the water in the Waste Surge Tank did not present a hazard to the public since the contents of the tank were not released to the river. Had a failure of the Waste Surge Tank occurred, as described in Amendment #9, Section V.C.1 of the S.A.R., and the radioactivity contained in the tank been released to the aquatic environment, the limits as specified in 10 CFR 20.106 would not have been exceeded when averaged over one year.

The Dresden Technical Specifications have recently been revised on Unit 1 to allow 90 curies in all above ground tanks. In addition, the company plans to submit a request for a similar limit on Units 2 and 3.

A review of the deviation and incident reports for 1973 and 1974 indicates that although at times there was high activity in the above ground tanks, the station reprocessed the water within 24 hours.

We believe that the corrective actions taken to bring the condition into compliance with Technical Specifications were appropriate considering the importance of saving necessary equipment and the attempt to bring the condition within Technical Specification requirements in the shortest period of time. Also, the modification of the Waste Collector Filters to provide greater capacity and better performance should minimize the potential for future incidents of this nature.

Sincerely,



B. B. Stephenson
Superintendent

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