



December 9, 1994

TPJ Ltr. 94-0029

U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Attention: Document Control Desk

Subject: Dresden Station Units 1, 2, and 3  
NRC Docket Numbers 50-10, 237, and 249  
Special Report in accordance with Technical  
Specification 3.8.B.4, Liquid Effluents

This written report is being furnished to the NRC Staff per Dresden Units 2 and 3 Technical Specification 3.8.B.4 which requires a written report within 30 days when liquid radioactive waste is not processed through the normal handling system. From October 3, 1994 to November 14, 1994 Dresden Station released ground water, contaminated with small amounts of tritium, without processing by the station's radwaste systems.

A leak in the Unit 2/3 HPCI test line was the source of tritiated water. This underground, buried line connects the free standing condensate storage tanks to the power block. As the excavation required to identify and repair this leak expanded, significant groundwater intrusion occurred. The pumping of large quantities of water combined with sand and dirt would have placed large stresses on the radwaste systems without corresponding benefit. The station radwaste systems do not effectively reduce tritium concentrations and no gamma emitting nuclides were detected in the water released. As such, the radwaste systems did not contribute to the cause of this event. Therefore, no actions are/were required to restore the radwaste equipment to operation.

The cause of the leak in the HPCI test line was the failure of the in-ground cathodic protection system at Dresden. Actions taken to prevent recurrence of the leak include:

- 1) Repair of the specific leak in the HPCI test line.
- 2) Installation of a new deep well cathodic protection system designed to limit corrosion of all station underground piping.

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- 3) Development of an extensive onsite ground water surveillance program to assist in early detection of other such leaks.

The estimated volume and curie content of the waste discharged is:

Volume	-	128,000 gallons
Activity	-	0.02 Ci Tritium
		< Minimal Detectable Concentrations for Gamma Emitting Isotopes

This discharge will be incorporated in the Station Semi-Annual Effluent Report as required by Technical Specification 6.6.C. for the period of July-December of 1994.

The release of tritiated water was a planned event thus there are no actions required to prevent recurrence.

Sincerely,



Thomas P. Joyce  
Site Vice President  
Dresden Station

TPJ/kls

cc: J. Martin, Regional Administrator, NRC Region III  
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