

Power Reactor	Event Number: 42184
Facility: BRAIDWOOD Region: 3 State: IL Unit: [1] [2] [ ] RX Type: [1] W-4-LP,[2] W-4-LP NRC Notified By: MIKE DEBOARD HQ OPS Officer: ARLON COSTA	Notification Date: 12/02/2005 Notification Time: 11:45 [ET] Event Date: 12/02/2005 Event Time: 10:00 [CST] Last Update Date: 12/02/2005
Emergency Class: NON EMERGENCY 10 CFR Section: 50.72(b)(2)(xi) - OFFSITE NOTIFICATION	Person (Organization): PATRICK LOUDEN (R3 ) ERIC BENNER (NRR ) THOMAS BLOUNT (IRD )

Unit	SCRAM Code	RX CRIT	Initial PWR	Initial RX Mode	Current PWR	Current RX Mode
1	N	Y	100	Power Operation	100	Power Operation
2	N	Y	100	Power Operation	100	Power Operation

**Event Text**

OFFSITE NOTIFICATION - ELEVATED LEVELS OF TRITIUM FOUND IN GROUNDWATER

"This notification is being made pursuant to 10 CFR 50.72(b)(2)(xi) for a press release issued by Exelon Nuclear at 10:00 AM CST on December 2, 2005 regarding elevated levels of tritium found in groundwater on the Braidwood Station site property near the plant's north boundary. An environmental monitoring program at the Braidwood Generating Station has found higher than normal concentrations of tritium close to an underground pipe inside the plant's northern boundary, and the station has begun a remediation program. An Exelon Nuclear environmental team is drilling test wells on and just beyond the Braidwood property line in order to determine how much tritium may have moved beyond the plant boundaries and ultimately to clean up the tritium. Exelon Nuclear has notified NRC regional personnel, appropriate state agencies, local and state elected officials and four property owners who are potentially affected.

"The tritium was found in shallow groundwater 8 to 15 feet deep on company property. It poses no health or safety risk to the public and does not threaten drinking water wells in the area. Tritium is a naturally occurring isotope of hydrogen that emits a very low level of radiation and is a natural part of water. It is found in more concentrated levels in water used in nuclear reactors. The closest private residential wells to the site showed no tritium above natural background levels. A sample of water from a pond 50 yards north of the plant property line showed tritium levels of about 2,400 picocuries per liter, above background levels but less than one-eighth of the federal drinking water limit. The residential and pond test samples were taken with the consent of property owners and the results received on Dec. 1.

"The underground pipe that passes near the monitored site in the past has carried water containing tritium from the plant to the Kankakee River, where it was periodically discharged under federal guidelines as part of normal plant operations. No tritiated water is currently in the pipe and no tritium is currently being introduced into the ground. Braidwood has not released levels of tritium that exceeded federal limits."

The licensee notified the NRC Resident Inspector, State and local agencies and has issued a press release.