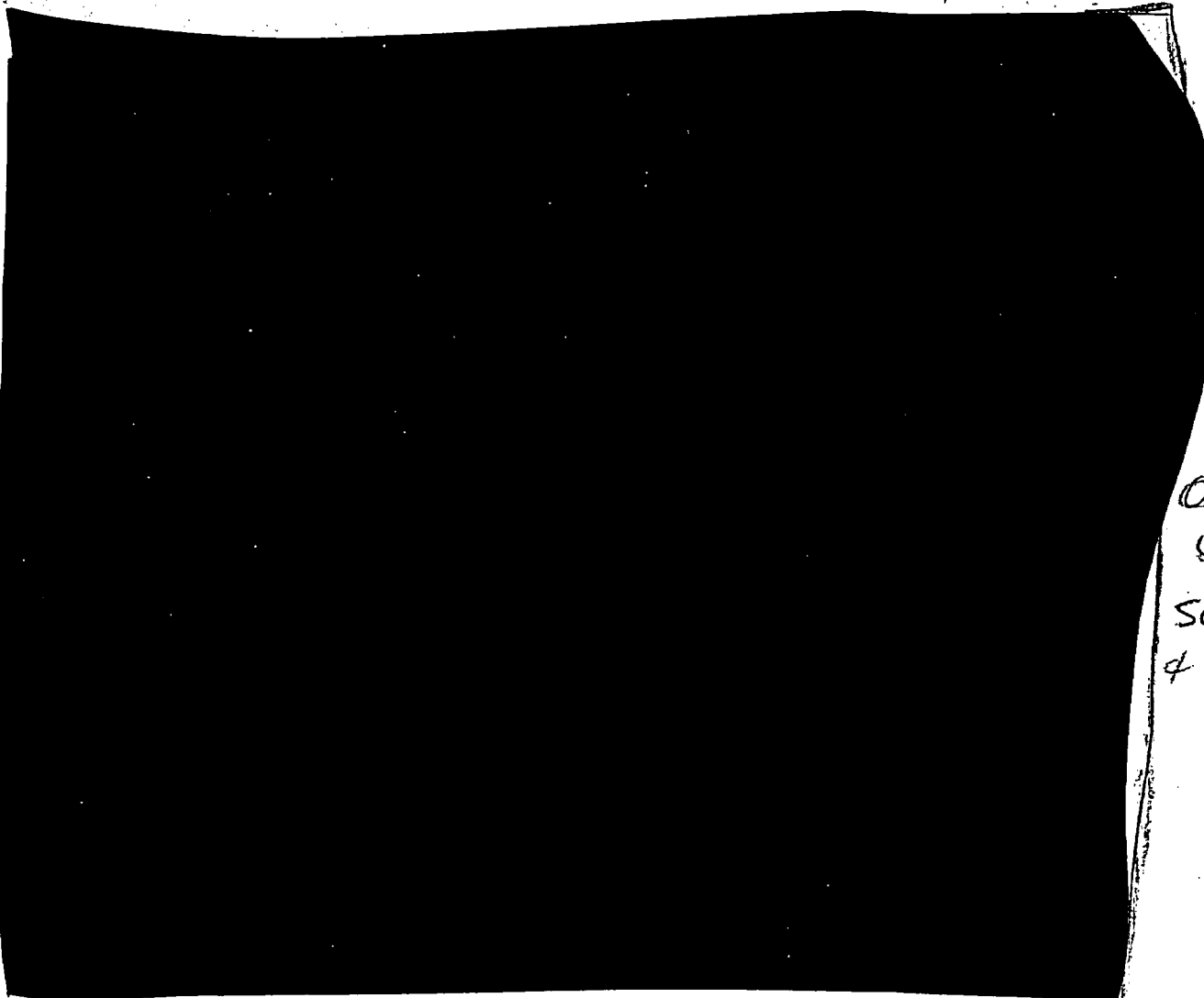


Braidwood Station, Units 1 and 2



OUT  
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SCOPE  
# 5

Other Items of Interest:

- As of December 9, 2005, the licensee has reported measurable levels of tritium in offsite groundwater monitoring wells that were installed over the last two weeks. During the subsequent monitoring they identified tritium in one residential drinking-water well. The residential well is located approximately 1/2-mile North of the contaminated onsite areas, and the licensee measured approximately 1150 picoCuries per liter of tritium in the well, which is a fraction of the EPA drinking water standard of 20,000 picoCuries per liter. Other nearby residential wells have not shown any tritium above normal background. However, the licensee detected elevated levels of tritium (as high as approximately 33,700 picoCuries per liter) in monitoring wells in a vacant development immediately offsite.

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The licensee continues to monitor and to develop options for remediation, with Region III inspection oversight. As of December 8, 2005, the licensee had a total of 40 groundwater monitoring wells in place and was planning to install another 40 wells to ensure that the vertical characterization of the aquifer was fully determined.

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Region III also has sent split samples from some offsite wells to the NRC's contract laboratory for independent analysis. In addition, Region III has obtained independent

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Act, exemptions Statute  
FOIA 2006-115

January 20, 2006

samples from four of the residents nearest to the site boundary. The resident with the measurable tritium level was contacted by Region III staff, but was satisfied with the licensee's actions and did not desire any additional sampling.

The licensee has arranged a meeting with the nearby residents for Monday, December 12, 2005, at its Training Building. State representatives of the Illinois Emergency Management Agency, Illinois Environmental Protection Agency, and Department of Public Health are planning to attend. In addition, two members of the Region III staff are also planning to attend. No media or other members of the public have been invited.

The licensee continues to attribute the contamination to leaks from its circulating blowdown line that occurred in 1998 and 2000. Along with circulating water, the licensee uses that line for liquid radioactive discharges from the plant. However, the licensee continues to evaluate the measurements to ensure that no additional leakage is occurring. While that investigation is ongoing, the licensee has suspended all discharges through that line and indicated that it can maintain that position for approximately 18 days.

A non-licensed operator identified a pool of water (about 1-2 ft in diameter) near the river screen house. The pool was located above a buried sample line running from the circulating water blowdown line to the river screen house. The licensee suspects that the water may originate from this line. The sample line is a 2 inch diameter carbon steel pipe. The pool of water was located on property owned by Exelon. Sampling for this area is planned but no test results were available yet.

On December 16, 2005, the State of Illinois Environmental Protection Agency issued the licensee a Violation Notice for contaminating the groundwater. On December 20, 2005, members of the Region III staff participated in a meeting between and Illinois Environmental Protection Agency and the licensee in Springfield, Illinois, which the licensee discussed the apparent origin of the contamination, its monitoring program and initial characterization, and the its future plans. Following that meeting, the Region, NRR, EDO, and OGC staffs conducted an internal meeting to discuss regulatory authority and preemption. A subsequent NRC internal meeting is scheduled for January 18, 2006, to further discuss the Illinois violations and regulatory jurisdiction issues.

On January 16, 2006, a resident noticed water pooling up around Vacuum Breaker 7, located off the owner controlled property, and informed the licensee. The licensee reduced blowdown flow and the leak stopped. Initial samples found no activity above background, and confirmatory samples were taken. The licensee is still investigating the failure mechanism. Region III and headquarters staffs (OGC, NRR, OEDO, STP) evaluated.

**The licensee has scheduled meetings with the State regulators on January 23, 2006, and with nearby residents on January 26, 2006, which Region III plans to attend.**

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EX. 5

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