

October 11, 2007

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE PNO-II-07-012

This preliminary notification constitutes EARLY notice of events of possible safety or public interest significance. The information is as initially received without verification or evaluation, and is basically all that is known by Region II staff (Atlanta, Georgia) on this date.

| <u>Facility</u> | <u>Licensee Emergency Classification</u> |
|---------------------------------|---|
| Catawba Nuclear Station | Notification of Unusual Event |
| Units 1 & 2 | Alert |
| York, SC | Site Area Emergency |
| Dockets/License: 50-413, 50-414 | General Emergency |
| | X Not Applicable |

SUBJECT: ONSITE GROUND WATER TRITIUM CONTAMINATION

On October 8, 2007, plant staff at the Catawba Nuclear Station received sample results which indicated the presence of detectable concentrations of tritium (hydrogen-3) in liquids collected from a ground water monitoring well located within the owner controlled area (OCA). The monitoring well is located approximately one half mile inside the property boundary of the facility. The measured level of activity in the sample obtained from this monitoring well was approximately 42,000 pCi/L from a depth of 50 feet. Additional water samples collected from other monitoring well locations onsite within the OCA also had measurable concentrations of tritium with a maximum level of approximately 4,000 pCi/L. This was the initial sampling of 30 new ground water monitoring wells which were recently installed at Catawba Nuclear Station in support of the Nuclear Energy Institute (NEI) ground water initiative.

The licensee has begun implementation of an action plan to monitor and evaluate the extent and potential for movement of detectable tritium in the groundwater based on the tritium detected in the single monitoring well which produced the sample with elevated levels of tritium. This includes taking additional samples from the 35 ground water monitoring wells located within the OCA and analyzing them for tritium and other radionuclides.

Once the licensee determined that tritium levels in excess of the NEI voluntary reporting criteria (greater than 20,000 pCi/L for onsite groundwater) were confirmed to be present in one of the ground water monitoring wells installed onsite, a 10 CFR 50.72 (EN 43703) report was submitted on October 9, 2007, at 9:41 a.m., with this information.

The South Carolina Department of Health and Environmental Control visited the Catawba Nuclear Station site on October 10, 2007, and collected water samples from the only two drinking water wells within the OCA. A split sample from each well was provided to Catawba personnel for confirmatory testing. The site does not use wells to supply potable water for employees at the facility.

Region II continues to monitor and assess the licensee's actions in response to this issue.

South Carolina Department of Health and Environmental Control (SCDHEC) intends to return to Catawba Nuclear Station on October 12, 2007, to begin sampling public and private drinking

water wells in the surrounding area. The licensee will receive split samples from any well that is sampled by SCDHEC.

The SCDHEC Division of Media Relations has issued a news release on this issue dated October 10, 2007. News coverage has been provided by both newspaper and television outlets in North Carolina and South Carolina starting on October 10, 2007.

Additional information on groundwater contamination from tritium can be found at the NRC public web site at the following address: <http://www.nrc.gov/reactors/operating/ops-experience/grndwtr-contam-tritium.html>

Region II received initial notification of ground water tritium contamination on October 8, 2007, when licensee management informed the Senior Resident Inspector. The information presented herein has been discussed with the licensee and the State, and is current as of 12:00 p.m., on October 11, 2007.

The state of South Carolina Department of Health and Environmental Control has been notified.

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