

Stephen E. Hedges Vice President Operations and Plant Manager July 25, 2006

WO 06-0035

Mr. Stuart A. Richards, Deputy Director Division of Inspection and Regional Support Office of Nuclear Reactor Regulation U.S. Nuclear Regulatory Commission Washington, DC 20555-0001

Subject: Docket 50-482: Groundwater Protection – Data Collection Questionnaire

Dear Mr. Richards:

The nuclear industry, in conjunction with the Nuclear Energy Institute, has developed a questionnaire to facilitate the collection of groundwater data at commercial nuclear reactor sites. The objective of the questionnaire is to compile baseline information about the current status of site programs for monitoring and protecting groundwater and to share that information with NRC. The completed questionnaire for Wolf Creek Generating Station is enclosed.

This letter contains no commitments. If you have any questions concerning this matter, please contact me at (620) 364-4190, or Mr. Kevin Moles at (620) 364-4126.

Very truly yours,

Stephén E. Hedges

SEH/rlt

Attachment

cc: J. N. Donohew (NRC), w/a

W. B. Jones (NRC), w/a B. S. Mallett (NRC), w/a Senior Resident Inspector (NRC), w/a Document Control Desk Ralph Andersen, Nuclear Energy Institute

Industry Groundwater Protection Initiative Voluntary Data Collection Questionnaire

Plant: Wolf Creek Generating Station

- 1. Briefly describe the program and/or methods used for detection of leakage or spills from plant systems, structures, and components that have a potential for an inadvertent release of radioactivity from plant operations into groundwater.
 - a. Wolf Creek has an operable Spent Fuel Pool Leakage Detection system that is used to monitor for leakage from the spent fuel pool.
 - b. Operations personnel perform routine rounds each shift. As part of these rounds, any leaks or spills would be reported to the control room, immediately cleaned up and documented in the plant corrective action process.
 - c. Engineering personnel perform periodic walk-downs of the systems that they are responsible for. During these walk-downs, if any leaks or spills were identified, they would be reported to the control room, immediately cleaned up and would be documented in the corrective action program.
 - d. Health Physics personnel conduct routine surveys in the plant. During these surveys if any leaks or spills were identified they would be reported to the control room, cleaned up and documented in the corrective action program.
 - e. Security personnel also perform routine rounds on-site and off-site and have the opportunity to identify leaks and spills. These leaks and spills would be reported to the control room, the leak/spill would be cleaned up and documented in our corrective action program.
 - f. Environmental personnel perform routine surveillances on-site and off-site and would report any leaks or spills identified.
- 2. Briefly describe the program and/or methods for monitoring onsite groundwater for the presence of radioactivity released from plant operations.
 - a. Wolf Creek has developed a process for monitoring onsite for the presence of radioactivity. This process has identified three dewatering well casings that have been sampled. As part of our site specific action plan, WCNOC will look at other locations that may provide additional opportunities to optimize our ability to identify leaks in underground release pathways. The sampling conducted onsite is performed quarterly.
 - b. The Offsite Dose Calculation Manual (ODCM) controls the radioactive liquid effluents released from the station to the Coffey County Lake. Releases from the station are aggressively controlled to ensure that the limits provided are maintained.
 - c. The Radiological Environmental Monitoring Program (REMP) maintains oversight of the Coffey County Lake and areas offsite. Ultimately, all discharged water is returned to the Coffey County Lake. The tritium levels in the lake range between ~9000 pCi/L to 16,000 pCi/L (below the Environmental Protection Agency (EPA) drinking water standard). The Coffey County Lake is used for all makeup water to the station, except for potable water. Therefore the secondary systems (circulating water, service water, essential service water, component cooling water, and fire protection water) do contain tritium.

Industry Groundwater Protection Initiative Voluntary Data Collection Questionnaire

Relative to monitoring outside of the Coffey County Lake, WCNOC does monitor ground water and drinking water routinely. There has been no offsite water contamination identified.

- 3. If applicable, briefly summarize any occurrences of inadvertent releases of radioactive liquids that had the potential to reach groundwater and have been documented in accordance with 10 CFR 50.75(g).
 - a. Wolf Creek has detected spent fuel pool liner leakage via the leak detection and collection system. There have been a total of 3 leaks found and repaired. The leakage was contained within the building systems and did not have the potential of reaching groundwater. The last leak was in 2001 and there have been no other leaks detected.
- 4. If applicable, briefly summarize the circumstances associated with any <u>onsite</u> or <u>offsite</u> groundwater monitoring result indicating a concentration in groundwater of radioactivity released from plant operations that exceeds the maximum contaminant level (MCL) established by the USEPA for drinking water.
 - a. There have been no identified instances of radioactivity released from the station that resulted in groundwater concentrations exceeding the EPA for drinking water.
- 5. Briefly describe any remediation efforts undertaken or planned to reduce or eliminate levels of radioactivity resulting from plant operations in soil or groundwater onsite or offsite.

a. Not applicable.