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W3F1-2006-0040

July 31, 2006

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

SUBJECT: Groundwater Protection Baseline Information
Waterford Steam Electric Station, Unit 3
Docket No. 50-382
License No. NPF-38

Dear Sir or Madam:

The nuclear industry, in conjunction with the Nuclear Energy Institute (NEI), developed a questionnaire to facilitate compilation of baseline information regarding the current status of site programs for monitoring and protecting groundwater. All participating nuclear sites agreed to provide the requested information to both NEI and the Nuclear Regulatory Commission.

The attachment to this letter contains the questionnaire response for Entergy's Waterford Steam Electric Station, Unit 3. Please contact Mr. John Hornsby at (504) 464-3249, if you have any questions or comments regarding this submittal.

There are no new commitments contained in this submittal.

Sincerely,

JAR/JLH/RLW/cbh

Attachment

IE25

cc: (w/Attachment)

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Attachment 1
To
W3F1-2006-0040

Groundwater Protection Questionnaire Response

Groundwater Protection Questionnaire

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.

   Response:

   The following items are used for detection of leakage or spills from plant systems, structures, and components (SSCs) that have a potential for an inadvertent release of radioactivity from plant operations into groundwater:

   - **Outfall monitoring program (site Chemistry procedure CE-001-004).**
   - **Operations Department personnel shiftly tours of plant systems and components looking for a wide variety of issues, including leaks.**
   - **Radiological Environmental Monitoring Program (REMP) (site Chemistry procedure CE-003-524).**
   - **Piping and tank integrity testing [ASME Section XI Pressure Testing - Engineering procedures NOECP-253 (site) and CEP-PT-001 (corporate)].**
   - **Corrective Action Program (corporate procedure EN-LI-102 used to document SSC leakage or spills).**
   - **Plant sump systems designed to collect system leakage that can then be discharged through radiation monitors.**
   - **Spent fuel pool leakage detection system.**
   - **IE Bulletin 80-10 monitoring of cross contaminated systems (site Chemistry procedure CE-001-004).**

2. Briefly describe the program and/or methods for monitoring onsite groundwater for the presence of radioactivity released from plant operations

   Response:

   Groundwater at Waterford-3 is surface water, due to the water table being so shallow in the vicinity of the plant. Waterford-3 has no groundwater wells on site. Groundwater/surface water is monitored for tritium and radioactivity to detection limits in the Offsite Dose Calculation Manual by the REMP at sample point SWK-1, (located on plant property) which monitors all storm runoff and non-radioactive discharges to the 40 Arpent Canal.

3. If applicable, briefly summarize any occurrences of inadvertent releases of radioactive liquids that have been documented in accordance with 10 CFR 50.75(g).

   Response:

   On May 21, 1997, approximately 800 gallons overflowed from the Waterford-3 spent fuel pool, as a result of a valve misalignment. Sampling and mitigation were performed following the spill to ensure no residual activity was left to potentially migrate into groundwater. After several days of less than Lower Limits of Detection (LLD) results on samples, the sampling was suspended on May 30, 1997.

4. If applicable, briefly summarize the circumstances associated with any onsite or offsite 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.

   Response:

   Waterford-3's drinking water is supplied by the Mississippi River. Radiological Environmental Monitoring Program (REMP) drinking water sample locations for tritium are below the LLD of 2000 pCi/l as per Technical Requirements Manual 3.12.1, Table 3.12-2. Groundwater samples have not exceeded the maximum contaminant level (MCL) established by the USEPA for drinking water. Groundwater at Waterford-3 is the same as surface water and has not exceeded the Technical Requirements Manual surface water limit of 30,000 pCi/l.

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.

   Response:

   As previously discussed in the response to Question 3 above, on May 21, 1997, approximately 800 gallons overflowed from the Waterford-3 spent fuel pool, as a result of a valve misalignment. Sampling and mitigation were performed following the spill to ensure no residual activity was left to potentially migrate into groundwater. After several days of less than LLD results on samples, the sampling was suspended on May 30, 1997. Contaminated dirt and asphalt were removed from the spill location.

   There is currently no known contamination of soil on the Waterford-3 site. Therefore, there are no remediation efforts presently underway or planned.