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LR-N08-0053



U.S. Nuclear Regulatory Commission ATTN: Document Control Desk Office of Nuclear Material Safety and Safeguards Washington, DC 20555-0001

> HOPE CREEK GENERATING STATION FACILITY OPERATING LICENSE NO. NPF-57 DOCKET NO. 50-354

Subject:

Special Report – North Plant Vent Radiation Monitoring System (RMS)

This special report is being submitted pursuant to the requirements of Hope Creek Technical Specification (TS) 3.3.7.5, "Accident Monitoring Instrumentation" Action 81, due to the North Plant Vent RMS being inoperable for greater than 72 hours.

Failure of post-planned maintenance testing conducted on February 29, 2008 resulted in the inability to return the North Plant Vent Radiation Monitoring System to operable status. A preplanned alternate method of sampling was implemented when the channel was removed from service and remained in effect until repairs were completed and the channel was returned to service on March 7, 2008.

Investigation identified two issues. The system failed its draw down vacuum test indicative of sample flow dilution. The observed as-found values failed to meet acceptance criteria of the five-minute hold test. Troubleshooting identified two sources of in-leakage, a solenoid valve up stream of the bypass loop flow sample pump and a vacuum relief valve in the particulate filter assembly. The solenoid valve was rebuilt and the relief valve replaced. These actions eliminated the in-leakage. Subsequent draw down testing was successful.

Additionally, the mid/high flow path flow control test did not pass the testing requirements. The sample flow rate did not change as required when the required test signal was changed. The flow controller was returned to service in manual mode with the flow manually set to ensure sufficient sample flow for all conditions (i.e. with margin above the minimum flow required). Procedures were revised to support operability in this configuration. The flow rate is checked during weekly surveillance of the system.

IE22 Ner Document Control Desk LR-N08-0053 Page 2

The North Plant Vent Radiation Monitoring system was returned to operable status in this configuration on March 7, 2008.

Replacement parts are being sought to return the flow controller to automatic control. The parts are expected to be available by March 25, 2008. Equipment vendor support is scheduled consistent with the receipt of the parts and it is anticipated that the system will be returned to automatic control by the end of March.

Should you have any questions concerning this letter, please contact Philip J. Duca at (856) 339-1640.

Sincerely,

John F. Perry

Plant Manager - Hope Creek

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