

APPENDIX

U. S. NUCLEAR REGULATORY COMMISSION
REGION IV

NRC Inspection Report: STN 50-482/85-06 Construction Permit: CPPR-147

Docket: STN 50-482

Licensee: Kansas Gas and Electric Company (KG&E)
P. O. Box 208
Wichita, Kansas 67201

Facility Name: Wolf Creek Generating Station (WCGS)

Inspection At: WCGS Site, Burlington, Kansas

Inspection Conducted: January 14-18, 1985

Inspector: *Ronald E. Baer* *2/7/85*
R. E. Baer, Radiation Specialist, Facilities Date
Radiological Protection Section

Approved: *Blaine Murray* *2/8/85*
Blaine Murray, Chief, Facilities Radiological Date
Protection Section

L. E. Martin *2/23/85*
L. E. Martin, Chief, Project Section A, Date
Reactor Project Branch 2

Inspection Summary

Inspection Conducted January 14-18, 1985 (Report STN 50-482/85-06)

Areas Inspected: Routine, unannounced inspection of the licensee's radioactive waste program including: management controls, liquid waste system, gaseous waste system, solid waste system, air cleaning system, area radiation monitors, and process and effluent radiation monitors. The inspection involved 35 inspector-hours onsite by one NRC inspector.

Results: Within the seven areas inspected, no violations or deviations were identified.

8503040248 850226
PDR ADOCK 05000482
G PDR

DETAILS

1. Persons Contacted

KG&E

- *F. T. Rhodes, Plant Manager
- *G. D. Boyer, Superintendent Technical Support
- G. R. Bramlett, Instrument and Calibration (I&C) Supervisor
- T. W. Coates, I&C Assistant Supervisor
- *D. A. Colwell, Quality Assurance Technologist
- J. C. Guimbellot, System Test Supervisor
- *C. J. Hoch, Quality Assurance Technician
- *J. M. Isom, Radwaste Coordinator
- *R. L. Logsdon, Site Chemist
- *F. D. McLaurin, Startup Assistant Manager
- T. S. Morrill, Chemistry Supervisor
- *M. M. Nichols, Site Health Physicist
- T. W. Padgett, Startup Engineer
- *L. E. Paulson, Corporate Radwaste Engineer
- *K. R. Peterson, Licensing
- L. J. Stifter, I&C Engineer
- *C. A. Swartzendruber, Radiological Services Manager
- *P. E. Turner, Nuclear Training Manager
- *M. G. Williams, Regulatory, Quality and Administration Superintendent

Others

- W. D. Allen, Allen Nuclear Associates, Consultant
- P. D. Andreychek, Mine Safety Appliances (MSA) Project Engineer
- *B. L. Bartlett, NRC Resident Inspector
- R. Mayercheck, MSA Contract Administrator

The NRC inspector also interviewed licensee and contractor employees including radiation protection, construction, and startup personnel.

*Denotes those individuals present during the exit interview on January 18, 1985.

2. Radwaste Organization and Management Control

The NRC inspector evaluated the licensee's corporate organization regarding radwaste management to determine compliance with the Final Safety Analysis Report (FSAR) commitments and recommendations of Regulatory Guide 4.15.

The licensee had recently filled the position of radiological services manager and corporate radwaste engineer (acting). These individuals appeared knowledgeable in their assigned responsibility and would provide the necessary support to the WCGS radioactive waste organization.

No violations or deviations were identified.

3. Liquid Radioactive Waste Management

The NRC inspector reviewed the licensee's liquid waste management system to determine compliance with FSAR commitments and inspection and enforcement (IE) Bulletin 80-10.

The NRC inspector discussed with licensee representatives the status of preoperational tests, representative sampling, discharge flow rate verification, and verification of tank volumes. The licensee stated that the reverse osmosis units will not be operational and were not tested in startup test SU4-HB01, "Liquid Radwaste System Preoperational Test," November 22, 1984. Discharge flow rates were to be verified during test SU4-HB01. The licensee had not completed test SU4-HB02, "Waste Evaporator." Open Item 482/8323-03 remains open pending completion of preoperational testing and representative sampling.

No violations or deviations were identified.

4. Gaseous Radioactive Waste Management

The NRC inspector reviewed the licensee's gaseous waste management system to determine compliance with FSAR commitments and IE Bulletin 80-10.

The NRC inspector determined that preoperational test SU3-HA01, "Gaseous Radwaste System," had not been completed and the verification of representative sampling had not been performed. Open Item 482/8323-04 remains open pending completion of these tests.

No violations or deviations were identified.

5. Solid Radwaste Management

The NRC inspector reviewed the solid radwaste management system including the spent resin system and the dry, active, waste system to determine compliance with FSAR commitments.

The NRC inspector discussed with licensee representatives the status of preoperational testing for the original plant solidification system described in the FSAR. The licensee stated that they had experienced some problems with the original system and would probably use a portable solidification system. A blanket order had been issued to a contractor

which provided for solidification of low level liquid concentrates, resin slurry, and depleted filter cartridge waste. The licensee stated that the fixed plant solidification system or the portable solidification system was expected to be available prior to initial criticality.

The NRC inspector stated that the plant original solidification system preoperational test must be completed, or if the portable solidification unit is used, then the licensee needed to: submit the process control program to the Office of Nuclear Reactor Regulation (NRR), select a location for the unit and provide for services and piping of effluents, and test unit operability to receive effluents and back flush lines. Open Item 482/8323-06 remains open pending completion of preoperational tests or provision of an operational alternate system.

No violations or deviations were identified.

6. Air Cleaning System

The NRC inspector reviewed the licensee's air cleaning systems to determine compliance with FSAR commitments, the recommendations of ANSI Standards N509-1980 and N510-1980, and Regulatory Guides 1.140 and 1.52.

The NRC inspector discussed with licensee's representatives and vendor personnel the status of preoperational test SU3-0006, "HEPA Filter/Absorber Test." The licensee was in the process of performing this test during the inspection. The licensee stated that a test canister which contains a representative sample of the filter train charcoal would be removed and sent to MSA for absorbent performance testing. These samples would be identified by filter train nomenclature and used as a baseline for charcoal condition.

The NRC inspector noted that revision 17 to the FSAR dated December 1984 deleted the preoperational test 14.2.12.1.82, "HEPA Filter Test (S-030006)," from the SNUPPS FSAR and stated "See Wolf Creek Site Addendum." The Wolf Creek Site Addendum did not reference the performance of this test. The NRC inspector informed the licensee of this apparent oversight, but noted that the licensee was performing test SU3-0006.

Open Item 482/8323-07 will remain open pending completion of preoperational testing.

No violations or deviations were identified.

7. Area Radiation Monitoring System

The NRC inspector reviewed the licensee's area radiation monitoring system for compliance with FSAR commitments.

The NRC inspector reviewed the electronic and radiological calibration for all area radiation monitors. The NRC inspector noted that most radiation monitors had been calibrated in August and September 1984 except radiation monitor 0-S0-RE-34 located in the cask handling area which was last calibrated in January 1984. The area radiation monitors are routinely calibrated on an annual frequency. The licensee stated that this monitor would be recalibrated and later provided a copy of the calibration performed on January 25, 1985 which the NRC inspector reviewed and found acceptable.

The NRC inspector reviewed the licensee's procedures STS IC-252A, "Analog Channel Operational Test New Fuel Pool Criticality Monitor SDRE35," Revision 0, January 5, 1985, and STS IC-452A, "Channel Calibration New Fuel Pool Criticality Monitor SDRE35," Revision 0, January 5, 1985, as typical of the procedures for all area radiation monitors. The licensee did not have approved calibration procedures for all area radiation monitors at the time of this inspection.

Open Item 482/8323-08 will remain open pending the recalibration of monitors discussed with licensee representatives, completion of surveillance and preoperational tests, and approval of related series procedures.

No violations or deviations were identified.

8. Process and Effluent Radioactivity Monitoring System

The NRC inspector reviewed the licensee's process and effluent radiation monitoring system for compliance with FSAR commitments.

The NRC inspector reviewed letter, December 12, 1984, to H. R. Denton (NRR) from G. L. Koester (KG&E) requesting approval of KG&E's plan for testing process and effluent radiation monitors. The licensee planned to test the 18 Technical Specification (TS) required monitors prior to fuel load and the remaining monitors later.

The licensee had completed preoperational testing and calibration of 15 of the TS required monitors. The NRC inspector reviewed the results of these calibrations. The licensee had performed calibration on liquid monitors with radioactive liquid and gaseous monitors with radioactive gases.

Open Item 482/8323-09 remains open pending completion of preoperational testing and approval of surveillance and calibration procedures.

No violations or deviations were identified.

9. Exit Interview

The NRC inspector met with licensee representatives identified in paragraph 1 at the conclusion of the inspection on January 18, 1985. The NRC inspector discussed the scope and findings of the inspection. The licensee committed to complete Open Items 482/8323-03; 482/8323-04; 482/8323-06; 482/8323-07; 482/8323-08; and 482/8323-09 2 weeks prior to criticality.