

APPENDIX

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

NRC Inspection Report: 50-267/89-18

Operating License: DPR-34

Docket: 50-267

Licensee: Public Service Company of Colorado (PSC)
P.O. Box 840
Denver, Colorado 80201-0840

Facility Name: Fort St. Vrain Nuclear Generating Station (FSV)

Inspection At: FSV Site, Weld County, Platteville, Colorado

Inspection Conducted: September 11-15, 1989

Inspectors:

Lorenzo Wilborn

Lorenzo Wilborn, Radiation Specialist
Facilities Radiological Protection Section

10/13/89
Date

for

Blaine Murray

Larry T. Ricketson, Radiation Specialist
Facilities Radiological Protection Section

10/13/89
Date

Approved:

Blaine Murray

Blaine Murray, Chief, Facilities Radiological
Protection Section

10/13/89
Date

Inspection Summary

Inspection Conducted September 11-15, 1989 (Report 50-267/89-18)

Areas Inspected: Routine, unannounced inspection of the licensee's radiological environmental monitoring program (REMP) including: organization and management controls; qualifications and training; licensee quality assurance (QA) and contractor audits; meteorological monitoring program; facilities, equipment, and supplies; and reportable occurrences.

Results: The inspector determined that the licensee's overall performance as well as that of its contractor regarding the REMP activities had been adequate. The licensee had maintained the same qualified staff since the previous NRC inspection conducted in this area during the period July 14-17, 1987, (NRC Inspection Report 50-267/87-18).

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

DETAILS

1. Persons Contacted

Licensee

*H. L. Brey, Nuclear Licensing and Resources Manager
 J. Brungardt, Senior Chemist
 *R. L. Craun, Engineering Manager
 D. W. Evans, Operations Manager
 *M. J. Ferris, QA Operations Manager
 *C. H. Fuller, Nuclear Production Manager
 *J. M. Gramling, Nuclear Licensing - Operations Supervisor
 *D. D. Miller, Radiochemistry Supervisor
 *W. D. Rodgers, Nuclear Compliance Services Manager
 *T. E. Schleiger, Chemistry and Radiation Protection Superintendent
 *L. D. Scott, QA Services Manager
 S. S. Sherrow, Health Physicist
 *P. F. Tomlinson, QA Manager
 W. Woodard, Radiation Protection Supervisor

Others

S. J. Clow, Colorado State University Chemist
 *R. E. Farrell, NRC Senior Resident Inspector
 Dr. J. E. Johnson, Colorado State University Professor
 P. W. Michaud, NRC Resident Inspector

*Denotes attendance at the exit interview.

The inspectors also contacted other licensee personnel including administrative and training.

2. Organization and Management Controls

The inspectors reviewed the licensee's organization and staffing regarding management controls and assignment of REMP responsibilities, and the program for identifying and correcting problem weaknesses to determine compliance with the requirements of Section 7 of the Technical Specifications (TS).

The inspectors noted that the organizational structure, the staff responsible for implementing/performing REMP activities, and the assignment of responsibilities had not changed since the previous NRC inspection conducted during the period July 14-17, 1987, (NRC Inspection Report 50-267/87-18). The inspectors verified that the collection and analysis of environmental media samples for radioactivity continued to be performed under contract to Colorado State University, Fort Collins, Colorado.

The inspectors determined that the organizational structure and the administrative control responsibilities of the staff involved in REMP activities were being implemented in accordance with the requirements of the TS.

No violations or deviations were identified.

3. Training and Qualifications

The inspectors reviewed the training and qualifications of the facility staff who had been assigned responsibilities to manage the REMP activities to determine compliance with the requirements of Section 7 of the TS and agreement with the guidance of NRC Regulatory Guide (RG) 1.8 and American National Standards Institute (ANSI) Standard N18.1-1971.

The inspectors verified that the education and experience, adequacy and quality of training, and employee knowledge of personnel in the PSC REMP project line of responsibilities met or exceeded the minimum training and qualifications specified in the REMP implementing procedures, the requirements of the TS, and the guidance of RG 1.8 and ANSI Standard N18.1-1971.

No violations or deviations were identified.

4. Audits

The inspectors reviewed the licensee's QA audit program to determine compliance with the requirements of Section 7 of the TS.

The inspectors reviewed the licensee's 1989 QA audit of REMP activities (No. ENPR-89-01, "Environmental Protection Plan," May 22 through June 14, 1989) and determined that the licensee's audit had been well planned and comprehensive according to the audit notification memorandum and the audit checklist, respectively, to satisfy the requirements of the TS. The inspectors noted that the audit was performed by qualified personnel knowledgeable in REMP activities. Based upon the audit results, there were areas identified relating to the reorganization at FSV relative to redefining organizational responsibilities within REMP that required improvement. The inspectors also noted that the audit findings had been reviewed by management, and that responses and corrective actions to the discrepant audit findings had been completed and documented in accordance with QA procedures.

No violations or deviations were identified.

5. Radiological Environmental Monitoring Program

The inspectors reviewed the licensee's REMP, Offsite Dose Calculation Manual (ODCM), Work Specification (WS)-60-0001, to determine compliance with Section 8 of the TS. The WS-60-0001 provides for a contractor to conduct the REMP with the licensee's radiation protection manager having

the overall responsibility for ensuring that the program is conducted in accordance with the FSV TS. The WS-60-0001 also provides for the contractor to furnish all necessary labor, supervision, equipment, tools, and materials to conduct intensive environmental radiological monitoring in the event of a radiological emergency at FSV.

The inspectors noted that the results of the land use census were reported in the annual radiological environmental monitoring reports and changes incorporated in the REMP and ODCM were described in the semi-annual radioactive effluent release reports and the annual radiological environmental monitoring reports.

The inspectors determined that the REMP samples were collected pursuant to Table 8.2-1 of the TS from the specific locations given in the table and figures in the ODCM, and analyzed pursuant to the requirements of Table 8.2-1 and the detection capabilities required by Table 8.2-2. The inspectors also determined that all reports were submitted in accordance with Section 5 of WS-60-0001 and Section 7 of the TS.

No violations or deviations were identified.

6. Meteorological Monitoring Program

The inspectors reviewed the licensee's meteorological monitoring program to determine compliance with the requirements of Section 7 of the TS, and agreement with the guidance of NRC Regulatory Guides (RG) 1.21, 1.23, and 1.97, and ANSI Standard 2.5-1984.

The inspectors noted that the licensee's annual meteorological data recovery rate was 98.80 percent for 1987 and 98.12 percent for 1988.

The inspectors determined that the licensee's performance of the meteorological monitoring and calibration programs met requirements of the TS and agreed with the guidance contained in the RGs and ANSI/ANS standard.

No violations or deviations were identified.

7. Facilities, Equipment, and Supplies

The inspectors inspected several environmental media sampling stations associated with the REMP and the contractor's facilities used for the preparation and analyses of REMP samples and storage of equipment and supplies to determine compliance with Section 8 of the TS and the ODCM.

The inspectors visited the following types of sampling stations: airborne, surface/drinking water, ground water, direct radiation, milk, and broad leaf vegetation. The required equipment was in place and operational at the selected sampling stations during the time of the visit. The inspectors verified that the sampling station locations were as described in the table and figures in the ODCM.

The inspectors determined that the facilities, the supply of equipment, and the on hand expendable supplies were adequate to accommodate the REMP.

No violations or deviations were identified.

8. Environmental Reports

The inspectors reviewed the licensee's semi-annual radioactive effluent release reports and annual radiological environmental monitoring reports for 1987 and 1988, respectively, to determine compliance with the requirements of Section 7 of the TS.

The inspectors determined that the licensee's reports contained the information required by the TS.

No violations or deviations were identified.

9. Reportable Occurrences

The inspectors noted that Section 7 of the TS contained a provision that if the REMP was not conducted as specified in Table 8.2-1 of the TS, in lieu of a licensee event report, a description of the reasons the program was not conducted as required and the plans for preventing recurrence shall be prepared and submitted to the NRC in the annual radiological environmental monitoring report.

The inspectors found no reportable events dealing with the REMP since the last REMP inspection (NRC Inspection Report 50-267/87-18, July 1987) through August 1989.

No violations or deviations were identified.

10. Exit Interview

The inspectors met with the senior resident inspector and the licensee's representatives denoted in paragraph 1 at the conclusion of the inspection on September 15, 1989, and summarized the scope and findings of inspection as presented in this report. The licensee did not identify as proprietary any of the materials provided to, or reviewed by, the inspectors during the inspection.