

U. S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT
REGION IV

IE Inspection Report No. 50-267/78-17

License No. DPR-34

Licensee: Public Service Company of Colorado (PSC)
Post Office Box 840
Denver, Colorado 80201

Facility: Fort St. Vrain Nuclear Generating Station

Inspection at: Platteville, Colorado

Inspection conducted: October 24-26, 1978

Inspector:

R. J. Everett
R. J. Everett, Radiation Specialist

11/16/78
Date

Approved by:

G. D. Brown
G. D. Brown, Chief, Fuel Facility and Material
Safety Branch

11/17/78
Date

Inspection Summary

Inspection on October 24-26, 1978 (Report No. 50-267/78-17)

Areas Inspected: Routine, unannounced inspection of Environmental Protection Programs for operations, including organization and administration; audits; environmental monitoring and surveillance; chemical and thermal monitoring; QC of analytical measurements; ecological studies; and a site tour which included environmental monitoring stations. The inspection involved 19 inspector-hours on site by one (1) NRC inspector.

Results: Of the seven areas inspected, no items of noncompliance were identified.

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DETAILS

1. Persons Contacted

Public Service Company of Colorado (PSC)

W. J. Martin, Manager, Planning and Analysis
*L. J. Stark, Supervisor, System Planning
*M. H. Holmes, Supervisor, Licensing and Administrative
*R. A. Petske, Engineer, System Planning
E. Hill, Supervisor, Operations
H. L. Brey, QA Manager
C. Tracey, Superintendent, QA Operations
*H. Revie, Senior QA Technician
*J. Salakiewicz, QA Engineer

Colorado State University (CSU)

B. Berven, PHD Candidate, Department of Radiology and Radiation Biology

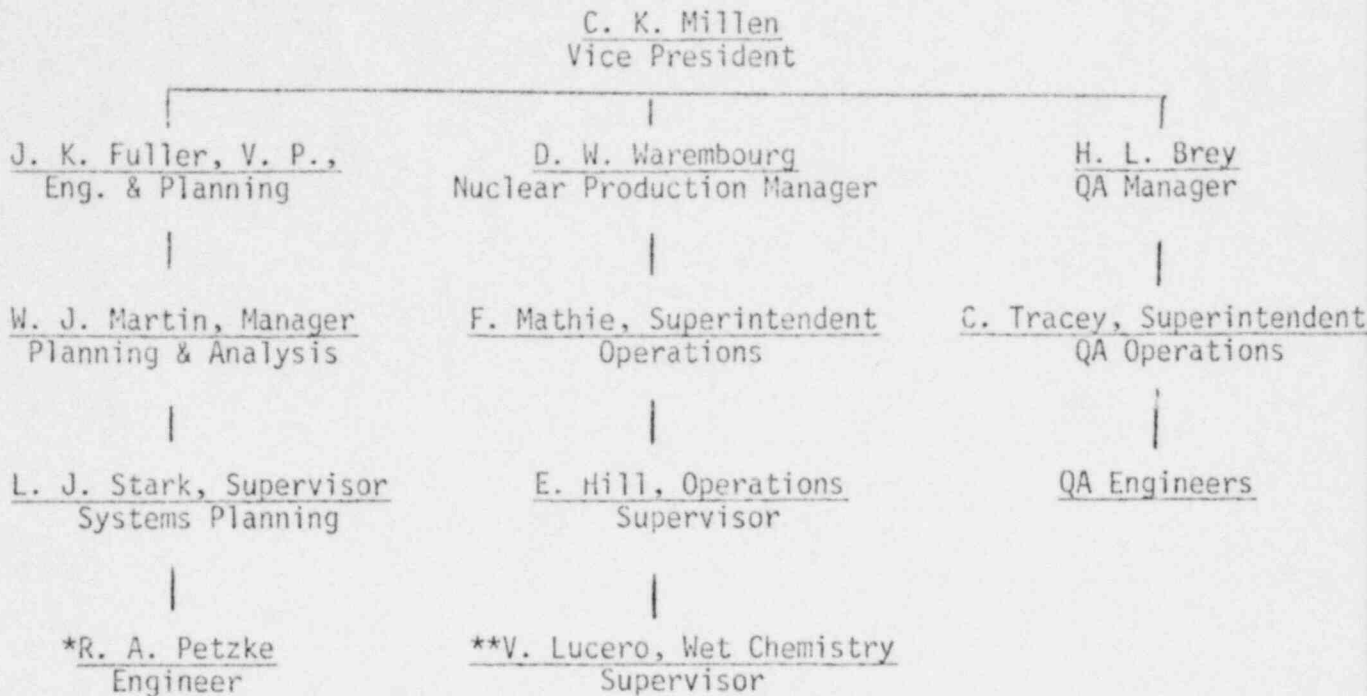
*Denotes those present at exit interview.

2. Licensee Action on Previous Inspection Findings

(Closed) Noncompliance (50-267/77-13): Failure to provide an air sampler at one monitoring station in the period March 13, 1977 through September 23, 1977. The inspector found that air sampling has been conducted at this station since September 23, 1977, and the corrective actions stated in the licensee's letter of October 20, 1977, have been carried out.

3. Organization and Administration

The inspector reviewed the PSC organization and assignments of environmental and chemistry program responsibilities. The following indicates the present structure and assigned individuals as indicated by PSC representatives.



*Lead responsibility for the Ecological and Environmental Programs.

**Lead responsibility for the Nonradiological Program.

4. Internal Audits

The inspector reviewed audits of environmental, ecological and chemistry programs and discussed findings with QA representatives. The following audit reports were reviewed.

- a. QASP-601.6.9, review of Environmental Radiological Monitoring Program (CSU), January, 1978.
- b. QASP-601.6.9, review of Ecological Monitoring Program (Thorne) January, 1978.
- c. QASP-601, review of CSU Semi-annual Report, August 3, 1978.
- d. QASP-601, review of CSU Semi-annual Report, February 9, 1978.
- e. QASP-701-6.2, review of Water Chemistry Program, January 30, 1978.
- f. QASP-701-6.6, review of Water Chemistry Program, September 20, 1978.

The inspector also reviewed QASP-601, the environmental program checklist and ADM-34, "Criteria for acceptance of data from CSU" These procedures are used in conducting the audits above. The inspector reviewed the deviations noted during these audits and the corrective action on each. Significant items identified were corrections to CSU's method of decay correction of I-131 and a non-compliance item on temperature monitoring in the Platte River during the 3rd quarter of 1978. Corrective actions are in progress. The inspector noted that effluent temperatures have not exceeded 80°F with the exception of July, 1977. A ΔT of 10°F was shown to be not exceeded during this period.

5. Environmental Radiological Monitoring

The environmental monitoring requirements are contained in SR 5.9.1, Appendix A, Technical specifications. The program is being conducted by CSU under contract with PSC. The inspector reviewed the CSU summary reports of the third and fourth quarters of 1977 and the first and second quarters of 1978. This review and discussion with licensee representatives indicated that requirements had been met. The inspector met with a representative of CSU and reviewed written procedures on environmental sampling and analysis. The inspector had no further questions in this area.

6. Nonradiological Monitoring

The nonradiological environmental requirements are contained in Appendix B of the Technical Specifications. Ecological studies are carried out by Thorne Ecological Institute. Nonradiological monitoring and analyses are carried out by plant chemistry personnel. Ecological progress reports were reviewed for the last half of 1977 and the first half of 1978, and no discrepancies were noted. Surveillance test records and the semi-annual reports of the last half of 1977 and the first half of 1978 indicate that T.S. requirements have been met during this period. The licensee stated that work on the remote temperature monitors in the Platte River should be completed shortly, thus avoiding the manual collection of temperatures which lead to the item of noncompliance identified in a QA audit the third quarter of 1978. The inspector had no further questions in this area.

7. Analytical Quality Control

a. Environmental Radioactivity

The inspector reviewed the Cross-Check Program between CSU and the Environmental Protection Agency (EPA). The cross-checks are done

approximately quarterly on water, air filters and milk samples. Occasional samples are run in duplicate with LFE Corporation and State of Colorado Department of Health. The inspector noted that the LFE comparisons were poor and several of the EPA cross-check samples were outside the EPA criteria of $\pm 3\sigma$. CSU has not provided any explanation or proposed corrective actions to bring the analysis within the limits of the EPA criteria. The licensee's Administrative Procedure (ADM-34) "Criteria for Acceptance of Data from CSU," does not require any corrective actions or explanation when cross-check samples are outside the EPA criteria, nor is any criteria provided as to the acceptance of analytical results from the contractor. The inspector stated that this issue would remain unresolved pending discussions with the NRC staff.

b. Nonradiological

The inspector reviewed procedure IWP-4, "Interdepartmental work procedure for interlaboratory cross-check program between PSC and CEP," and monthly and semiannual reports of cross-check results. Controls for Environmental Protection (CEP) provides "skiked" samples monthly to PSC for their analysis. The inspector noted that acceptance criteria for the cross-check samples were documented in the procedure. Results of this program over the last six months indicate agreement on all samples except copper, which was at the 75% agreement level. The inspector had no further questions in this area at this time.

8. Site Tour

The inspector visited the sampling stations in the facility area. All air sampling gear was found operational. The inspector noted that the air sampling heads were inverted but not protected from rain or snowfall. The licensee stated that the low rainfall in the area precluded any real problem of wet filters. The inspector noted that a cow herd north of the facility had access to Gooseguill ditch which receives plant effluent and inquired as to whether these cows are whole body counted as part of the environmental surveillance schedule. The licensee responded that 2-4 cows are counted quarterly and these animal are selected randomly within the facility area. The inspector discussed with the licensee the number, placement and calibration of CaF_2Dy thermoluminescence dosimeters (TLDs) in use in the environmental program and discussed the TLD response to noble gases typical of plant effluent. The inspector had no further questions in this area at this time. The inspector visited the large lined ponds used to hold liquids from demineralizer regeneration. The ponds were found in good condition and serving their intended function. The inspector had no further questions in this area at this time.

9. Exit Interview

The inspector met with PSC representatives at the Engineering Center, Denver, Colorado on October 26, 1978 (See paragraph 1). The inspector discussed the purpose and scope of the inspection and discussed the findings.