

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

IE Inspection Report No. 50-267/81-03

Docket No. 50-267

Licensee: Public Service Company of Colorado
P. O. Box 840
Denver, Colorado 80201

Facility Name: Fort St. Vrain Nuclear Generation Station

Inspection at: Fort St. Vrain Site, Platteville, Colorado

Inspection Conducted: February 1-28, 1981

Inspectors:

L. A. Yandell for
M. W. Dickerson, Senior Resident Reactor Inspector

3/18/81
Date

L. A. Yandell for
G. L. Plumlee III, Resident Reactor Inspector

3/18/81
Date

Approved by:

L. A. Yandell for
T. F. Westerman, Chief, Reactor Project Section No. 1

3/18/81
Date

Inspection Summary

Inspection conducted on February 1-28, 1981 (Report No. 50-267/81-03)

Areas Inspected: Routine, announced inspection of review of Refueling Activities; Surveillance; Maintenance; Operational Safety Verification; Plant Operations; Licensee Event Followup; and review of periodic and special reports. The inspection involved 167 inspector-hours on site by two NRC inspectors.

Results: Within the seven areas inspected, two items of noncompliance were identified (failure to adhere to Technical Specification limitations, Paragraph 2a; and failure to follow a procedural requirement, Paragraph 3).

8105060512

DETAILS1. Persons Contacted

L. Brey, QA Manager
W. Franek, Results Supervisor
J. Gamm, Supervisor Technical Services
E. Hill, Superintendent of Operation
W. Hillyard, Administrative Services Manager
D. Hood, Shift Supervisor
F. Mathie, Operations Manager
T. Orlin, Superintendent QA Services
L. Singleton, Superintendent Operation QA
J. Van Dyke, Shift Supervisor
R. Wadas, Training Supervisor
D. Warembourg, Manager, Nuclear Production

The inspector also contacted other plant personnel including reactor operators, maintenance men, electricians, technicians and administrative personnel.

2. Operational Safety Verification

The inspector reviewed licensee activities to ascertain that the facility is being operated safely and in conformance with regulatory requirements, and the licensee's management control system is effectively discharging its responsibilities for continued safe operation. The review was conducted by direct observation of activities, tours of the facility, interviews and discussion with licensee personnel, independent verification of safety system status and limiting conditions for operations, and review of facility records.

Included in the inspection were observation of control room activities, review of operational logs, records, and tours of accessible areas. Logs and records reviewed included:

- . Shift Supervisor Logs
- . Reactor Operator Logs
- . Equipment Operator Logs
- . Auxiliary Operator Logs
- . Technical Specification Compliance Logs
- . Operations Order Book
- . System Status Log

- . Form 1 Log (Jumper Log)
- . Plant Trouble Reports

During tours of accessible areas, particular attention was directed to the following:

- . Monitoring Instrumentation
- . Radiation Controls
- . Housekeeping
- . Fluid Leaks
- . Piping Vibrations
- . Hanger/Seismic Restraints
- . Clearance Tags
- . Fire Hazards
- . Control Room Manning
- . Annunciators

The operability of selected systems or portions of systems were verified by walkdown of the accessible portions. Observed were the Helium Purification System and the Secondary Coolant System. Procedures were also reviewed and implementation observed for Liquid Waste Releases No. 430 and 431 and Gaseous Effluent Release No. 507. The releases appeared to have been made in a satisfactory manner.

A. Technical Specification LCO 4.8.2.(a) - Exceeded

On February 3, 1981, at 11:15 a.m., the licensee reported to the Resident Inspector that the limits of Technical Specification Limiting Condition for Operation (LCO) 4.8.2.(a) for the concentration of tritium in an unrestricted area had been exceeded. TS 4.8.2.(a) states that "The maximum instantaneous release rate of radioactive liquid effluents from the site shall be such that the concentration of radionuclides in the Cooling Tower blowdown water discharge does not exceed the values specified in Table II, Column 2, 10 CFR Part 20, Appendix B, for unrestricted areas."

The specified release rate was 3.0 gpm at a dilution rate of 2300 gpm to be followed by a water flush of 6000 gallons at the same release and dilution rates. However, due to difficulty in maintaining

the flush at the specified release rate an increase in the release rate was apparently experienced and resulted in the excessive release

The licensee immediately suspended all liquid waste releases until definite corrective action could be taken to prevent recurrence. This action resulted in the installation of a bypass around the oil separator. The bypass is to be used for releases directly from the liquid waste holdup tanks. This is followed by a flush of clean water at the recommended release and blowdown (dilution) rate.

Details on the release are available in the 14 day report 81-013 dated February 17, 1981.

Additionally, this matter was discussed with the licensee who was informed that failure to meet the requirements of the Technical Specification was a violation (8103-01).

The inspector had no additional questions in this area.

3. Surveillance (Monthly)

The inspector reviewed all aspects of surveillance testing involving safety-related systems. The review included observation and review relative to Technical Specification requirements. The surveillance tests reviewed and observed were:

SR 5.8.2bc-M Radioactive Liquid Effluent System Instrument Function Test (Release #430 - 431)

SR 5.8.1abc-M Radioactive Gaseous Effluent System Test, (Release #507)

SR 5.3.7-W Secondary Coolant Activity

SR 5.2.12-W Primary Coolant Chemical Analysis

SR 5.2.11-W Primary Coolant Activity Analysis

SR 5.8.1F-W Radioactive Gaseous Effluent Vent Iodine/Particulate Filter Analysis

SR 5.6.2a-W Station Battery and PPS Check

SR 5.2.10a.4-W Diesel Driven Fire Pump Battery and Charger Weekly Inspection

SR 5.4.1.3.1.b-M Circulator Speed (Steam and Water) Test

SR 5.4.1.2.7.c-M Superheat Header Temperature Test

SR 5.4.1.3.6.b-M Circulator Seal Malfunction Test

SR 5.7.1b-X Fuel Handling Machine Instrument Functional Test

During the performance of SR 5.7.1b-X on February 9, 1981, the inspector noted that the Radiation Work Permit instructions for Radiation Work Permit (RWP) No. 2566 were not being followed completely. In two cases where the inspector observed maintenance personnel frisk, a failure to frisk the clothing was noted which was required by the RWP. In one case involving results personnel, a complete failure to frisk was noted by the inspector. Health Physics was immediately notified, as well as maintenance and results management.

The inspector discussed with representatives of the licensee the requirements of Administrative Procedures P-1 and P-3, Technical Specification 7.4 and RWP No. 2566 as follows:

Technical Specification 7.4, "Procedures, Administrative Controls," paragraph d, requires that "Procedures for personnel radiation protection shall be prepared consistent with the requirements of 10 CFR Part 20 and shall be approved, maintained and adhered to for all operations involving personnel radiation exposure."

Administrative Procedure P-3, "Radioactive/Contaminated Waste/Area Control," Issue 2, dated August 4, 1980, requires in paragraph 4.5.3 that "The environment in controlled work areas must be monitored and the work authorized by use of a Radiation Work Permit as described by Procedure P-1."

Administrative Procedure P-1, "Plant Operations," Issue 2, dated August 4, 1980, requires in part in paragraph 4.6.2 that " . . . Each assigned employee reads RWP and signs RWP to indicate the job instructions are understood"

Radiation Work Permit No. 2566, requires a contamination check upon leaving the area on hands, clothing, shoes and tools.

Contrary to the above, as noted previously, two maintenance individuals and one results individual were observed exiting from an RWP area on February 9, 1981, whereby the maintenance individuals failed to check their clothing for contamination, and the results individual failed to perform a contamination check on hands, clothing, and shoes. This is a violation (8103-02).

4. Maintenance (Monthly)

The inspector reviewed records and observed work in progress to ascertain that the following maintenance activities were being conducted in accordance with approved procedures, Technical Specifications and appropriate Codes and Standards.

MP-29 Repair and Adjustment of SAGE Safety Valves (V-21268-2)

T-159 DPMM Response Time Test @ 70% Reactor Power

FHP-2 New Element Inspection and Burnable Poison Loading

No violations or deviations were identified.

5. Refueling Activities

The inspector verified by direct observation that surveillance testing for the following activity had been completed:

SR 5.7.1b-x Fuel Handling Machine Instrument Functional Test,
Revision 14, February 6, 1981 - completed February 8, 1981.

The inspector also observed new element inspections and burnable poison loading in accordance with FHP-2.

A violation (8103-02) was identified as noted in paragraph 3, Surveillance (Monthly).

The inspector had no additional questions in this area.

6. Review of Licensee Event Reports

The inspector reviewed licensee event reporting activities to verify that they were in accordance with Technical Specification, Section 7, including identification details, corrective action, review and evaluation of aspects relative to operations and accuracy of reporting.

The following reports were reviewed by the inspector:

80-40	80-61
80-46	80-65
80-50	80-68
80-55	80-70
80-57	

No violations or deviations were identified.

7. Report Reviews

The inspectors reviewed the following reports for content, reporting requirements and adequacy:

Monthly Operating Information Report - January 1981
Monthly Operations Report - January 1981
Semi-Annual Effluent Report - July through December 1980

No violations or deviations were identified.

8. Review of Plant Operations

The inspector reviewed several aspects of facility operations to determine if they were being accomplished in accordance with regulatory requirements. reviewed were:

A. Procurement and Storage

The inspector observed the receipt inspection, storage and tagging requirement for purchased material. Additionally, the inspector observed portions of an audit which verified the traceability, purchase requirements and long-term storage facilities. The latter observances were made during audit QAA-2201-80-01. (See IE Report 81-01)

B. Environmental Protection

The inspector observed the placement and functioning of a portion of the equipment utilized for monitoring of the environment adjacent to Fort St. Vrain. No significant problems were found, however, at station, F-3, the filter paper on the air sampler was observed to be only partially covering the intake port. The licensee was notified of this problem and their contractor is to service the filter March 28, 1981. The licensee will also consider this during a review of the data.

C. Emergency Preparedness

The inspector observed the following means for monitoring releases of radiation and verified they were operable and are described in the emergency plan.

- (1) Stack Ventilation Monitors
- (2) Liquid Effluent Monitors
- (3) Survey Team Equipment
- (4) Meteorological Equipment

D. Corrective Action

The inspector reviewed all of the licensee event reports generated which had not been closed prior to this report. Included in the review were trends and recurring failures and the resolution of discrepancies involving safety-related equipment.

No violations or deviations were identified.

9. Exit Interviews

Exit interviews were conducted at the end of various segments of this inspection with Mr. D. Warembourg (Manager, Nuclear Production) and/or other members of the Public Service Company staff. At the interviews, the inspector discussed the findings indicated in the previous paragraphs. The licensee acknowledged these findings.