

APPENDIX B

U. S. NUCLEAR REGULATORY COMMISSION
REGION IV

Report: 50-267/82-17

License: DPR-34

Docket: 50-267

Category: 5

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

Facility Name: Fort St. Vrain Nuclear Generating Station

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

Inspection Conducted: June 1-30, 1982

Inspectors: M. W. Dickerson 7/8/82
M. W. Dickerson, Senior Resident Reactor Inspector Date

G. L. Plumlee III 7/8/82
G. L. Plumlee III, Resident Reactor Inspector Date

Approved: T. F. Westerman 7/12/82
T. F. Westerman, Chief, Reactor Project Section A Date

Inspection Summary

Inspection conducted June 1-30, 1982 (Report: 50-267/82-17)

Areas Inspected: Routine, announced inspection of Surveillance; Maintenance; Review of Plant Operations; Operational Safety Verification; Follow Up of Previous Inspection Findings; and Review of Periodic and Special Reports. The inspection involved 224 inspection-hours onsite by two NRC inspectors.

Results: Within the six areas inspected, one violation was identified (Failure to adhere to Procedural Requirement, Paragraph 3).

DETAIL

1. Persons Contacted

M. Block, Superintendent of Operations
T. Borst, Radiation Protection Manager
B. Burchfield, Results Engineering Supervisor
W. Craine, Superintendent of Maintenance
M. Deniston, Shift Supervisor
D. Evans, Shift Supervisor
W. Franek, Nuclear Site Engineering Manager
W. Franklin, Shift Supervisor
C. Fuller, Technical Services Engineering Supervisor
J. Gahm, QA Manager
E. Hill, Operations Manager
D. Hood, Shift Supervisor
J. Liebelt, Senior Maintenance Supervisor
M. McBride, Technical/Administrative Services Manager
H. O'Hagan, Shift Supervisor
L. Singleton, Superintendent Operations QA
J. Van Dyke, Shift Supervisor
D. Warembourg, Manager Nuclear Production
R. Webb, Maintenance Supervisor
W. Woodard, Health Physicist

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

2. (Closed) Unresolved Item (50-267/8113-08): Status Tagging of Removed Radiation Monitoring Equipment. Surveillance Procedure SR 5.8.1cd-Q has been changed to include the status tagging of radiation monitors when they are removed from service.

(Open) Unresolved Item (50-267/8124-05): Design Change to Prevent 10 CFR 20 Violations. The licensee has installed a liquid waste block valve, HV-62249, in accordance with CN 1433, at the location where the cooling tower blowdown mixes with the liquid waste discharge. This valve automatically shuts on loss of cooling tower blowdown, thus preventing a violation of the limits for discharge of plant effluents to an unrestricted area. This item will remain open until completion of CN 1481, which will install remote valve position indication in the control room. Presently, only a local valve position indicator exists.

(Closed) Unresolved Item (50-267/8125-02): Kodak Fire Training. Elements contained in Kodak fire training are now contained in the Fort St. Vrain fire training program.

(Closed) Open Item (50-267/8125-05): Helium Circulator Replacement Weld Data Report. The document package for PTR-81-5-236 now contains a weld data report for each weld data sheet. Additionally, the data packages now incorporates a checkoff sheet to ensure the data package is complete.

3. Operational Safety Verification

The NRC 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.

Logs and records reviewed included:

- . Shift Supervisor Logs
- . Reactor Operator Logs
- . Equipment Operator Logs
- . Auxiliary Operator Logs
- . Technical Specification Compliance Logs
- . Operations Order Book
- . Operations Deviations Reports
- . Clearance Log
- . Temporary Configuration Reports
- . 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. The NRC inspector verified the operability of the Radioactive Gas Waste System. No significant problems were identified during the system walkdown.

Procedures were also reviewed and implementation observed for Gaseous Effluent Release No. 641 and Liquid Waste Release No. 569. The releases appeared to have been made in a satisfactory manner.

During a tour of the reactor building on June 15, 1982, at 2:00 p.m. MDT, with reactor power at 70%, the NRC inspector determined that a can of flammable spray paint remover had been left uncontrolled inside the reactor building. The NRC inspector found the partially used can of combustible material on the deck grating, level 7, and immediately reported it to a member of the licensee's staff. There was no apparent work being performed in that area and the licensee did not know who was using this material and stated that its use inside the reactor building had not been authorized.

Administrative Procedure P-8, "Fire Prevention and Fighting," Issue 4, Section 4.4.4, states in part that:

- "f) The temporary use of combustibles in safety-related areas must be controlled. Such materials may be allowed into safety-related areas only when immediate use is intended, and must be removed from the area when not being used."

During this same tour of the reactor building, the NRC inspector identified and reported to the licensee numerous examples of areas littered with items that had the potential to become a fire hazard.

The above items were discussed with the licensee. The licensee was informed that the failure to follow procedures which are Technical Specification requirements is considered a violation (8217-01).

The NRC inspector had no further questions in this area.

4. Surveillance (Monthly)

The NRC 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 Instrumentation
Functional Test (Release No. 569)

SR 5.8.1abc-M Radioactive Gaseous Effluent System Test (Release No. 641)

SR 5.4.1.1.5.b-P/5.4.1.4.3.b-P Wide Range Power Channel Test

SR 5.4.1.4.1.c-P Startup Channel Calibration

SR 5.4.1.1.4.b-M/5.4.1.4.2.b-M Linear Power Channel Scram Test

SR 5.4.1.4.4.a-P Multiple Rod Pair Withdrawal Test

SR 5.1.2bd-A Reserve Shutdown Hopper Low Pressure Calibration

No violations or deviations were identified.

5. Maintenance (Monthly)

The NRC 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. The following maintenance activities were reviewed and observed:

PTR 4-92 Repair of FV-2205 in accordance with MP 33-2, "Maintenance and Repair of Masoneilan Valves" and MP 91-20, "Maintenance and Repair of System 91 Hydraulic Valve Actuators"

PTR 6-125 C-2103 "C" Circulator Steam Inlet Flange Leak Repair in accordance with MP 21-4, "Steam Water Inlet Bellows Flange Tightening Procedures"

- FHP-7 Preparations for shipment of five spent fuel elements and one Scrap Reflector to GAC (Part 1)
- PTR 6-329 Trouble shoot and repair of Region 37 CRDM outlimit indication
- No violations or deviations were identified.

6. Review of Plant Operations

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

a. Emergency Preparedness Exercise

The NRC inspectors reviewed the FSV Radiological Emergency Response Plan (RERP), participated in, and monitored the RERP Exercise to verify the licensee's compliance with regulatory requirements. The exercise was initiated at 8:00 a.m. MDT, on June 3, 1982, and terminated at 12:25 p.m. MDT. The exercise was based upon a nonisolable leak in the reheat section on Loop 2. An exit meeting was conducted on June 4, 1982, at 1:30 p.m. MDT, between the licensee and NRC Emergency Preparedness Team members. Among the items discussed in the exit meeting were those noted by the NRC resident inspector while at his preassigned Emergency Response Duty Station which are as follows:

Control Room (CR) Observations

Data logger used for initial dose assessment, however, RERP Implementing procedures do not refer to the use of the data logger.

Technical Support Center (TSC) Observations

No status boards maintained. Did have TV monitors but appeared not to be used. Monitors displayed data logger calculations.

Continuous Air Monitor was not operated continuously due to its high noise level.

Communication difficulties existed between EAB driver and TSC. ENS network was inoperable. TSC telephone arrangement was crowded.

Use of "real" data (all meteorological data except for wind speed) resulted in a stability "G" category, which on two separate occasions resulted in a general emergency instead of a site emergency for which the scenario was designed.

Failure of the Early Warning Alert System to be activated until 11:47 a.m. MDT.

Data Logger Dose Assessment sheet used by the data logger operator had not been officially approved.

Area maps on TSC walls were not divided into sectors.

The action to be taken by the licensee with regard to the above items will be discussed in NRC inspection report #50-267/82-14 concerning the emergency exercise.

b. Environmental Protection

The NRC inspector observed portions of the environmental protection sampling program which is provided to the licensee by Colorado State University. The sampling observed by the NRC inspector were from the following sites:

- E-41 Silt, Water (Goosequill Ditch)
- E-38 Silt, Water, Fish, Crayfish, Vegetation (Entrance to Settling Basin)
- F-2 Silic gel, Changeout of Air Filter (Old cabin on farm northeast of plant)
- U-43 Silt, Water, Vegetation (East of plant on South Platte River near pumping station)

No violations or deviations were identified.

7. Loss of All Essential Buses

On June 5, 1982, at 3:50 p.m. MDT, while at approximately 15% reactor power, a loss of all three essential 480 volt buses occurred. Both emergency diesel generators started and sequential loading occurred automatically. "A" circulator and Loop I Steam Generator remained in service for forced cooldown. The reactor was manually scrammed.

The 480 volt essential buses were returned to normal at 7:30 p.m. MDT, on June 5, 1982.

On June 8, 1982, the licensee determined that the cause of this event was due to an improperly adjusted undervoltage (UV) relay on the Reserve Auxiliary Transformer (RAT). The licensee's procedure RSP-4, "Testing and Calibrating CV Voltage Relays," did not reflect the fact that the UV relay contained a set of dual contacts in parallel, which must both be adjusted for correct operation. They should have been adjusted such that a loss of outside power signal would be generated with a drop in line voltage to 80% of its normal value of 4160 volts. Apparently only one contact was adjusted in accordance with the procedure resulting in this signal being generated at approximately 93% of its normal value. As a result, an improper loss of outside power signal was generated due to a small dip in line voltage causing the essential buses to shed loads. The emergency diesel generators automatically started and loaded as required by the programmed loading sequence.

The licensee revised procedure RSP-4 to reflect the necessary changes, the UV relay was recalibrated, and all UV relays were checked to ensure that this was an isolated problem.

No violations or deviations were identified.

8. Report Reviews

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

Monthly Operating Information Report, May 1982
Monthly Operations Report, May 1982

No violations or deviations were identified.

9. Exit Interview

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 inspectors discussed the findings indicated in the previous paragraphs. The licensee acknowledged these findings.