

APPENDIX B

U. S. NUCLEAR REGULATORY COMMISSION

REGION IV

Report: 50-267/81-25

Docket: 50-267

License: DPR-34

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

Facility Name: Fort St. Vrain Nuclear Generating Station

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

Inspection Conducted: November 16-20, 1981

Inspector: E. H. Johnson 1/13/82
E. H. Johnson, Reactor Inspector, Systems and Technical Section Date

Approved: R. E. Hall 1-13-82
R. E. Hall, Chief, Systems and Technical Section Date

Inspection Summary

Inspection Conducted November 16-20, 1981 (Report 50-267/81-25)

Areas Inspected: Routine, unannounced inspection of maintenance and fire protection/prevention program implementation. The inspection involved 36 inspector-hours by one NRC inspector.

Results: Within the two areas inspected, no violations or deviations were noted in one area; but one violation was identified in the other area (violation - failure to perform surveillance testing at the intervals required by Technical Specifications - paragraph 2).

DETAILS

1. Persons Contacted

- *M. Block, Superintendent of Operations
- *T. Borst, Radiation Protection Manager
- P. Brearly, Training Instructor
- W. Craine, Superintendent of Maintenance
- M. Ferris, Supervisor, QA Technical Support
- *W. Franek, Site Engineering Manager
- *J. Gahm, QA Manager
- J. Glass, Acting Supervisor, Scheduling and Maintenance
- *F. Hill, Station Manager
- *A. Kitzman, Clerical Supervisor
- G. Redmond, Acting Supervisor, Maintenance QC
- R. Wadas, Training Supervisor
- *D. Warembourg, Manager, Nuclear Production
- S. Wilford, Training Instructor

The NRC inspector also contacted other plant personnel including administrative operations and maintenance personnel.

*Denotes those persons present at the exit interview.

2. Fire Protection/Prevention Program Implementation

The objective of this inspection effort was to determine whether the licensee is implementing a fire protection/prevention program in conformance with regulatory requirements, technical specifications, and industry standards.

The following elements were included in this area of the inspection:

- fire prevention/protection organization
- control of combustibles during maintenance and modification activities
- general facility housekeeping
- fire protection system components, functional and properly maintained
- surveillance testing of fire protection systems
- fire brigade training and fire drills

The NRC inspector reviewed the below listed licensee procedures to determine how the regulatory requirements and commitments were translated into practice at the station:

<u>Procedure/Revision or Date</u>	<u>Title</u>
P-8/August 4, 1980	Fire Fighting and Prevention
P-10/May 4, 1981	Safe Work Practices
Revision 6	Fire Suppression and Prevention Manual
Revision 17	Training Practices Administrative Manual

It was noted that Procedure P-8 specifies that primary fire fighting and fire prevention responsibility at the station is vested in the Operations Manager. A recent organizational change, it was observed, had changed this title to Station Manager. In addition, the NRC inspector learned from review of the results of a Nuclear Facility Safety Committee audit, it was recommended that a specific fire prevention coordinator be appointed. The recommendations resulting from this audit were still in resolution at the time of this inspection; thus, this item will remain open for further inspection at a future date. (Open Item 8125-01)

Fire brigade training to meet or exceed the requirements of Appendix R to 10 CFR 50 is required by the licensee of all brigade numbers. For all newly reporting station personnel (except clerical staff), attendance at initial fire fighting training is required. This program consists of a video taped fire fighting fundamentals lesson, hands-on training using fire extinguishers and hoses in fighting an actual staged fire, fire protection system familiarization, and fire strategy training. Continuing training for all fire brigade team members consists of one fire drill per shift fire brigade each quarter, one fire training session for each shift fire brigade each quarter, and an annual all day fire fighting refresher conducted by Kodak Company using their own industrial fire fighting course. This latter training includes actual fire fighting. These training elements are set out in the Training Practices Administrative Manual only on a record form used to track completion of each element for each brigade member. An additional requirement for an annual physical for each fire brigade member is also included on this form. The training department maintains all records of completed fire brigade training.

The fire brigade training appeared to meet the requirements of Appendix R to 10 CFR 50, and the industrial fire fighting training provided by the Kodak Company was noted to be a strong element of the program. However, the NRC inspector noted that this program had not yet been promulgated as a formalized descriptive procedure to document the program and describe, in detail, all the areas to be covered during the initial fire brigade

training and quarterly retraining sessions. Lacking such direction, the NRC inspector indicated at the exit interview, could lead to omission of critical elements of the program in the future and would not guarantee a continued uniformity in training that heretofore had apparently been achieved. The NRC inspector said that this item would be designated unresolved pending further inspection of fire brigade training. (Unresolved Item 8125-02)

The NRC inspector conducted a detailed tour of all accessible areas of the station to observe general housekeeping conditions and the control of combustibles during maintenance and modification. Additionally, this tour included an inspection of installed fire protection equipment and systems; such as, positions of selected valves, fire barrier condition, hose stations, Carbox and Halon system lineups, fire lockers, and hose houses. No items of noncompliance or deviations were noted. Several minor discrepancies; such as, a missing fire blanket and one hose station that had become unracked were noted. These were brought to the attention of the licensee and were rectified prior to the end of the inspection. General housekeeping conditions were satisfactory, and in spite of a major modification in progress at the time of the inspection, work areas appeared to be orderly.

The final element of this area of the inspection was a review of the surveillance testing of fire protection systems and related Technical Specification requirements. Of the latter, Technical Specification 7.1.3, 7.b(8) requires an audit of the fire protection program by an outside fire protection consultant each three years. The results of this audit were reviewed (NFSC Audit H-81-1). A number of significant recommendations resulted from this audit. These items included the designation of a fire prevention coordinator (as discussed above), the need for specific fire brigade leader training, control of hot work, inspection of unsealed valves, improved fire strategies, and the need for a dike between the diesel generator rooms. These recommendations were entered into the licensee's management follow-up system as corrective action requests (CAARs) 341, 342, 344, 346, 347, 348, and 349. The NRC inspector indicated, during the exit interview, that he shared the same concerns as were expressed in these findings and recommendations; but as they were identified by the licensee and corrective actions were still in progress, he would identify this as an unresolved item. (Unresolved Item 8125-03)

To verify conformance to the fire protection system surveillance requirements, the NRC inspector first selected five surveillance procedures for a detailed review of technical adequacy. The NRC inspector found the content of these procedures satisfactory. Next, the records of completion for 24 surveillance tests were reviewed to verify that testing was performed at the intervals required. The NRC inspector discovered three instances where testing had not been accomplished as required. These discrepancies are detailed below:

- a. Technical Specification 5.2.10(a)(3) requires the diesel engine for the diesel driven fire pump be inspected each refueling shutdown; the engine was last inspected in September 1980 and was not inspected during the spring 1981 refueling.
- b. Technical Specification 5.10.1 requires annual actuation testing of the heating and ventilation isolation dampers and associated fans in the three room control complex; this surveillance test was last performed on July 17, 1980, an interval of 16 months to the date of the present inspection.
- c. Technical Specifications 5.10.2(a) and (b) require the Halon storage cylinders to be verified operable quarterly by checking their weight and pressure. During 1981, these tests were performed on February 20, July 1, and October 23. The interval between the first two tests is 19 weeks.

For these latter two discrepancies, the Technical Specifications permit the normal surveillance to be extended by 25 percent. However as can be seen above, this extended interval was exceeded. The failure to perform surveillance testing at the frequencies required by the Technical Specifications is an apparent violation. (Violation 8125-04)

This item was discussed with the licensee's staff at the exit interview. They indicated to the NRC inspector that their practice in the past had been to establish a scheduled date for each surveillance item, and as long as the actual date of performance fell within +25 percent of the total interval duration based on this schedule date, the surveillance requirement was satisfied. The NRC inspector indicated that this practice could lead to as much as an 18-month interval between performances of an annual surveillance test.

Following the inspection, the NRC inspector discussed this item with the Manager of Nuclear Production and his staff. The NRC inspector learned that the licensee would review the method for establishing a due date for surveillance. What would probably evolve, the NRC inspector was told, would be that when a surveillance was performed prior to the scheduled date, a new "next due" date for the surveillance test would be established based on the actual date of the test performance. Where a test was done after the scheduled date, then the original scheduled date would be used to establish a "next due" date.

3. Maintenance

The objective of this inspection effort was to ascertain whether maintenance activities on safety-related systems and components were conducted in accordance with approved procedures and in accordance with Technical Specification requirements.

The below listed maintenance activities were reviewed to determine that the activities were properly approved, that the maintenance was conducted in accordance with an approved procedure, and that inspection and testing were performed as required. Several of these procedures were reviewed in detail to determine if they appeared to be technically adequate.

<u>Plant Trouble Report (PTR)</u>	<u>Maintenance Activity</u>	<u>Procedure</u>
81-10-117	Refill Loop 2 Hydraulic Oil Reservoir	M.P. 91.3*
81-5-236	Remove and Replace Helium Circulator	M.P. 21.15*
Preventive Maintenance	Quarterly Diesel Generator Inspection	P.M. 92.10*
81-8-365	Repair Fire Damaged Cables	CN 1405 & 1405A CNP 81-224*
81-6-56	BFS 167E Snubber Rebuilt	M.P. 98.1*
81-9-198	HV 2292 Relief Valve Replacement	M.P. 91.10
81-9-137	Changeout of "D" Engine Injectors	P.M. 92.10

*Procedure reviewed for adequacy

In addition to the above, the NRC inspector reviewed the following procedures for adequacy:

M.P. 12-1 (Revision 1), "Removal and Installation of Control Rod Drive Assemblies in the Reactor Penetration"

M.P. 12-6 (Revision 10/30/81), "Maintenance and Repair of Control Rod Drive and Orificing Assemblies"

M.P. 16-3 (Revision 7/20/81), "Maintenance and Repair of 1900 Series Consolidated Safety Relief Valves"

M.P. 102-1 (Revision 4/30/81), "Verification and Qualification of Micrometer Standards"

The NRC inspector noted that the licensee's staff is currently rewriting many of the maintenance procedures to clarify instructions, incorporate technical manual references and inspection hold points. This effort was apparent to the NRC inspector during his review.

The inspection of maintenance activities also included a review of the number and type of outstanding maintenance items to determine if an excessive backlog existed. The NRC inspector was able to determine that, on average, only about four or five items were marked as outstanding for each safety-related system or component. This backlog generally included minor adjustment items and most appeared backlogged awaiting parts or appropriate plant conditions.

During review of the documentation for the Helium Circulator replacement (PTR 81-5-236), the NRC inspector discovered that the documentation package did not contain a weld data report for each weld data sheet. It was noted, however, that this package was still in the process of being finalized. The NRC inspector learned that the responsibility for ensuring that a work package was complete lay with the assigned craft department. Completed packages were sent to the PTR clerk who verified that the PTR was filled out correctly; but lacking a checklist of what supporting documents should be included, this clerk could not verify the completeness of the package. Thus, an incomplete package could be sent to the plant archives. On many occasions, it was learned, after a package was forwarded to the archives, the PTR clerk received additional miscellaneous documents relating to maintenance activities. If the documents could be crossed to a specific PTR, they would be filed with them; otherwise, a special file would have to be created. The NRC inspector expressed his concern that this system did not allow for easy retrieval from storage of information regarding completed maintenance as might be needed when reviewing equipment problems. With regard to the completeness of documentation for PTR 81-5-236, the NRC inspector indicated that this package would be reinspected at a later date. (Open Item 8125-05)

No violations or deviations were noted in this area of the inspection.

4. Unresolved Items

Unresolved items are matters about which more information is required to determine if they are acceptable items, violations, or deviations. Two new unresolved items are included in paragraph 2 of this report.

<u>Item</u>	<u>Description</u>
8125-02	Fire Protection Training Program
8125-03	Resolution of NFSC Fire Protection Audit Findings

5. Exit Interview

An exit interview was conducted on November 20, 1981, with members of the licensee's staff as denoted in paragraph 1. The NRC Senior Resident Reactor Inspector also attended. The NRC inspector's observations and findings noted in the foregoing paragraphs were discussed.