APPENDIX B

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

NRC Inspection Report: 50-298/87-18 License: DPR-46

Docket: 50-298

Licensee: Nebraska Public Power District (NPPD)
P. O. Box 499
Columbus, Nebraska 68601

Facility Name: Cooper Nuclear Station (CNS)

Inspection At: CNS Site, Brownville, Nebraska

Inspection Conducted: July 20-24, 1987

Inspector: W. M. McNeill 8/3/87
W. M. McNeill, Project Engineer, Project Section A, Reactor Projects Branch Date

Approved: J. P. Jaudon 8/3/87
J. P. Jaudon, Chief, Project Section A Reactor Projects Branch Date

Inspection Summary

Inspection Conducted July 20-24, 1987 (Report 50-298/87-18)

Areas Inspected: Routine, unannounced inspection of licensee action on previous inspection findings; IE bulletins/Temporary Instructions; and licensee event report followup.

Results: Within the area inspected, one violation was identified (failure to report as required by 10 CFR 50.73).

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DETAILS

1. Persons Contacted

NPPD

B. Brungardt, Operations Manager
J. C. Ditto, QA Specialist
J. R. Flaherty, Plant Engineering Supervisor
R. Foust, Lead Electrical/I&C Engineer
S. S. Freborg, Lead Mechanical Engineer
*C. R. Goings-Merrill, Regulatory Compliance Specialist
G. R. Horn, Nuclear Operations Division Manager
*G. M. Mace, Plant Engineering Supervisor
*J. M. Meacham, Techanical Manager
D. L. Reeves, Staff Engineer
*D. R. Robinson, QA Specialist
M. J. Spencer, Performance Engineer
V. L. Wolstenholm, QA Division Manager

*Denotes personnel attending exit meeting.

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

2. Licensee Action on Previous Inspection Findings

(Open) Unresolved Item 298/8620-01: This item involved the licensee's nonconformance trend report program. The licensee has issued quarterly trend reports for the last three quarters. The trend program is still under review. As of yet, the trend program does not address outside audits such as INPO, identify the discipline or work unit responsible for a nonconformance, correct for activity levels, or apply a Pareto Principle to the trends.

(Open) Open Item 298/8630-09: This item involved the licensee's identification of the cause of cracking in the standby diesel generator heads. The Nonconformance Report (NCR) No. 5182 documenting this problem is open. A suggested scenario has been documented in the supplement to Licensee Event Report (LER) No. 86-26 dated December 31, 1986. However, confirmatory evidence, such as a vendor review and comment on the scenario, has not been obtained.

3. IE Bulletins/Temporary Instructions

The following temporary instruction was reviewed by the NRC inspector for applicability to CNS and to determine if the licensee had performed the required actions.

(Closed) Temporary Instruction (TI) 2515/89, "Inspection of Licensee's Actions Taken to Implement Generic Letter 84-11: Inspections of Boiling Water Reactors Stainless Steel Piping," requires that piping susceptible to intergranular stress corrosion cracking (IGSCC) identified as a result of IE Bulletins 82-03 and 83-02 be verified in regard to the inspection program, competence of ultrasonic (UT) examiners, leak detection, and performance of inspection and subsequent sections. In regard to the inspection program, previous NRC Inspection Reports 298/83-10 and 83-14 addressed the review of the program and procedures as well as the witnessing and review of inspection activities. This included repair by weld overlays. These same reports also reviewed and witnessed the qualification of the personnel used at CNS. Leak detection limits and technical specification revision was addressed in previous NRC Inspection Report 298/83-18 which closed out the bulletins in question. The competence of UT examiners, performance of inspection, and subsequent actions has been previously addressed in NRC Inspection Report 298/86-34. This report was of inservice inspection activities of the replacement piping which is not suspect to IGSCC failure. In the fall of 1985, all suspect piping was replaced. NPPD's response letter to GL 84-11 dated June 4, 1984 (NLS 8400159), identifies that replacement pipe supercedes the requirement for reinspection of IGSCC. Replacement pipe was type 316 with .02 percent carbon and nitrogen added acceptable per NUREG 0313 and solution heat treated to further minimize IGSCC.

Temporary Instruction 2515/89 is closed for Cooper Nuclear Station.

4. Licensee Event Report (LER) Followup

The following LERs were closed on the basis of the inspector reviews, reviews of licensee documentation, and discussions with licensee personnel:

87-10 Automatic Starting of Diesel Generators Upon Loss of the Emergency Transformer Due to Inclement Weather

87-13 Unplanned Actuation of Diesel Generator #2 Due to Loss of voltage on 4160V-1G Bus During Transfer of Power from its Startup to Normal Service

87-14 Unplanned Reactor Shutdown as a Result of High Reactor Water Conductivity Due to Condenser Tube Leakage

87-16 Unplanned Automatic Startup of Both Diesel Generators Due to a Suspected Lightning Strike on the Offsite 69 RV Emergency Power Supply Transmission System

In the review of the above LERs for Station Operations Review Committee (SORC) approval, it was noted that there were six NCRs that were decided by SORC to be not reportable. One of these was NCR 87-038 dated May 12, 1987. This NCR documented that a Group III Primary Containment Isolation System (PCIS) actuation occurred on May 12, 1987.

During performance of Surveillance Procedure SP 6.2.1.2.1, "PCIS RWCU High Flow Calibration and Functional/Functional Test", at Step No. 15, the isolation relay 941-16A-K26 remained open. As a result, when the MO-15 valve breaker was re-energized, a trip signal was present for the inboard isolation valve.

The CNS staff had concluded that because a valid actuation signal had not occurred, not all of the system isolation occurred (outboard valve had remained open) and that MO-15 was not a part of the ESF, but the ESF was limited to the isolation circuit associated with pressure switch 170A. On this basis, SORC voted to not report NCR No. 87-038. One nonvoting member of the SORC (QA) disagreed with this determination. It should be noted that the Updated Safety Analysis Report (USAR) identifies in Appendix F that in response to criterion 43, for example, the system discussed in VII-3 is an ESF system. USAR VII-3 does identify penetration X-14, a part of the PCIS, which Technical Specifications (TS) and USAR both identify as to include valve RWCU MO-15. The failure to report the ESF actuation is an apparent violation (298/8718-01).

Another NCR, 81-021, identified that on April 14, 1987, during performance of surveillance procedure SP 6.1.11, three of four turbine first stage pressure switches were found to be greater than procedure set points. TS limits were not exceeded. The staff evaluation dated April 28, 1987, concluded that although TS limits were not exceeded, there was still a possibility of reportability under 10 CFR 50.73(a)(2)(v) and (vi), if a generic problem exists. The engineering evaluation of the NCR dated June 30, 1987, appears to conclude that there is a generic problem with these pressure switches (Barksdale B2T) in this application. A previous NCR, No. 4252, had identified problems with these same pressure switches in other applications. The immediate corrective action to NCR 87-021 was to increase the frequency of surveillance. The NCR also stated that, "the ultimate solution to the problem of Barksdale B2T setpoint drift . . . appears to be the implementation of the Analog Trip modification." The NRC inspector thus concluded that a generic problem has been established for at least one application. Since the reportability time for this had not yet run out, the reportability of this item will be checked during a future inspection, and it is considered to be an unresolved item. (298/8718-02).

5. Unresolved Items

Unresolved items are matters about which more information is required in order to ascertain whether or not the items are acceptable, violations, or deviations. The following unresolved item is discussed in this report:

Paragraph	Item	Subject
4	298/8718-02	Possible reportability of Barksdale setpoint problems

6. Exit Meeting

The NRC inspector conducted an exit meeting on July 24, 1987, with the licensee personnel denoted in paragraph 1. The CNS SRI also attended. At this meeting, the scope and findings of the inspection were summarized.