Nebraska Public Power District

COOPER NUCLEAR STATION
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NLS960199
October 18, 1996

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555-0001

Gentlemen:

Subject: Reply to a Notice of Violation
NRC Inspection Report No. 50-298/96-10
Cooper Nuclear Station, NRC Docket 50-298, DPR-46

Reference:
1. Letter to G. R. Horn (NPPD) from L. J. Callan (USNRC) dated September 20, 1996, "NRC Inspection Report 50-298/96-10 and Notice of Violation"

2. Letter to G. R. Horn (NPPD) from T. P. Gwynn (USNRC) dated July 10, 1996, "NRC Inspection Report 50-298/96-10"

By letter dated September 20, 1996 (Reference 1), the NRC cited Nebraska Public Power District (District) as being in violation of NRC requirements. This letter, including Attachment 1, constitutes the District's reply to the referenced Notice of Violation in accordance with 10 CFR 2.201. The District admits to the violation and has completed all corrective actions necessary to return CNS to full compliance.

Should you have any questions concerning this matter, please contact me.

Sincerely,

P. D. Graham

P. D. Graham
Vice President - Nuclear

/crm
Attachment

IE01

cc: Regional Administrator
USNRC - Region IV

Senior Project Manager
USNRC - NRR Project Directorate IV-1

Senior Resident Inspector
USNRC

NPG Distribution

REPLY TO SEPTEMBER 20, 1996, NOTICE OF VIOLATION
COOPER NUCLEAR STATION
NRC DOCKET NO. 50-298, LICENSE DPR-46

During an NRC inspection conducted on May 20-24 and June 3-7, 1996, a violation of NRC requirements was identified. The particular violation and the District's reply are set forth below:

"10 CFR Part 50, Appendix B, Criterion XVI, states, in part, that 'measures shall be established to assure that conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and nonconformances are promptly identified and corrected.'

Contrary to the above, on numerous occasions between April 1993 and October 1995, the licensee failed to identify that, based upon the estimated thrust requirements attributable to potential pressure locking conditions, core spray injection valve CS-MOV-MO12A could fail to open automatically in response to a loss of coolant accident. The licensee could have identified this condition at the following times: during the evaluation of the data from a diagnostic test of this valve in April 1993; during the secondary reviews of the test package in April 1993; during a review of diagnostic traces for anomalies performed in response to NRC violation 298/9308-07 issued in October 1993; and in October 1995 when the NRC challenged the apparently low pullout thrust being reported for this valve. The failure of CS-MOV-MO12A to open is a condition adverse to quality that would disable one train of core spray flow to the reactor vessel in the event of a loss of coolant accident."

Admission or Denial to Violation

The District admits the violation.

Reason for Violation

As presented during the predecisional enforcement conference on August 27, 1996, the root cause of this violation is management inattention to the Generic Letter (GL) 89-10 motor operated valve (MOV) program. In 1993, the District's GL 89-10 MOV program was clearly below industry standards. This underlying cause is evidenced by the following weaknesses:

1. Inadequate identification and evaluation of test trace anomalies. This weakness resulted in the failure to immediately detect a sensor thrust reversal anomaly which occurred during testing conducted in 1993 and the subsequent failure to identify this anomaly during the review of test data in response to NRC violation 298/9308-07.

2. Inadequate verification and validation of calculation design inputs and assumptions. This weakness resulted in a failure to challenge questionable inputs and assumptions during the review of a vendor prepared bonnet pressure decay calculation.

3. Inadequate trending of MOV test results. This weakness resulted in the failure to detect the disparity between the 1991 and the 1993 test data for CS-MOV-MO12A.

Corrective Steps Taken and the Results Achieved

Since both CS-MOV-MO12A and CS-MOV-MO12B were modified during the 1995 refueling outage to preclude pressure locking, no actions were required to reestablish Core Spray system operability. However, to ensure the operability of other GL 89-10 valves, immediate actions were taken to re-review test traces for the MOVs not retested during the 1995 refueling outage for anomalies. No anomalies were found.

In response to ongoing program inspections and assessments, management attention was redirected to the GL 89-10 MOV program during the 1994 time frame. This renewed commitment to the program was demonstrated, for example, by the significant scope of MOV testing conducted during the 1994 forced outage (which ultimately resulted in a delayed plant restart). Continued support was demonstrated in 1995 by the formation of a new MOV team, with significant emphasis on ownership and accountability. These actions lead to notable program improvements which, in turn, lead to the successful closure of GL 89-10 in June 1996.

While program closure has been achieved, the commitment to continuous improvement has not diminished. Accordingly, the following actions have been taken to address the symptomatic weaknesses associated with the identified root cause:

1. The design input verification/validation process has been strengthened through improvements to Engineering Procedures 3.4.7, "Design Calculations" and 3.4.8, "Design Verification."

2. The MOV trending program, originally developed in 1994, has been enhanced and formalized under Engineering Procedure 3.33, "Motor Operated Valve Program."

3. To preclude misinterpretation of test data, the following engineering and maintenance procedures have been revised:

   - Engineering Procedure 3.33, "Motor Operated Valve Program"
   - Maintenance Procedure 7.3.35.5, "Testing of Motor Operated Valves Using VOTES"[1]
   - Maintenance Procedure 7.3.35.6, "DP Testing of Motor Operated Valves Using VOTES"[1]

Corrective Steps That Will Be Taken to Avoid Future Violations

No additional corrective actions are planned at this time.

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[1] Procedures 7.3.35.5 and 7.3.35.6 have subsequently been replaced by Maintenance Procedure 7.5.2, "VOTES Testing of Rising Stem Motor Operated Valves," and Maintenance Procedure 7.5.7, "VOTES Test Analysis of Rising Stem Motor Operated Valves." The above described enhancements were carried forward and incorporated into these new procedures.

Date When Full Compliance Will Be Achieved

The District has completed all corrective actions necessary to return CNS to full compliance with respect to the identificd violation.

Correspondence No: NLS960199

The following table identifies those actions committed to by the District in this document. Any other actions discussed in the submittal represent intended or planned actions by the District. They are described to the NRC for the NRC's information and are not regulatory commitments. Please notify the Licensing Manager at Cooper Nuclear Station of any questions regarding this document or any associated regulatory commitments.

COMMITMENT	COMMITTED DATE OR OUTAGE
None.	