



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION IV

611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8604

FEB - 8 1996

Nebraska Public Power District
ATTN: Guy R. Horn, Vice President - Nuclear
1414 15th Street
Columbus, Nebraska 68601


SUBJECT: NRC INSPECTION REPORT 50-298/95-15

Thank you for your letter of January 8, 1996, in response to our letter and Notice of Violation dated December 8, 1995. We have reviewed your reply and find it responsive to the concerns raised in our Notice of Violation.

We noted your statement that Violation 298/9515-02 was supplemental to Violation 298/9511-01 in relation to the threshold for initiating a condition report. We also acknowledge your position that there is a need for management to continue placing attention on specific threshold issues should they occur. However, we do not believe that Violation 298/9515-02 is another example of Violation 298/9511-01. Although related, the first violation was issued for a failure to identify a condition adverse to quality (i.e., water accumulation in the high-pressure coolant injection turbine exhaust piping) while the second was issued for failure to initiate a condition report upon recognition of an undesirable condition (i.e., loss of control over calibration blocks).

We will review the implementation of your corrective actions during a future inspection to determine that full compliance has been achieved and will be maintained.

Sincerely,


Thomas P. Gwynn, Director
Division of Reactor Safety

Docket: 50-298
License: DPR-46

cc:
Nebraska Public Power District
ATTN: John R. McPhail, General Counsel
P.O. Box 499
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Nebraska Public Power District
ATTN: John Mueller, Site Manager
P.O. Box 98
Brownville, Nebraska 68321

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PDR ADOCK 05000298
Q PDR

Nebraska Public Power District

-2-

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ATTN: Chairman
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Kansas Radiation Control Program Director

E-Mail report to D. Nelson (DJN)
E-Mail report to NRR Event Tracking System (IPAS)

bcc to DMB (IE01)
bcc distrib. by RIV:

L. J. Callan
Branch Chief (DRP/C)
MIS System
Branch Chief (DRP/TSS)
RIV File

Resident Inspector
Leah Tremper (OC/LFDCB, MS: TWFN 9E10)
DRS-PSB
Project Engineer (DRP/C)

DRS AI 95-134

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E-Mail report to D. Nelson (DJN)
E-Mail report to NRR Event Tracking System (IPAS)

bcc to DMB (IE01)
bcc distrib. by RIV:

L. J. Callan
Branch Chief (DRP/C)
MIS System
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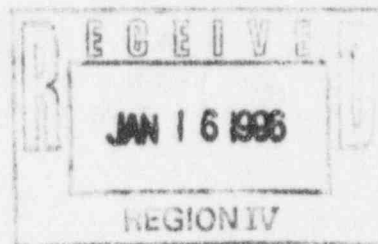


Nebraska Public Power District

COOPER NUCLEAR STATION
P.O. BOX 98, BROWNVILLE, NEBRASKA 68321
TELEPHONE (402)825-3811
FAX (402)825-5205

NLS960001
January 8, 1996

Director, Office of Enforcement
U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555



Gentlemen:

Subject: Reply to a Notice of Violation;
NRC Inspection Report No. 50-298/95-15;
Cooper Nuclear Station, NRC Docket 50-298, DPR-46

Reference: Letter from Mr. T. P. Gwynn (USNRC) to Mr. G. R. Horn (NPPD), dated
December 8, 1995, NRC Inspection Report 50-298/95-15 and Notice of
Violation.

This letter, including Attachment 1, constitutes Nebraska Public Power District's (the District) reply to the referenced Notice of Violation in accordance with 10 CFR 2.201. Inspection Report 50-298/95-15 documented the results of an NRC inspection conducted from October 23 through November 9, 1995, of the inservice inspection (ISI) program, erosion corrosion program, and followup of a previous maintenance inspection finding. The District admits to the violations and has completed all corrective actions that are necessary to return Cooper Nuclear Station (CNS) to full compliance with regard to 10CFR50.55a and 10CFR50 Appendix B Criterion V.

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

Sincerely,

J. H. Mueller
Site Manager

Attachment

cc: Regional Administrator
USNRC - Region IV

Senior Project Manager
USNRC - NRR Project Directorate IV-1

Senior Resident Inspector
USNRC - Cooper Nuclear Station

NPG Distribution

96-0597

Powerful Pride in Nebraska

9601180468

REPLY TO DECEMBER 8, 1995, NOTICE OF VIOLATION
COOPER NUCLEAR STATION
NRC DOCKET NO. 50-298, LICENSE DPR-46

During NRC inspection activities conducted from October 23 through November 9, 1995, two violations of NRC requirements were identified. The particular violations and the District's reply are set forth below:

"Paragraph (g)(3)(I) of 10 CFR 50.55a, in part, states that components classified as ASME Code Class 1, 2, and 3 shall meet the pre-service examination requirements set forth in Section XI of the ASME Boiler and Pressure Vessel Code and Addenda applied to the particular component.

ASME Code, Section XI, 1980 Edition, Winter 1991 Addenda, Mandatory Appendix III, Article III-4000, Paragraph III-4330, states, "[c]ircumferential welds in Class 1 and 2 piping requiring volumetric examination shall be marked [in reference to weld centerline] once before or during preoperational examination to establish a reference point."

Contrary to the above, ASME Code replacement welds were not marked in reference to weld centerline prior to 1991 (e.g., Weld RHB-CF-60), and there were no formal or procedural controls established as of November 9, 1995, to assure that circumferential welds in ASME Code Class 1 and 2 piping requiring volumetric examination would be permanently marked as required."

Admission or Denial to Violation

The District admits the violation.

Reasons for Violation

An investigation into the cause of this Violation revealed the following:

- 1) When the 1st ten-year interval was established at CNS for the implementation of the American Society of Mechanical Engineers (ASME) Section XI Code, "Rules for Inservice Inspection of Power Plant Components", the ASME Code (the Code) did not require weld marking. This requirement was subsequently adopted into the Code and should have been included in the 2nd ten-year interval program for ISI of replacement/repair welds.
- 2) Documentation exists that weld marking has been consistently performed since 1991 for the Non-Destructive Examination (NDE) of repair/replacement welds. Prior to this time, weld markings appear not to have been applied during the 2nd ten-year interval.

- 3) Weld markings are an administrative Code requirement that are designed to provide a consistent reference point for future examinations. Instead, the recording of NDE indications has been controlled by administrative procedures which also included location references for indications. Accordingly, even though weld markings had not been made prior to 1991, there has not been any difficulty in identifying previous indications for subsequent examinations.

The reason for the violation stems from the lack of management controls over the interpretation and implementation of ASME Section XI Code requirements. Prior to the 1994 forced outage, reliance was placed on the contract NDE examiners to properly implement Code ISI requirements, while CNS personnel retained overall programmatic control. This programmatic control did not typically extend to developing procedural mechanisms for the tracking and verification of administrative Code requirements (such as the weld markings), nor in the documentation of their completion. For their part, it appears that the contract NDE examiners believed that the intent of the weld marking requirement was met by the method in which they recorded data.

Corrective Steps Taken and the Results Achieved

The District has reviewed the documentation of the examinations performed on repair/replacement welds during the 2nd ten-year interval. It was found that those welds which had not been marked at one time during the 2nd ten-year interval had subsequently been either replaced and appropriately marked, or were reconciled as no longer requiring marking per Section XI Code requirements. Accordingly, no rework is necessary to affix weld markings on prior examinations.

After identification of this issue, instruction was provided to the CNS ISI and Repair/Replacement Engineers to ensure that the welds repaired or replaced during the recent refueling outage were appropriately marked. Maintenance records document that the markings have been made as required.

The District has assessed the concern that Code non-compliances of a more significant nature may exist stemming from the same root cause. During the 1994 forced outage, significant efforts were made to correct the programmatic deficiencies of the CNS ISI Program. These included: a) critically reviewing and redefining the Section XI boundaries, b) broadening in-house Code expertise by hiring an experienced ISI engineer from outside the District, c) reviewing the 2nd ten-year interval examination records (with any resulting reinspections performed during this last refueling outage), and d) revising the ISI program and plan to reflect the changes made. The improvement in ISI program quality was acknowledged in Inspection Report 95-15. At the time of this programmatic upgrade, weld marking was being performed. Accordingly, since the scope of these efforts was to assure the current adequacy of the program, a more intrusive inquiry into historical compliance and administrative controls governing weld marking was not pursued. Additionally, a comprehensive review of the forthcoming Code requirements has been performed to assure they are incorporated into the ISI Program Plan for the upcoming 3rd ten-year interval. For these reasons, the District has confidence in the acceptability of the CNS ISI Program despite this isolated issue.

Corrective Steps That Will Be Taken to Avoid Further Violations

Procedural controls are being put in place to coincide with the beginning of the 3rd ten-year interval to ensure that weld marking requirements continue to be met in the future.

Date When Full Compliance Will Be Achieved

The District is in full compliance with the requirements of 10 CFR 50.55a.

"Criterion V of Appendix B to 10 CFR Part 50, states, in part, that "[a]ctivities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures or drawings."

Administrative Procedure 0.5, "Condition Reporting," Revision 3, Step 4.11.1, requires that any individual aware of an undesirable or questionable condition at the facility is responsible for initiating a condition report. Step 8.1.1 specifies that any individual may initiate a condition report.

Contrary to the above, upon discovery on October 23, 1995, of a loss of control of calibration blocks, used to perform examinations prior to acceptance and release by engineering, the licensee inservice inspection personnel failed to initiate a condition report for undesirable or questionable conditions."

Admission or Denial to Violation

The District admits the violation.

Reasons for Violation

The District considers this violation to be supplemental to Violation 9511-01 in that it is an additional instance where inappropriate judgments were made by CNS personnel as to the threshold where a Condition Report (CR) should be written. Procedure 0.5 states, "Any individual aware of an undesirable or questionable condition at CNS is responsible for initiating a Condition Report." However, it is not the District's intent that the formal Corrective Action Program routinely supplement day-to-day verbal corrections made between management and the staff. In the case of this violation, the CNS ISI Engineer and his supervisor believed that effective corrective action had been taken to reestablish control over the NDE contractor and the calibration blocks, and to resolve the adverse consequences of that issue. These actions included: a) discussing the incident with the NDE contractor supervision, b) establishing stricter administrative controls over the future use of the calibration blocks that were potentially suspect because of this event, and c) invalidating the data that had been taken with the improper blocks and identifying the need to re-perform those examinations. It was believed that under these circumstances, a CR was not warranted particularly since the issue had been identified and action taken prior to review and acceptance of the examination data. This was an inappropriate judgment since examinations had been performed with the inaccurate calibration blocks.

Corrective Steps Taken and the Results Achieved

After discussion of this potential violation with the NRC inspector, a CR was written to document the inappropriate use of the calibration blocks. The CNS personnel involved were sensitized to the expectation that the CR process is to be used to document potential conditions adverse to quality. Additionally, this issue was described to CNS personnel in a posted newsletter on outage progress and activities.

Corrective Steps That Will Be Taken to Avoid Further Violations

As discussed in the District reply to Violation 9511-01 (NLS950205), CNS management will continue to place attention on specific threshold issues should they occur.

Date When Full Compliance Will Be Achieved

The District is in full compliance with the requirements of 10 CFR 50 Appendix B Criterion V with respect to adhering to the requirements of Procedure 0.5.

Correspondence No: NLS960001

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
Procedural controls are being put in place to coincide with the beginning of the 3rd ten-year interval to ensure that weld marking requirements continue to be met in the future.	3/1/96



Nebraska Public Power District

COOPER NUCLEAR STATION
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TELEPHONE (402)825-3811
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NLS950205
October 24, 1995

2

Director, Office of Enforcement
U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555

OCT 31

Gentlemen:

Subject: Reply to a Notice of Violation;
NRC Inspection Report No. 50-298/95-11;
Cooper Nuclear Station, NRC Docket 50-298, DPR-46

Reference: Letter from Mr. J. E. Dyer (USNRC) to Mr. G. R. Horn (NPPD), dated
September 26, 1995, NRC Inspection Report 50-298/95-11 and Notice of
Violation.

This letter, including Attachment 1, constitutes Nebraska Public Power District's
(the District) reply to the referenced Notice of Violation (NOV) in accordance
with 10 CFR 2.201. Inspection Report 50-298/95-11 documented the results of an
NRC inspection conducted from August 14 - 17 and September 12 - 13, 1995, which
included an assessment of the operability of the High Pressure Coolant Injection
(HPCI) System and containment integrity following the identification of the
potential for waterhammer from accumulated water in the HPCI turbine exhaust
piping. The District admits to the violation and has completed all corrective
actions that are necessary to return Cooper Nuclear Station (CNS) to full
compliance with regard to 10CFR50 Appendix B Criterion XVI.

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

Sincerely,

J. H. Mueller
Site Manager

Attachment

- cc: Regional Administrator
USNRC Region IV
- NRC NRR Project Manager
USNRC
- NRC Resident Inspector
Cooper Nuclear Station
- NPG Distribution

96-0175

9511010138-4pp

REPLY TO SEPTEMBER 26, 1995, NOTICE OF VIOLATION
COOPER NUCLEAR STATION
NRC DOCKET NO. 50-298, LICENSE DPR-46

During NRC inspection activities conducted on August 14 - 17 and September 12 - 13, 1995, a violation of NRC requirements was identified. The particular violation and the District's reply are set forth below:

The violation contained in the referenced inspection report cites the following:

"Criterion XVI of Appendix B to 10 CFR Part 50 states, in part, that measures 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, from original licensing of the Cooper Nuclear Station in January 1974 until August 1995 a condition adverse to quality existed in that the high pressure coolant injection turbine exhaust piping was susceptible to water accumulation and created the potential for a waterhammer that could challenge design code allowable margins. The condition adverse to quality was not promptly identified and corrected in the past and recent opportunities to identify and correct the condition were also missed."

Admission or Denial to Violation

The District admits the violation.

Reasons for Violation

The cause for previous failures to resolve this hardware deficiency was due to a lack of effective post-corrective action follow-up. This conclusion is supported by the history of the corrective actions related to this issue, which is described in the body of the Inspection Report. Previous NRC correspondence has documented the inadequacy of the Corrective Action Program that was in place prior to 1994 (NRC Inspection Reports 50-298/92-03, 93-06, 93-17, and 93-202).

More recent opportunities were missed under the improved CNS Corrective Action Program because CNS personnel did not recognize that the recurring existence of water in the HPCI Turbine Exhaust line was a condition adverse to quality. The cause is due to an original design deficiency that was compensated for by a proceduralized "work-around." This was accepted because it appeared to address the symptoms of this condition. In this manner, the potentially adverse system condition became an expected system response, which was considered beneath the threshold for writing a Condition Report. The current station emphasis on not accepting past work arounds contributed to the identification of this condition.

Corrective Steps Taken and the Results Achieved

An Operability Evaluation (OE) was performed for the HPCI System given the worst case accumulation of water in the turbine exhaust line. This OE (with accompanying calculations) concluded that HPCI was within stress operability limits.

The current CNS Corrective Action Program was reviewed to assess the controls that are in place to assure that corrective actions have been effective. The key phases of condition resolution (condition evaluation, action assignments, action completion, and condition closure) involve active management participation with oversight by the Corrective Action Program staff. The specific protocols for

these activities collectively ensure that adverse conditions are effectively resolved. Additionally, the Condition Reporting process has controls to monitor recurring conditions through trending and recurrence reviews prior to the initial disposition of a documented adverse condition.

In the most recent Quality Assurance audit of the CNS Corrective Action Program the conclusion was reached that although weaknesses remain, the program is effectively identifying and resolving station issues. During a recent NRC Team Inspection (NRC Inspection Report 50-298/95-07 dated 8/3/95) a similar conclusion was reached that the CNS Corrective Action Program was, in general, effective.

CNS Management now clearly communicates its expectation that plant problems are to be corrected. Most recently, the following actions have been taken regarding this expectation:

1. CNS memoranda to NPG Managers, Supervisors, and staff have reinforced management's expectation as well as the procedural requirement that Condition Reports be initiated any time an individual is aware of an undesirable or questionable condition at the facility.
2. As discussed in the District's Notice of Violation response to NRC Inspection Report 50-298/95-04, management provided instruction to the Shift Supervisors and Control Room Supervisors that they lower their threshold for writing Condition Reports to include conditions that may have been adequately resolved, but could have broader implications.

Corrective Steps That Will Be Taken to Avoid Further Violations

While the corrective actions taken have sensitized the CNS Staff to this issue, management will remain vigilant in ensuring that an appropriate threshold level for generating condition reports is maintained.

The District has completed the required actions necessary to restore compliance with 10CFR50 Appendix B Criterion XVI. Additionally, as discussed in the Exit Meeting of 8/17/95, the District will take action to reduce or eliminate the accumulation of significant amounts of water in the exhaust line. This action will be completed during the current refueling outage. Upon return to power, water accumulation will be monitored to determine if any additional actions are required above those taken during the outage.

Date When Full Compliance Will Be Achieved

The District is in full compliance with the requirements of 10 CFR 50 Appendix B Criterion XVI with respect to the issue of water in the HPCI Turbine Exhaust line.

Correspondence No: NLS950205

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
The District will take action to reduce or eliminate the accumulation of significant amounts of water in the exhaust line.	During RFO16
Upon return to power water accumulation will be monitored to determine if any additional actions are required above those taken during the outage.	None