Nebraska Public Power District

COOPER NUCLEAR STATION
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NLS950228
November 22, 1995

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

Subject: IE Bulletin 80-13 Response ; Visual Inspection of Core Spray Spargers
Cooper Nuclear Station, NRC Docket No. 50-298, License No. DPR-46

Reference: IE Bulletin 80-13, Visual Inspection of Core Spray Spargers

Gentlemen:

Nuclear Regulatory Commission IE Bulletin 80-13 (referenced above) requires all operating licensees of Boiling Water Reactors (BWRs) to perform a visual inspection of the Core Spray Spargers and the segment of piping between the inlet nozzle and the vessel shroud every refueling outage. This bulletin also requires a written report of the examination results to be submitted to the NRC within 30 days of the completion of the examinations. In accordance with the requirements of IE Bulletin 80-13, the Nebraska Public Power District (District) hereby provides the results of the subject inspections for the Fall 1995 refueling outage. The District requests NRC review and approval of the attached results prior to startup from the current refueling outage, which is currently scheduled to conclude December 19, 1995.

The Core Spray Spargers and associated piping were inspected by General Electric (GE) In-Vessel Inspection personnel in accordance with IE Bulletin 80-13 and the approved GE procedure. The lighting was sufficient to resolve a 0.0005 inch diameter wire. Three crack-like indications, and two suspect indications were identified. Supplemental ultrasonic examinations were performed to evaluate these indications. Examination Summary Sheet, R-CS-101, is included as Attachment 1 to this letter.

Attachment 2 to this letter provides the GE evaluation of the relevant indications per the fracture mechanics methods of ASME Section XI, Subsection IWB-3600, and demonstrates the structural integrity of the Core Spray internal piping for at least one more operating cycle. The District will continue to inspect the Core Spray Spargers and associated piping in accordance with IE Bulletin 80-13.

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Please contact me if you have any questions or require any additional information.

Sincerely,

John H. Mueller
Site Manager

/dnm
Attachments

cc: Senior Project Manager
USNRC - NRR Project Directorate IV-1

Senior Resident Inspector
USNRC

Regional Administrator
USNRC - Region IV

NPG Distribution

GE Nuclear Energy

EXAMINATION SUMMARY SHEET

REPORT NO.: R-CS-101

PROJECT: COOPER NUCLEAR STATION RFO16

PROCEDURE: UT-CNS-507V0 **REV:** 0 **FRR:** N/A N/A N/A

SYSTEM: CORE SPRAY

WELD NO.: SEE BELOW N/A **REV:** N/A **FRR:** N/A N/A N/A

CONFIGURATION: SEE BELOW N/A **REV:** N/A **FRR:** N/A N/A N/A

EXAMINER: NICK LABELLA **LEVEL:** II

EXAMINER: MIKE WEBSTER **LEVEL:** II

EXAMINER: N/A **LEVEL:** N/A

☐ MT ☐ PT ● UT ☐ VT

WELD TYPE: ● CIRCUMFERENTIAL ☐ LONGITUDINAL ☐ OTHER

DATA SHEET NO.(S): D-CS-101, D-CS-102, D-CS-103, D-CS-104 D-CS-105, D-CS-106

CAL SHEET NO.(S): C-CS-101 C-CS-102 C-CS-103

The purpose of this report is to provide the final results of the Remote Ultrasonic examinations performed Nov. 3 thru Nov 5, 1995 on the Internal Core Spray Piping. This UT exam was performed to confirm the presence or absence of cracking in areas identified as cracked or suspect areas by the enhanced IVVI inspections.

These examinations were performed utilizing the Smart 2000 Data Acquision System and the Core Spray piping examination fixture which utilized 3 seperate 80° refracted longitudinal wave (OD Creeping Wave) search units. The examination technique utilized circumferential and axial scanning patterns. All scans were performed with the ultrasonic beam directed perpendicular to the weld.

The exams performed are listed below by component ID and Data report number and includes a summary of results obtained

A-Loop Weld # 1 @ 170° D-CS-101
Visual inspections had reported a crack like indication located between 190° and 350°. The UT examination detected this crack intermittently between 190° and 350°. It does not appear to be ID connected and appears to be limited to the upper 25% of the base material. The exam was performed for 360° and detected no additional cracking.

A-Loop Weld # 21 @ 10° D-CS-102
Visual inspections had reported a crack like indication located between 270° and 360°. The UT examination detected this crack intermittently between 280° and 350°. It does not appear to be ID connected and appears to be limited to the upper 25% of the base material. The exam was performed for 360° and detected no additional cracking.

A-Loop Weld # 6 @ 170° D-CS-103
Visual inspections had reported a suspect indication located between 290° and 310°. The UT examination detected no evidence of cracking in this area. The exam was performed for 360° and detected no additional cracking.

B-Loop Weld # 12 @ 270° D-CS-104
Visual inspections had reported a crack like indication 1.5" in length, located between 0° and 90°. The UT examination detected no evidence of cracking in this area. The exam was performed from 315° clockwise to 180° and detected no cracking. The proximity of the RPV wall prevented any additional UT examination.

A-Loop Weld # 7 @ 170° D-CS-105
Visual inspections had reported a suspect indication located 360° intermittent on the lower side of this weld. The UT examination detected no evidence of cracking in this area. The UT exam was performed for 360° and detected no cracking.

A-Loop Weld # 15 @ 10° D-CS-106
Visual inspections had reported a non-relevant indication located 360° intermittent on the lower side of this weld. The UT examination detected no evidence of cracking in this area. The UT exam was performed for 360° and detected no cracking.

SUMMARY BY	III LEVEL	11·22·95 DATE			
GE REVIEWED BY	III LEVEL	11-22-95 DATE	NPPD ISI ENGINEER REVIEW	11/22/95 DATE	PAGE: 1 OF: 11

FORM UT-09 REV. 2