



Nebraska Public Power District

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10 CFR 50.55a

NLS2022004
February 7, 2022

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

Subject: Response to Nuclear Regulatory Commission's Request for Additional Information Regarding Relief Request RR5-01, Revision 1
Cooper Nuclear Station, Docket No. 50-298, DPR-46

- References:**
1. Email from Thomas Wengert, U.S. Nuclear Regulatory Commission, to Linda Dewhirst, Nebraska Public Power District, dated January 10, 2022, "Cooper - Final RAI RE: Relief Request RR5-01 Revision 1 (EPID L-2021-LLR-0046)"
 2. Letter from John Dent, Jr., Nebraska Public Power District, to the U.S. Nuclear Regulatory Commission, dated June 21, 2021, "10 CFR 50.55a Relief Request RI5-02, Revision 3, and RR5-01, Revision 1"

Dear Sir or Madam:

The purpose of this letter is for the Nebraska Public Power District to respond to the Nuclear Regulatory Commission's request for additional information (RAI) (Reference 1) related to the Cooper Nuclear Station request for relief from certain 10 CFR 50.55a requirements (Reference 2).

The responses to the specific RAI questions are provided in the Attachment to this letter.

This letter does not contain any new regulatory commitments.

If you have any questions concerning this matter, please contact Linda Dewhirst, Regulatory Affairs and Compliance Manager, at (402) 825-5416.

Sincerely,

John Dent, Jr.
Vice President and
Chief Nuclear Officer

/dv

Attachment: Response to Nuclear Regulatory Commission Request for Additional Information (RAI)

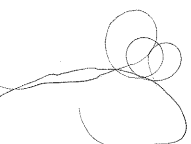
cc: Regional Administrator w/ attachment
USNRC - Region IV

Cooper Project Manager w/ attachment
USNRC - NRR Plant Licensing Branch IV

Senior Resident Inspector w/ attachment
USNRC - CNS

NPG Distribution w/ attachment

CNS Records w/ attachment

A handwritten signature or scribble in the bottom left corner of the page, consisting of several overlapping loops and lines.

Attachment

Response to Nuclear Regulatory Commission Request for Additional Information (RAI)

Cooper Nuclear Station, Docket No. 50-298, DPR-46

The Nuclear Regulatory Commission (NRC) request for additional information regarding the Relief Request RR5-01, Revision 1, is shown in italics. The Nebraska Public Power District (NPPD) response to the request is shown in normal font.

RAI-NPHP-01

The licensee's application states that the full structural weld overlay will be designed consistent with the requirements for the design thickness, length, and location of the overlay in accordance with Nonmandatory Appendix Q, "Weld Overlay Repair of Class 1, 2, and 3 Austenitic Stainless Steel Piping Weldments," and IWB-3640 of ASME Code, Section XI, 2007 Edition through the 2008 Addenda, as referenced by Nonmandatory Appendix Q. In the event that an overlay repair is required, identify when the design analysis will be completed and available for NRC staff inspection/audit.

NPPD Response:

In the event a flaw is discovered that will require a full structural weld overlay (FSWOL) to repair, a sizing calculation and design drawing will be developed prior to installation to justify the weld overlay geometry, materials, etc. The sizing will be based upon a 360-degree circumferential through-wall flaw in the weldment. An experienced vendor with the design of FSWOL's will be contracted as needed to assist NPPD with the design. The FSWOL sizing analysis and NPPD design change will be made available to the NRC prior to the installation of the emergent weld overlay.

Within 120 days after the outage, a complete qualification package will be developed, which will include American Society of Mechanical Engineers (ASME) Code, Section III qualification of the repair with a corresponding Design Report, and fracture mechanics analyses of conservatively postulated flaws to assure ASME Code, Section XI compliance until the next scheduled inspection and beyond. The qualification package will be made available to the NRC.

RAI-NPHP-02

The licensee's application does not provide any discussion regarding the growth of a flaw found in the dissimilar metal weld. Explain how the potential for flaw growth in the original dissimilar metal weld will be evaluated to demonstrate the adequacy of the weld overlay design.

NPPD Response:

Either the identified flaw or postulated flaws in the axial and circumferential directions (most conservative) will be evaluated. Growth due to both stress corrosion and fatigue cycling will be considered using industry standards. The flaw growth evaluation will be developed post outage as part of the qualification package discussed above.

RAI-NPHP-03

Confirm whether the licensee intends to submit acceptance examination and preservice inspection results to the NRC, or make them available for NRC staff inspection, after installation of the weld overlay and before the restart of the plant. This is to confirm that the weld overlay installation has satisfied the proposed alternative.

NPPD Response:

The preservice examination results will be made available to the NRC prior to plant startup from refuel outage 32.