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10 CFR 50.55a

NLS2006040 May 4, 2006

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

- Subject: Response to NRC Request for Additional Information Related to Relief Request RI-05 for the Fourth Ten-Year Inservice Inspection Interval Cooper Nuclear Station, Docket No. 50-298, DPR-46
- References: 1. Letter from Brian Benney, U.S. Nuclear Regulatory Commission, to Randall K. Edington, Nebraska Public Power District, dated April 14, 2006, "Cooper Nuclear Station - Request for Additional Information RE: Relief Request RI-05 for the Fourth Ten-Year Inservice Inspection Interval (TAC No. MD0280)"
 - Letter from Randall K. Edington, Nebraska Public Power District, to U.S. Nuclear Regulatory Commission, dated February 23, 2006, "10 CFR 50.55a Requests for Fourth Ten-Year Inservice Inspection Interval" (NLS2006015)

The purpose of this letter is to submit the Nebraska Public Power District response to the U.S. Nuclear Regulatory Commission Request for Additional Information (Reference 1) regarding 10 CFR 50.55a Request Number RI-05, which was submitted to the NRC on February 23, 2006 (Reference 2). The response is attached.

Should you have any questions concerning this matter, please contact Paul Fleming, Licensing Manager, at (402) 825-2774.

Sincerely,

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Randall K. Edington / Vice President – Nuclear and Chief Nuclear Officer

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Attachment

cc: Regional Administrator w/attachment USNRC - Region IV

Cooper Project Manager w/attachment USNRC – NRR Project Directorate IV-1

Senior Resident Inspector w/attachment USNRC - CNS

NPG Distribution w/attachment

CNS Records w/attachment

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Attachment

Response to NRC Request for Additional Information Related to Relief Request RI-05 for the Fourth Ten-Year Inservice Inspection Interval

Nebraska Public Power District Cooper Nuclear Station

NRC RAI Question No. 1

The submittal dated February 23, 2006, stated that "[a]s an alternative to the [ASME] [C]ode-required examination, CNS will perform a visual examination, VT-1, of the applicable welds each inspection interval." Were the VT-1 visual examinations performed in the second and third inservice inspection (ISI) intervals for which this relief has been previously granted, and if so, what were the results of the examinations?

NPPD Response

Relief Request RI-05 for the second inservice inspection interval for which relief has been previously granted did not require VT-1 visual examinations. Therefore, VT-1 visual examinations were not performed in the second interval. VT-2 visual examinations were required in the second interval, and the results were satisfactory for both welds.

Relief Request RI-05 for the third inservice inspection interval for which relief has been previously granted required VT-1 and VT-2 visual examinations. A VT-1 visual examination of Residual Heat Removal (RHR) weld RHR-CA-3A (and not RHR-CA-3B) was performed in combination with the code-required VT-2 visual examinations performed for both welds (RHR-CA-3A and RHR-CA-3B) for which this relief has been previously granted. A VT-1 visual examination of RHR-CA-3B was not performed since this weld was not selected for examination in the Cooper Nuclear Station (CNS) Third Ten-Year Interval Inservice Inspection Program. Section XI of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code, 1989 Edition (the applicable code during the third interval), Table IWC-2500-1, Note 3, specified that in the case of multiple vessels of similar design, size, and service, the required examinations may be limited to one vessel or distributed among the vessels. Therefore, RHR-CA-3B was not selected for periodic VT-1 visual examination for the third interval, and CNS does not intend to select it for periodic VT-1 examination for the fourth interval. No reportable indications were noted for the VT-1 visual examination of RHR-CA-3A, and the results of the VT-2 visual examinations were satisfactory for both welds.

RHR-CA-3A will be VT-1 examined in the fourth interval.

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NRC RAI Question No. 2

Please describe why the proposed VT-1 examination will continue to provide reasonable assurance of structural integrity through the end of the fourth ISI interval.

NPPD Response

Proposed Relief Request RI-05 specified that VT-1 visual examination, in combination with VT-2 visual examination, will continue to provide reasonable assurance of structural integrity of the welds.

The shell welds on the RHR heat exchanger are a complex configuration. Access to the welds is extremely limited as a result of the configuration. Both volumetric and surface examinations are essentially prohibited by the limited access.

The only potentially active degradation mechanism associated with these welds is fatigue. To the best of our knowledge, there have been no industry reports of fatigue flaws in this weld configuration. VT-1 visual examination provides a reasonable alternative for the detection of surface-breaking flaws because the flaws can readily be detected by visual examination.

VT-2 visual examination on the shell side of the heat exchanger will also be performed. VT-2 visual examination of the welds during system pressure tests should provide adequate assurance of structural reliability since it would provide initial evidence of seepage from a through-wall perforation.

Therefore, VT-1 visual examination, in combination with the VT-2 visual examination, will continue to provide reasonable assurance of structural integrity of the welds through the end of the fourth ISI interval.

ATTACHMENT 3 LIST OF REGULATORY COMMITMENTS©

Correspondence Number: <u>NLS2006040</u>

The following table identifies those actions committed to by Nebraska Public Power District (NPPD) in this document. Any other actions discussed in the submittal represent intended or planned actions by NPPD. They are described for information only 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 | COMMITMENT NUMBER | COMMITTED DATE OR OUTAGE |
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| None | | |
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