From: Wengert, Thomas

Sent: Wednesday, November 10, 2021 1:37 PM

To: Dewhirst, Linda R.

Cc: Van Der Kamp, David W.; Forland, Thomas J.; Dixon-Herrity, Jennifer; Tsao, John

Subject: Cooper - Final RAI RE: Alternative Request RI5-02 Revision 3 (EPID L-2021-LLR-0045)

Attachments: Cooper - Final RAI Regarding Alternative Request RI5-02 Rev 3.pdf

On October 29, 2021, the U.S. Nuclear Regulatory Commission (NRC) staff sent Nebraska Public Power District (NPPD) the draft Request for Additional Information (RAI) identified below for Cooper Nuclear Station (Cooper). This RAI relates to Relief Request (RR) RI5-02, Revision 3, concerning the inspection of Cooper reactor vessel interior surfaces, reactor interior attachments, and core support structures using Boiling Water Reactor Vessel and Internals Project (BWRVIP) guidelines as an alternative.

On November 10, 2021, the NRC and NPPD staffs held a conference call to clarify the draft RAI. At the conclusion of the call, NPPD informed the NRC staff that the information requested was understood and that no additional clarification of the RAI was necessary. A publicly available version of this final RAI (attached, with "Draft" removed) will be placed in the NRC's Agencywide Documents Access and Management System (ADAMS). As agreed, please provide a response to this RAI within 30 days of this correspondence.

From: Wengert, Thomas
Sent: Friday, October 29, 2021 7:47 AM
To: Dewhirst, Linda R. <lrdewhi@nppd.com>
Cc: Van Der Kamp, David W. <dwvande@nppd.com>; Forland, Thomas J. <tjforla@nppd.com>; Dixon-Herrity, Jennifer <Jennifer.Dixon-Herrity@nrc.gov>
Subject: Cooper - Draft RAI RE: Alternative Request RI5-02 Revision 3 (EPID L-2021-LLR-0045)

By letter dated June 21, 2021 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML21172A301), Nebraska Public Power District (the licensee) requested an alternative to certain requirements of Section XI of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code) for inservice inspection (ISI) of reactor vessel internal components at Cooper Nuclear Station (Cooper). The licensee submitted Relief Request (RR) RI5-02, Revision 3, concerning the inspection of Cooper reactor vessel interior surfaces, reactor interior attachments, and core support structures using Boiling Water Reactor Vessel and Internals Project (BWRVIP) guidelines as an alternative. The relief request is applicable for the fifth 10-year ISI interval, which began on April 1, 2016, and will end on February 28, 2026.

The NRC staff reviewed the submittal and determined that additional information, as described in the attached request for additional information (RAI), is required for the staff to complete its review of this application. This RAI is identified as draft at this time to confirm your understanding of the information that the NRC staff needs to complete the evaluation. Please let me know if you would like to have a call with the NRC staff to clarify this request. If the request for information is understood, please respond to this RAI within 30 days of the date of this request.

Tom Wengert
Project Manager – Cooper Nuclear Station
NRR/DORL/LPL4
(301) 415-4037

Hearing Identifier: NRR_DRMA
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Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:

REQUEST FOR ADDITIONAL INFORMATION

REGARDING ALTERNATIVE REQUEST RI5-02, REVISION 3

FOR FIFTH 10-YEAR INSERVICE INSPECTION INTERVAL

NEBRASKA PUBLIC POWER DISTRICT

COOPER NUCLEAR STATION

DOCKET NO. 50-298

By letter dated June 21, 2021 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML21172A301), Nebraska Public Power District (the licensee) requested an alternative to certain requirements of Section XI of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code) for inservice inspection (ISI) of reactor vessel internal components at Cooper Nuclear Station (Cooper). The licensee submitted Relief Request (RR) RI5-02, Revision 3, concerning the inspection of Cooper reactor vessel interior surfaces, reactor interior attachments, and core support structures using Boiling Water Reactor Vessel and Internals Project (BWRVIP) guidelines as an alternative. The relief request is applicable for the fifth 10-year ISI interval, which began on April 1, 2016, and will end on February 28, 2026.

In RI5-02, Revision 3, the licensee proposed, in part, an alternative to use BWRVIP-94, Revision 4, Program Implementation Guide, dated November 2020 (ADAMS Accession No. ML20345A248). BWRVIP-94, Revision 4 has not been reviewed or endorsed by the NRC staff.

Regulatory Basis

The ISI of ASME Code Class 1, 2, and 3 components is to be performed in accordance with Section XI of the ASME Code and applicable edition and addenda as required by Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.55a(g), "Preservice and inservice inspection requirements," except where specific relief has been granted by the NRC pursuant to 10 CFR 50.55a(g)(6)(i), "Impractical ISI requirements: Granting of relief."

Pursuant to 10 CFR 50.55a(z), "Alternatives to codes and standards requirements," alternatives to the requirements of paragraph (g) may be used, when authorized by the NRC if (1) the proposed alternatives would provide an acceptable level of quality and safety or (2) compliance with the specified requirements would result in hardship or unusual difficulty without a compensating increase in the level of quality and safety.

Pursuant to 10 CFR 50.55a(g)(4), "Inservice inspection standards requirement for operating plants," ASME Code Class 1, 2, and 3 components (including supports) must meet the requirements, except the design and access provisions and the preservice examination requirements set forth in the ASME Code, Section XI to the extent practical within the limitations of design, geometry, and materials of construction of the components. The regulations require that inservice examination of components and system pressure tests conducted during the first 10-year interval and subsequent intervals comply with the requirements in the latest edition and addenda of Section XI of the ASME Code incorporated by reference in 10 CFR 50.55a(a)(1)(ii), "ASME Boiler and Pressure Vessel Code, Section XI," 18 months prior to the start of the 120-

month interval, subject to the conditions listed in 10 CFR 50.55a(b)(2), "Conditions on ASME BPV Code, Section XI."

To complete its review, the U.S. Nuclear Regulatory Commission (NRC) staff requests the following additional information.

RAI-1

Issue

By letter dated February 17, 2016 (ADAMS Accession No. ML16034A479), the NRC authorized the use of the original relief request RI5-02 (Revision 0), which contains inspection requirements for reactor vessel internal components based on guidance in various BWRVIP topical reports at Cooper. By letter dated July 31, 2018 (ADAMS Accession No. ML18183A325), the NRC authorized the use of RR RI5-02, Revision 1, which provided an updated inspection history to include the fall 2016 refueling outage. By letter dated March 19, 2020 (ADAMS Accession No. ML20077L339), the NRC authorized the use of RR RI5-02, Revision 2, which requested to use BWRVIP-41, Revision 4-A and BWRVIP-94, Revision 3.

The current proposed RR RI5-02, Revision 3 requests to use BWRVIP-25, Revision 1-A and BWRVIP-94, Revision 4. Relief Request RI5-02, Revision 3 does not contain all of the information that is typically contained in a relief request, such as affected components and applicable ASME Code requirements that were provided in Revision 0. As submitted, RI5-02, Revision 3 is not a standalone, independent document.

Request

Provide additional information for RI5-02, Revision 3 that includes all of the information in Revisions 0, 1 and 2, such that RI5-02, Revision 3 is a standalone, independent document.

RAI-2

Issue

Section 3.5, page 3-2, of BWRVIP-94, Revision 4, states in part that "…In cases where inspection recommendations cannot be implemented and that situation is stated in the BWRVIP document transmitted to the NRC, the BWRVIP transmittal of the document to the NRC is considered the notification to the NRC that a BWRVIP recommendation is not implemented. In such cases, utility notification to the NRC is not required…". It is not clear whether the licensee will notify the NRC if an inspection recommendation will not be implemented.

Request

Discuss whether the licensee will notify the NRC if an inspection recommendation at Cooper cannot be implemented, if RR RI-02 is authorized.

RAI-3

Issue

Section 3.5, Page 3-2, of BWRVIP-94, Revision 4, states in part that "…Deviations from BWRVIP guidelines do not need to be submitted to the NRC for approval unless specifically required by the BWRVIP guideline document or other utility commitments…"

Appendix B, General Consideration Section, Item No. 4 of BWRVIP-94, Revision 4 states in part that "… In no case shall any deviation to the vessel and internals program allow a change to a plant's licensing basis without the approvals required by regulation…"

Based on the above, the NRC staff requests clarification regarding deviations from BWRVIP guidance.

Request

Clarify the specific circumstances under which the licensee would submit deviations to the NRC for approval. Provide specific examples of deviations needing and not needing prior NRC approval. The examples can be hypothetical if actual cases do not exist.

RAI-4

Issue

Appendix B, Introduction Section of BWRVIP-94, Revision 4, states in part that "…Deviation dispositions do not need to be submitted to the NRC. However, the NRC shall be notified of any deviation from BWRVIP guidelines transmitted to the NRC as described in Section 3.5…"

Appendix B, General Consideration Section, Item No. 2 of BWRVIP-94, Revision 4 states in part that "For planned deviation dispositions, the utility shall notify the NRC and the BWRVIP within 45 days of the utility executive concurrence with the deviation disposition…"

Based on the above two statements, it is not clear to the NRC staff whether deviation dispositions will or will not be submitted to the NRC.

Request

Clarify the specific circumstances or criteria for when the licensee would notify the NRC of deviations and deviation dispositions.

RAI-5

Issue

Section 3.5, page 3-2 bottom and top of page 3-3, of BWRVIP-94, Revision 4, states in part that "…Licensees shall forward a copy of the IVVI [in-vessel visual inspection] and volumetric final reports for reactor internals inspections provided by the utilities' inspection vendors within 120 days following completion of an outage…" It is not clear to the NRC staff where or to whom licensees will forward a copy of the inspection report, as indicated in this quoted statement.

Request

Clarify whether Cooper will submit the IVVI report and volumetric final reports to the NRC (i.e., as part of the routine 90-day inservice inspection report that licensees submit to the NRC after the completion of refueling outages for information in accordance with the ASME Code, Section XI, IWA-6230, Owner's Activity Report (Forms OAR-1 and/or NIS-1, or a separate submittal).

RAI-6

Issue

Section 3.5, page 3-3, of BWRVIP-94, Revision 4, states in part that "…Flaw evaluations performed in accordance with the guidance in BWRVIP reports for the acceptance of inspection results do not require transmittal to, or approval by, the NRC…" The code of record for the fifth ISI interval at Cooper is the 2007 Edition and 2008 Addenda of the ASME Code, Section XI. Subarticles IWB-3134(b), IWB-3144(b), and IWB-3640 of the 2007 Edition specify that analytical evaluation of inspection results shall be submitted to the regulatory authority (i.e., the NRC). The above statement in BWRVIP-94, Revision 4 appears to conflict with the requirements of the ASME Code, Section XI.

Request

Considering the above ASME Code, Section XI requirements, clarify whether Cooper will transmit the flaw evaluations to the NRC after the ISI is performed on reactor vessel internal components.