



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

October 25, 2010

Mr. David J. Bannister
Vice President and CNO
Omaha Public Power District
Fort Calhoun Station
444 South 16th St. Mall
Omaha, NE 68102-2247

SUBJECT: FORT CALHOUN STATION, UNIT NO. 1 - REQUEST FOR ADDITIONAL
INFORMATION RE: REQUEST FOR RELIEF FROM CODE CASE N-722
VISUAL EXAMINATION OF THE REACTOR VESSEL HOT-LEG NOZZLE-TO-
SAFE-END DISSIMILAR METAL WELDS (TAC NO. ME4541)

Dear Mr. Bannister:

By letter dated August 16, 2010 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML102300641), the Omaha Public Power District (the licensee) proposed an alternative to the requirement of paragraph 50.55a(g)(6)(ii)(E), "Reactor coolant pressure boundary visual inspections," of Title 10 of the *Code of Federal Regulations* (10 CFR), for the Fort Calhoun Station, Unit 1. This requirement defines the inservice inspection (ISI) frequency of visual examination of the reactor vessel hot-leg nozzle-to-safe-end welds in accordance with the American Society of Mechanical Engineers Boiler and Pressure Vessel Code Case N-722, "Additional Examinations for PWR [Pressurized-Water Reactor] Pressure Retaining Welds in Class 1 Components Fabricated With Alloy 600/82/182 Materials, Section XI, Division 1." The duration of request is for the fourth 10-year ISI interval which ends on September 25, 2013.

The NRC staff has reviewed the information provided in the submittal and determined that additional information is required in order to complete its review of the proposed changes. The request for additional information (RAI) was provided in an e-mail on October 4, 2010, to Mr. Bill Hansher of your staff. Mr. Hansher indicated that the response would be provided within 30 days of receipt of this letter. The RAI is enclosed.

D. Bannister

- 2 -

If you have any questions, please contact me at 301-415-1377 or via e-mail at lynnea.wilkins@nrc.gov.

Sincerely,

A handwritten signature in black ink, appearing to read 'Lynnea Wilkins', written in a cursive style.

Lynnea Wilkins, Project Manager
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-285

Enclosure:
Request for Additional Information

cc w/encl: Distribution via Listserv

REQUEST FOR ADDITIONAL INFORMATION

REQUEST FOR RELIEF FROM ASME CODE CASE N-722 REQUIREMENTS FOR VISUAL
EXAMINATION OF REACTOR VESSEL HOT-LEG NOZZLE-TO-SAFE-END WELDS

OMAHA PUBLIC POWER DISTRICT

FORT CALHOUN STATION, UNIT NO. 1

DOCKET NO. 50-285

By letter dated August 16, 2010 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML102300641), the Omaha Public Power District (the licensee) proposed an alternative to the requirement of paragraph 50.55a(g)(6)(ii)(E), "Reactor coolant pressure boundary visual inspections," of Title 10 of the *Code of Federal Regulations* (10 CFR), for the Fort Calhoun Station, Unit 1. This requirement defines the inservice inspection (ISI) frequency of visual examination of the reactor vessel hot-leg nozzle-to-safe-end welds in accordance with the American Society of Mechanical Engineers Boiler and Pressure Vessel Code Case N-722, "Additional Examinations for PWR [Pressurized-Water Reactor] Pressure Retaining Welds in Class 1 Components Fabricated With Alloy 600/82/182 Materials, Section XI, Division 1." The duration of request is for the fourth 10-year ISI interval which ends on September 25, 2013.

The NRC staff has reviewed the information provided by the licensee and determined that the following information is needed in order to complete its review of the relief request:

1. The NRC staff requests the licensee's basis for not performing a visual, volumetric, or inside-surface examination of each weld necessary to meet the inspection requirements of 10 CFR 50.55a(g)(6)(ii)(E). If visual, volumetric, or inside-surface examinations can be performed on each penetration nozzle to meet the current inspection requirements, the NRC staff questions the sufficiency of the basis for granting relief under 10 CFR 50.55a(a)(3)(i), because not performing the examination does not provide the same level of assurance as the current inspection requirements. However, if there is a hardship, NRC staff requests the licensee's basis for relief to not perform the inspection under 10 CFR 50.55a(a)(3)(ii).
2. The NRC staff requests the following references used in the Westinghouse calculation: numbers 3, 5, 6, 8, 9, 10, and 11. The NRC staff will need these references quickly to have sufficient time to perform verification calculations and support the licensee's schedule.
3. The NRC staff requests the 2003, 2008, and 2009 inspection data of welds designated as Items 1 and 2 in Table 1 of the relief request dated August 16, 2010. In addition, the NRC staff requests the inspector's summary reports to

Enclosure

verify previous inspection results and the basis for initial starting flaw size in flaw analysis calculations (e.g., reports documenting the inspection stating “No Reportable” or “No Recordable” indications).

4. In order to support the licensee’s use of zinc as a mitigation method, the NRC staff requests supporting technical basis documents for review. Specifically, the NRC staff requests those documents that address the mitigation effectiveness of the zinc addition history at Fort Calhoun Station, Unit 1, at the current levels at 300 parts per billion (ppb)-months, and the rate of addition of 6 ppb/month. Also, please provide projected rates of addition and projected accumulated concentration-time levels over the period of the requested relief.

D. Bannister

- 2 -

If you have any questions, please contact me at 301-415-1377 or via e-mail at lynnea.wilkins@nrc.gov.

Sincerely,

/RA/

Lynnea Wilkins, Project Manager
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-285

Enclosure:
Request for Additional Information

cc w/encl: Distribution via Listserv

DISTRIBUTION:

PUBLIC
LPLIV r/f
RidsAcrcsAcnw_MailCTR Resource
RidsNrrDorIDpr Resource
RidsNrrDorlPl4 Resource
RidsNrrLAJBurkhardt Resource
RidsNrrPMCooper Resource
RidsOgcRp Resource
RidsRgn4MailCenter Resource
RidsNrrDciCpnb Resource
J. Collins NRR/DCI/CPNB

ADAMS Accession No.: ML102860087

*email dated

OFFICE	NRR/LPL4/PM	NRR/LPL4/LA	NRR/DCI/CPNB	NRR/LPL4/BC	NRR/LPL4/PM
NAME	LWilkins	JBurkhardt	TLupold*	MMarkley	LWilkins NKalyanam for
DATE	10/14/10	10/14/10	10/1/10	10/25/10	10/25/10

OFFICIAL RECORD COPY