



July 7, 2016

ULNRC-06321

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

10 CFR 50.55a

Ladies and Gentlemen:

**DOCKET NUMBER 50-483
CALLAWAY PLANT UNIT 1
UNION ELECTRIC CO.
RENEWED FACILITY OPERATING LICENSE NPF-30
RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION
THIRD 10-YEAR INTERVAL INSERVICE INSPECTION
REQUEST FOR RELIEF NO. I3R-08 (TAC NUMBER MF6729)**

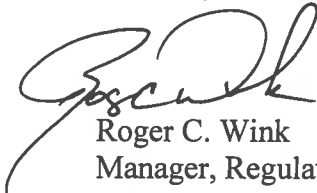
By letter dated September 14, 2015 (ADAMS Accession Number ML15258A432), and pursuant to 10 CFR 50, Section 50.55a(g)(5)(iii), Union Electric Company (Ameren Missouri) requested relief from the requirements of the ASME Code, Section XI, in regard to certain weld examinations performed during the third 10-year interval for the inservice inspection (ISI) Program at Callaway Plant. Four specific relief requests were submitted for the third 10-year ISI interval, for which the code of record was the 1998 Edition, through the 2000 Addenda of ASME Code, Section XI. In particular, per Relief Request I3R-08, relief was requested from the Code required "essentially 100 percent" volumetric examination coverage requirements applicable to specified welds in the Reactor Coolant System, Residual Heat Removal System, Chemical and Volume Control System, and Containment Spray System.

During its review of Relief Request I3R-08, the NRC staff determined that requests for additional information (RAIs) were needed to complete its review of the relief request. The NRC transmitted a list of RAIs to Ameren Missouri in electronic form on June 7, 2016, and requested that responses be provided within 30 days. The responses to the RAIs are provided in the Attachment to this letter.

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This letter contains no new commitments. If there are any questions, please contact Tom Elwood at 314-225-1905.

Sincerely,

 6581
7/7/16
Roger C. Wink
Manager, Regulatory Affairs

JPK/tlw

Attachment: Response to Request for Additional Information - Third 10-Year Interval Inservice Inspection Request for Relief No. I3R-08

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**Attachment to
ULNRC-06321**

**Response to Request for Additional Information
Third 10-Year Interval Inservice Inspection
Request for Relief No. I3R-08**

3 Pages

**REQUEST FOR ADDITIONAL INFORMATION
THIRD 10-YEAR INTERVAL INSERVICE INSPECTION
REQUEST FOR RELIEF NO. I3R-08
UNION ELECTRIC COMPANY
CALLAWAY PLANT, UNIT 1
DOCKET NO. 50-48**

1.0 SCOPE

By letter dated September 14, 2015 (Agencywide Documents Access and Management System (ADAMS) at Accession Number ML15258A432), Union Electric Company (dba Ameren Missouri), the licensee, requested relief from the requirements of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME BPV Code), Section XI, for Callaway Plant, Unit 1 (Callaway) under the provisions of Title 10 of the Code of Federal Regulations (10 CFR), Part 50, Section 50.55a(g)(5)(iii), for the third 10-year inservice inspection (ISI) Program. Request for Relief (RR) No. I3R-08 applies to the third 10-year ISI interval, in which the licensee adopted the 1998 Edition, through the 2000 Addenda of ASME Code, Section XI as the code of record.

2.0 REGULATORY BASIS

2.1 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 addenda as a way to detect anomaly and degradation indications so that structural integrity of these components can be maintained. This is required by 10 CFR 50.55a(g), except where specific relief has been granted by the Commission pursuant to 10 CFR 50.55a(g)(6)(i). Section 10 CFR 50.55a(g)(5)(iii) states that the licensee must notify the U.S. Nuclear Regulatory Commission (NRC) and submit information to support its determinations that conforming with an ASME Code requirement is impractical for its facility. Determinations of impracticality in accordance with this section must be based on the demonstrated limitations experienced when attempting to comply with the Code requirements during the ISI interval for which the request is being submitted.

Pursuant to 10 CFR 50.55a(g)(4), components (including supports) that are classified as ASME Code Class 1, Class 2, and Class 3 must meet the requirements, except design and access provisions and preservice examination requirements, set forth in Section XI of editions and addenda of the ASME Code, that become effective subsequent to editions specified in paragraphs (g)(2) and (3) of this section, to the extent practical within the limitations of design, geometry, and materials of construction of the components.

3.0 REQUEST FOR ADDITIONAL INFORMATION

3.1 *Table 1 of the relief request states that the material listed is austenitic stainless steel. It is unclear if the pipe is austenitic stainless steel. Please also confirm that the weld*

material and the associated components (valve, elbow, tee, and flange) of Table 1 are austenitic stainless steel. If valve, elbow, tee, and flange are cast austenitic stainless steel, please describe.

Response:

All welds and the associated pipe are austenitic stainless steel material, and the attached components are forged austenitic stainless steel material.

3.2 Provide ASME Code classification (e.g., Class 1 or 2), operating pressure and temperature for each weld.

Response:

Operating pressure and temperature and pressure for each weld are provided in Table 3 below. Please note that the weld number for the last entry in the table has been changed from "2-EN-01-07006541-010-FW04" to "2-EN-02-07006541-010-FW04," to correct a typographical error that was present in Table 1 and Table 2 of the previously submitted I3R-08.

Table 3

Weld No.	ASME Code Classification	Operating Pressure, psig	Operating Temperature, °F
2-BG-23-FW150	1	2196	558
2-BG-21-F013	1	2285	558
2-BB-02-S001-J	1	2235	.653
2-BB-02-F019	1	2235	653
2-BG-21-F012	1	2285	558
2-EJ-04-S001-J	2	480	280
2-EJ-01-S010-A	2	542	350
2-BB-08-V121-2	1	2510	186
2-BB-04-F014	1	2235	653
2-BG-02-S046-A	2	1519	186
2-BB-04-F004	1	2235	653
2-BB-08-FW047	1	2510	186
2-HB-24-FW002	1	2196	558
2-BB-08-FW052-B	1	2510	186
2-BG-02-FW040	2	2510	186
2-EN-01-07006540-010-FW04	2	50	250
2-EN-02-07006541-010-FW04	2	50	250

- 3.3 *Confirm that the welds under consideration are not part of an augmented inspection program such as ASME Code Case N-770-1, MRP-146, and/or the Electric Power Research Institute (EPRI) interim guidance, MRP 2015-025, "EPRI-MRP Interim Guidance for Management of Thermal Fatigue" (Accession Number ML15189A100). If these welds are part of an augmented program, please describe.*

Response:

The identified welds are not part of an augmented inspection program.

- 3.4 *For the welds in Table 1 listed as being subject to thermal fatigue, were there other welds composed of the same materials and subject to similar environmental conditions which were examined? If so, please describe these examinations and their results.*

Response:

No. During the risk-informed weld selection process, wherever possible, welds that are not obstructed were selected. Any similar welds selected would also be obstructed.

- 3.5 *For the welds in Table 1 listed as being subject to thermal fatigue, are there additional welds composed of the same materials and subject to the similar environmental conditions which could be examined in the future to provide additional inspection coverage should the NRC staff determine that the coverage achieved for the welds under consideration is not adequate?*

Response:

Callaway performs separate augmented inspections in accordance with MRP-146 for locations (basemetal and welds) susceptible to thermal fatigue. To date, these inspections (last performed in April 2016) have not identified any degradation as a result of thermal fatigue or any other degradation mechanism.