



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

December 24, 2013

Mr. Adam C. Heflin
Senior Vice President and
Chief Nuclear Officer
Union Electric Company
P.O. Box 620
Fulton, MO 65251

**SUBJECT: CALLAWAY PLANT, UNIT 1 – REQUEST FOR ADDITIONAL INFORMATION
RE: I3R-15, PROPOSED ALTERNATIVE REGARDING PRESSURE
RETAINING BOUNDARY DURING SYSTEM LEAKAGE TEST (TAC NO.
MF2921)**

Dear Mr. Heflin:

By letter dated October 17, 2013, Union Electric Company (dba Ameren Missouri, the licensee) submitted to the U.S. Nuclear Regulatory Commission (NRC) for approval request for alternative (RFA) I3R-15 for the Callaway Plant, Unit 1. The licensee proposed an alternative to certain requirements of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code), Section XI, regarding the scope of Class 1 pressure retaining piping and components required to be included in system leakage testing at a pressure corresponding to 100 percent power operation, as specified in Paragraph IWB-5222(b) of the ASME Code.

The NRC staff has reviewed the information provided in your application and determined that additional information is required in order to complete its formal review. The enclosed questions were provided to T. Elwood of your staff on December 17, 2013.

A. Heflin

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Please provide a response to the enclosed questions by January 31, 2014. If you have any questions, please contact me at 301-415-2296 or via e-mail at fred.lyon@nrc.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "C. F. Lyon".

Carl F. Lyon, Project Manager
Plant Licensing Branch IV-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-483

Enclosure:
Request for Additional Information

cc w/encl: Distribution via Listserv

REQUEST FOR ADDITIONAL INFORMATION
I3R-15, PROPOSED ALTERNATIVE REGARDING
PRESSURE RETAINING BOUNDARY DURING SYSTEM LEAKAGE TEST
UNION ELECTRIC COMPANY
CALLAWAY PLANT, UNIT 1
DOCKET NO. 50-483

By letter dated October 17, 2013 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML13291A041), Union Electric Company (dba Ameren Missouri, the licensee) submitted to the U.S. Nuclear Regulatory Commission (NRC) for approval request for alternative (RFA) I3R-15. The licensee proposed an alternative to a certain requirement of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME Code), Section XI. RFA I3R-15 relates to the inservice inspection (ISI) requirement of IWB-5222(b) during system leakage tests at the Callaway Plant, Unit 1.

The NRC staff has reviewed the information provided in the application and determined that the additional information is required in order to complete its formal review.

1. Please provide additional discussion as requested below for the basis for hardship for not meeting the ASME Code system leakage test requirements of IWB-5222(b) for the Group 1, 2, 3, 4, and 5 piping system identified in Section 1 of RFA I3R-15. For example, refer to the request for Sequoyah, ADAMS Accession No. ML13178A280.
 - a. Discuss potential personnel safety hazards that could be introduced if each group of piping is subjected to the system leakage test in accordance with IWB-5222(b). Examples include occupational hazards, risk for spills, contaminations, and exposure to unwanted excess radiations.
 - b. Provide an estimate for person-rem (roentgen equivalent man) exposure with consideration of as low as reasonably achievable (ALARA).
 - c. Discuss whether the leakage test in accordance with the IWB-5222 requirements could cause a reactor trip or violate any requirement(s) of the technical specifications (TS).
2. Discuss whether alternative options, such as the use of external pressure source, and temporary or permanent modifications, such as installing temporary or permanent piping to facilitate performance of the required system leakage test in accordance with IWB-5222, have been considered and determined to be not practical options.

Enclosure

3. For justification that the structural integrity or leak tightness of each group of piping identified in RFA I3R-15 will be reasonably ensured, without the required extension in pressure retaining boundary during system leakage test, discuss whether there has been any industry or plant-specific operating experience regarding potential degradation of the welded connections in the piping and components identified in RFA I3R-15 due to known degradation mechanisms that would lead to leakage.

A. Heflin

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Please provide a response to the enclosed questions by January 31, 2014. If you have any questions, please contact me at 301-415-2296 or via e-mail at fred.lyon@nrc.gov.

Sincerely,
/RA/

Carl F. Lyon, Project Manager
Plant Licensing Branch IV-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-483

Enclosure:
Request for Additional Information

cc w/encl: Distribution via Listserv

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LPL4-1 Reading

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ADAMS Accession No.: ML13358A030

*email dated

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