

August 10, 2005

U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Mail Stop P1-137  
Washington, DC 20555-0001

Ladies and Gentlemen:

ULNRC-05185  
10 CFR 50.55a



**DOCKET NUMBER 50-483  
UNION ELECTRIC COMPANY  
CALLAWAY PLANT  
REQUEST FOR RELIEF FROM  
ASME SECTION XI CODE INSERVICE EXAMINATION REQUIREMENTS**

Pursuant to 10 CFR 50.55a(a)(3), Union Electric Company (AmerenUE) hereby requests NRC approval of the attached relief request (i.e., 10 CFR 50.55a request) for the examination of snubbers at Callaway. The relief request (attached and identified as 10 CFR 50.55a Request Number I3R-03) is for the third 10-year interval of Callaway's Inservice Inspection (ISI) Program, which begins December 19, 2005. The Code Edition(s) and Addenda applicable to Callaway for its third 10-year ISI interval are ASME Boiler and Pressure Vessel Code, Section XI 1998 Edition through 2000 Addenda, and ASME/ANSI OM, Part 4, 1987 Edition with OMa-1998 Addenda.

The relief request would allow snubbers to continue to be inspected in accordance with the test program defined in Section 16.7.2 of the Callaway Final Safety Analysis Report (FSAR) in lieu of the applicable Code requirements specified in Article IWF-5000, "Inservice Inspection Requirements for Snubbers," Subarticles IWF-5200 and IWF-5300 (as directed by the above-noted Code Edition(s) and Addenda). The snubber test program defined in FSAR Section 16.7.2 is the NRC-approved program that was previously specified in the Callaway Technical Specifications (Appendix A of the Operating License), i.e., until the applicable Technical Specification requirements were relocated to Chapter 16 of the FSAR based on application of the Final Policy Statement on Technical Specification Improvement (1994 timeframe). The snubber visual inspection schedule specified

A047

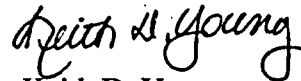
ULNRC-05185  
August 10, 2005  
Page 2

per FSAR Section 16.7.2 (and as formerly specified in the Callaway Technical Specifications) is in accordance with the "alternative" schedule recommended by NRC Generic Letter 09-09, which continues to be an NRC-accepted approach at many licensed facilities today.

Supporting information and additional justification for the requested relief is provided in the attachment. It may be noted that no new regulatory commitments have been made or identified pursuant to this letter and its attachment.

Please contact us for any questions you may have regarding this request.

Sincerely,



Keith D. Young  
Manager - Regulatory Affairs

TBE/jdg

Attachment: 10 CFR50.55a Request Number I3R-03

ULNRC-05185  
August 10, 2005  
Page 3

cc: U.S. Nuclear Regulatory Commission (Original and 1 copy)  
Attn: Document Control Desk  
Mail Stop P1-137  
Washington, DC 20555-0001

Mr. Bruce S. Mallett  
Regional Administrator  
U.S. Nuclear Regulatory Commission  
Region IV  
611 Ryan Plaza Drive, Suite 400  
Arlington, TX 76011-4005

Senior Resident Inspector  
Callaway Resident Office  
U.S. Nuclear Regulatory Commission  
8201 NRC Road  
Steedman, MO 65077

Mr. Jack N. Donohew (2 copies)  
Licensing Project Manager, Callaway Plant  
Office of Nuclear Reactor Regulation  
U. S. Nuclear Regulatory Commission  
Mail Stop 7E1  
Washington, DC 20555-2738

Missouri Public Service Commission  
Governor Office Building  
200 Madison Street  
PO Box 360  
Jefferson City, MO 65102-0360

## **10 CFR 50.55a Request Number I3R-03**

### **Proposed Alternative In Accordance with 10 CFR 50.55a(a)(3)(i)**

#### **Alternative Provides Acceptable Level of Quality and Safety**

**1. ASME Code Components Affected**

All safety-related ASME Section XI Code Class 1, 2, and 3 snubbers.

**2. Applicable Code Edition and Addenda**

ASME Boiler and Pressure Vessel Code, Section XI 1998 Edition through 2000 Addenda  
ASME/ANSI OM, Part 4, 1987 Edition with OMa-1988 Addenda

**3. Applicable Code Requirement**

The applicable Code requirements are specified in Article IWF-5000, "Inservice Inspection Requirements for Snubbers," Subarticles IWF-5200 and IWF-5300:

- (a) Preservice/Inservice examinations shall be performed in accordance with ASME/ANSI OM, Part 4, using the VT-3 visual examination method described in IWA-2213.
- (b) Preservice/Inservice tests shall be performed in accordance with ASME/ANSI OM, Part 4.
- (c) Integral and non-integral attachments for snubbers, including lugs, bolting, pins, and clamps, shall be examined with the requirements of this Subsection.

**4. Reason for Request**

ASME Section XI, 1998 Edition through 2000 Addenda, Subarticles IWF-5200 and IWF-5300 specifies that snubber preservice/inservice examinations and tests be performed in accordance with ASME/ANSI OM, Part 4, as noted above. However, snubber examinations and tests at Callaway Plant are currently performed in accordance with the program described in Callaway Plant Final Safety Accident Report (FSAR) Section 16.7.2, "Snubbers." To resolve this conflict, relief is requested from the requirements of Article IWF-5000 (Subarticles IWF-5200 and IWF-5300) to allow snubbers to continue to be tested in accordance with FSAR Section 16.7.2, in lieu of the noted Code requirements.

The current inspection/testing program as defined by the FSAR provides for an acceptable level of quality and safety equal to or greater than that of ASME/ANSI OM, Part 4.

## 5. Proposed Alternative and Basis for Use

In lieu of implementing the requirements of Subarticle IWF-5200 and IWD-5300, it is proposed that the preservice/in-service examination and testing be performed under Callaway Plant FSAR, 16.7.2, "Snubbers."

### Visual Snubber Examinations

The Callaway Plant FSAR lists visual examination requirements for snubbers that are compatible with Section XI VT-3 requirements. IWF-5000 requires that examinations be performed using the VT-3 visual examination method described in IWA-2213. IWA-2213 reads as follows:

VT-3 examinations are conducted to determine the general mechanical and structural condition of components and their supports by verifying parameters such as clearances, settings, and physical displacements; and to detect discontinuities and imperfections, such as loss of integrity at bolted or welded connections, loose or missing parts, debris, corrosion, wear, or erosion. VT-3 includes examinations for conditions that could affect operability or functional adequacy of snubbers and constant load and spring supports.

The Callaway Plant FSAR states:

Visual inspections shall verify that: (1) There are no visible indications of damage or impaired OPERABILITY, (2) Attachments to the foundation or support structure are functional, and (3) Fasteners for the attachment of the snubber to the component and to the snubber anchorage are functional.

The Callaway Plant procedure that implements the FSAR snubber inspections identifies the following as unacceptable conditions:

- Indication of damage or impaired operability.
- Dysfunctional attachments to foundation or supporting structure.
- Dysfunctional fasteners securing snubber to component and foundation or supporting structure.
- Damage, deterioration, or deformation of snubber, snubber attachment, structural steel or concrete.
- Extensive corrosion on the support cylinder or housing snap ring.
- Arc strikes anywhere on the component support.
- Weld or paint splatter or other roughness of the support cylinder located in an area which could impede movement of the snubber.
- Obvious signs of binding.
- Missing bolts, load pins, connections or other type fasteners which are designed to be under load.

- Weld cracks.
- Dysfunctional load pins.
- Fully dislodged spherical bearings.
- Piping or component interference with snubber unless interference is in the designed direction of motion.
- Rotational binding that prevents the snubber from moving as designed.
- Missing cotter pins or locking devices.
- Insulation interferences.

The differences between the requirements of IWA-2213 and the Callaway Plant FSAR are primarily semantic in nature. The intent and scope of the two documents are essentially equal, although the code wording is more detailed than the FSAR in listing specific items to be included. However, those items are intuitive to meeting the FSAR requirements and are more specifically addressed in the implementing procedure that closely parallels the code listing. FSAR examinations are performed by personnel that are qualified to perform VT-3 examinations per IWA-2300.

The Callaway Plant FSAR also incorporates the reduced visual examination frequency table as provided in NRC Generic Letter 90-09. This results in a significant reduction in unnecessary radiological exposure to plant personnel, a savings in company resources, and compliance with visual examination requirements while maintaining the same confidence level in snubber operability as that provided by following Section XI requirements.

### Snubber Testing

The Callaway Plant FSAR snubber testing requirements for snubbers are compatible with ASME/ANSI OM, Part 4. ASME/ANSI OM, Part 4, states:

Snubber operational readiness test shall verify the following:

- (a) activation is within the specified range of velocity or acceleration in tension and in compression;
- (b) release rate, when applicable, is within the specified range in tension and in compression. For units specifically required not to displace under continuous load, ability of the snubber to withstand load without displacement;
- (c) for mechanical snubbers, drag force is within specified limits, in tension and in compression.

The Callaway Plant FSAR states:

The snubber functional test shall verify that:

- a. Activation (restraining action) is achieved within the specified range in both tension and compression;

- b. Snubber bleed, or release rate where required, is present in both tension and compression, within the specified range, and
- c. For mechanical snubbers, the force required to initiate or maintain motion of the snubber is within the specified range in both directions of travel.

Testing methods may be used to measure parameters indirectly or parameters other than those specified if those results can be correlated to the specified parameters through established methods.

The Callaway Plant FSAR snubber testing program provides for comprehensive and conservative requirements that are effective in providing a reliable snubber population. This results in increased confidence in plant safety. The use of the Callaway Plant FSAR addresses the intent and scope of the requirements Section XI Article IWF-5000 in a single governing document that can be consistently applied.

6. **Duration of Proposed Alternative**

Snubber visual examination and testing will be scheduled and performed in accordance with FSAR 16.7.2, "Snubbers," throughout the entire third 120-month inspection interval.

7. **Precedents**

None