

February 28, 2007

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

Ladies and Gentlemen:

ULNRC-05373



**DOCKET NUMBER 50-483
CALLAWAY PLANT UNIT 1
UNION ELECTRIC CO.
ACTIONS FOR ADDRESSING CONCERNS REGARDING
PRESSURIZER ALLOY 82/182 BUTT WELDS**

In October of 2006, while performing inspections of its pressurizer Alloy 82/182 butt welds in accordance with MRP-139, a PWR licensee discovered several circumferential indications in its pressurizer surge, safety and relief nozzles. Because of the potential importance of this issue, AmerenUE (Union Electric) submitted letter ULNRC-05360, "Inspection/Mitigation Plans for Alloy 82/182 Pressurizer Butt Welds," dated January 31, 2007 to notify the NRC of actions being taken or planned with regard to Alloy 82/182 butt welds on the pressurizer spray, surge, safety, and relief lines at Callaway Plant.

As described in the January 31 letter, a mitigation activity for addressing this issue is planned for Callaway Plant in which pre-emptive full structural weld overlays are to be applied to the nozzle-to-safe end dissimilar metal and safe-end-to piping stainless steel butt welds associated with the pressurizer and connected piping. This activity will be completed during the forthcoming refueling outage (RF-15) which is scheduled to commence on April 2, 2007. Completion of this activity during RF-15 was identified as a commitment in the January 31 letter.

Besides the planned mitigation activity, and as an interim action until commencement of RF-15, AmerenUE also described in its January 31 letter how it will continue to monitor reactor coolant system (RCS) leakage (i.e., unidentified leakage) in accordance with the leakage monitoring program in place at Callaway. The monitoring method, the overall sensitivity to an increase in RCS leakage, the thresholds levels at which action would be taken, and the actions themselves that would be taken if required, were all summarized in the letter.

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Subsequent to submittal of the January 31 letter, however, and based on a telephone conference that was conducted between NRC and AmerenUE personnel on February 21, 2007, AmerenUE agreed to revise/enhance the RCS leakage monitoring program described in its January 31 letter and to formally commit to implementing an enhanced leakage monitoring program.

Accordingly, the enhanced RCS leakage monitoring program for Callaway Plant is described in Attachment 1 to this letter. The description/information provided in the attachment supersedes the description/information that was provided in the January 31 letter. Further, AmerenUE hereby commits to implementing the enhanced leakage monitoring program described in Attachment 1 on or by February 28, 2007. This commitment is identified as such in Attachment 2 to this letter.

It should be noted that the commitment and descriptive information provided in regard to the mitigation activity planned for RF-15, as well as the summary information that was provided regarding the bare metal visual inspections that were performed at Callaway for the pressurizer nozzle welds, remain unchanged from what was contained in the January 31 letter. That information and commitment are thus not repeated in this letter. However, one additional commitment should be made in light of the fact that AmerenUE's January 31 letter did not mention reporting of the details associated with the follow-up inspections to be performed for the pressurizer weld overlays after installation during RF-15, as desired by the NRC. Such a report is to be provided within 60 days following restart from RF-15. A commitment to provide the report is hereby made in this letter, and this commitment is included in Attachment 2.

For any questions regarding the information provided in this letter or its attachments, please contact me at 573-676-8763 or David E. Shafer at either 314-554-3104 or 573-676-4722. AmerenUE hereby notes that the NRC will be informed if any of the information contained in this letter or its attachments is to be revised. (This is identified as a commitment in Attachment 2.)

Sincerely,



David T. Fitzgerald
Manager - Regulatory Affairs

TBE/jdg

- Attachments: 1. Enhanced Reactor Coolant System (RCS) Leakage Monitoring Program for Callaway Plant
2. List of Commitments

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**Enhanced Reactor Coolant System (RCS)
Leakage Monitoring Program for Callaway Plant**

RCS Leakage Monitoring Frequency ⁽¹⁾⁽²⁾	RCS Leakage Monitoring Action Levels	RCS Leakage Monitoring Actions	Reporting
Daily (i.e., at least once per 24 hours) during MODES 1, 2, 3.	<p>(1) A 0.1 gpm increase in unidentified leakage from the previous day, such that the additional leakage is sustained for 72 hours, with at least 0.1 gpm not confirmed from sources other than pressurizer nozzle welds.</p> <p><u>OR</u></p> <p>(2) A 0.25 gpm increase above a baseline leak rate for unidentified leakage, such that the additional leakage is sustained for 72 hours, with at least 0.25 gpm not confirmed from sources other than the pressurizer nozzle welds.⁽³⁾</p>	With a leakage increase at or above the threshold value and sustained for 72 hours [per (1) or (2) at left], place the unit in MODE 3 within 6 hours and in MODE 5 within 36 hours and perform a bare metal visual inspection of the pressurizer surge, spray, safety, and relief nozzle butt welds containing alloy 82/182 material.	Report details of bare metal visual inspection results (if bare metal inspection is required per the specified Action at left) within 60 days of the unit restart.

Notes:

1. The provision of Technical Specification (TS) Surveillance Requirement (SR) 3.0.2 (i.e., 25% overrun) is applicable to the Frequency specified here.
2. As specified in Callaway TS 3.4.13, "RCS Operational Leakage," performance of the RCS water inventory balance per SR 3.4.13.1 (for verifying that RCS operational leakage is within limits) is not required until 12 hours after establishing steady-state operation upon restart. The basis for this provision (and therefore the provision itself) applies here as well, in the event of an unplanned plant shutdown and restart prior to RF-15.
3. During the telecon conducted with NRC staff personnel on February 21, 2007, it was discussed how the baseline leak rate would be established from values that were recorded during the first 7 days after attaining steady-state full-power operation upon restart from RF-14 (Fall 2005). Subsequent to the telecon, however, it was determined that the discussed approach (which would have been based on values obtained from 11/26/05 to 12/4/05) would have yielded a non-conservatively high baseline value due to the more extended time it took achieve an average steady-state unidentified leakage value after restart from RF-14. Instead, values obtained during the period from 12/6/05 to 12/31/05 were used to determine the average unidentified leakage subsequent to RF-14, which established a more conservative (lower) baseline value for the purposes of the enhanced leakage monitoring program. This approach was discussed and accepted by the NRC via electronic mail on 2/22/07.

LIST OF COMMITMENTS

The following table identifies actions committed to by AmerenUE in this document (letter). Any other statements in this document (letter) are provided for information purposes and are not considered commitments. Please direct questions regarding this commitment to David E. Shafer, Superintendent, Licensing at either 314-554-3104 or 573-676-4722.

COMMITMENT	Due Date/Event
Callaway Plant will implement and conform to the enhanced RCS leakage monitoring program, including the specified shutdown actions as required, which is described in Attachment 1.	To begin on or by February 28, 2007 and continue until plant shutdown for RF-15.
Details concerning results of the follow-up inspections to be performed on the pressurizer weld overlays installed during RF-15 will be reported to the NRC.	Within 60 days following plant restart from RF-15.
The NRC will be informed if AmerenUE revises any of the information contained in this letter (ULNRC-05373) (including its attachments).	Prior to revision of the information.