

January 31, 2007

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

Ladies and Gentlemen:

ULNRC-05360



**DOCKET NUMBER 50-483  
CALLAWAY PLANT UNIT 1  
UNION ELECTRIC CO.  
INSPECTION/MITIGATION PLANS FOR  
ALLOY 82/182 PRESSURIZER 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) is submitting this letter 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.

The action being taken at Callaway Plant is a mitigation activity to be implemented during the forthcoming refueling outage (RF-15) which is scheduled to commence on April 2, 2007. Specifically, the activity planned is the application of pre-emptive full structural weld overlays for the nozzle-to-safe end dissimilar metal and safe-end-to piping stainless steel butt welds associated with the pressurizer and connected piping. Because pre-emptive full structural weld overlays are to be applied to the noted nozzle welds, no pre-mitigation inspections are planned.

A 10 CFR 50.55a request to support the planned installation and examination of overlays was submitted by AmerenUE via letter ULNRC-05292, "10 CFR 50.55a Request for Relief from ASME Section XI Repair and Replacement Requirements: Proposed Alternatives for Application of Structural Weld Overlays to Pressurizer Nozzle Welds," dated August 14, 2006. The 10 CFR 50.55a request is currently under review by the NRC staff. Details regarding the pre-emptive full structural weld overlays were provided in the 10 CFR 50.55a request. However, mitigation summary information is provided in Attachment 1 to this letter.

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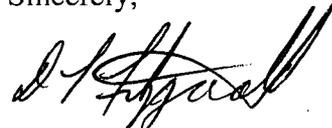
It should be noted that bare metal visual (BMV) inspections of the Alloy 82/182 butt welds on the pressurizer spray, surge, safety, and relief lines at Callaway Plant were completed in the Spring of 2004 (during Refuel 13) and Fall of 2005 (during Refuel 14). Those inspections revealed no cracking or leakage.

Nevertheless, with Callaway Plant currently at power, and until commencement of the refuel outage on April 2, reactor coolant system (RCS) leakage will continue to be monitored in accordance with current requirements and procedures. Highlights of the RCS leakage monitoring program at Callaway Plant are as follows:

- RCS monitoring method employed: RCS inventory balancing every 3 days.
- Overall sensitivity to RCS leakage: An increase of 0.03 gpm since previous balancing.
- Action levels: An absolute unidentified leakage  $\geq 0.2$  gpm, or an increase of 0.03 gpm since previous balancing.
- Responses to exceeding action levels: Initiation of actions to review indication of RCS leakage and determine cause, which may include review of containment humidity, radiation, and sump level indication.

For any questions regarding the mitigation plans or any of 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. The NRC will be informed if AmerenUE revises any of the information contained in this letter.

Sincerely,



David T. Fitzgerald  
Manager - Regulatory Affairs

TBE/jdg

Attachments: 1. Mitigation Information Table  
2. List of Commitments

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***(Certrec receives ALL attachments  
as long as they are non-safeguards  
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## MITIGATION INFORMATION TABLE

### Mitigation Summary for Alloy 82/182 Pressurizer Butt Welds

Nozzle		MRP-139 Volumetric Inspection Requirement to Be Met		Mitigation to Be Completed	Comments
Function/ Designation	Susceptible Material Description	Outage Designation	Start Date (MM/YYYY)	Outage Designation	
Spray	82/182	Refuel 15	04/2007	Refuel 15	See Note 1 (below).
Surge	82/182	Refuel 15	04/2007	Refuel 15	See Note 1 (below).
Safety X	82/182	Refuel 15	04/2007	Refuel 15	See Note 1 (below).
Safety Y	82/182	Refuel 15	04/2007	Refuel 15	See Note 1 (below).
Relief - Z	82/182	Refuel 15	04/2007	Refuel 15	See Note 1 (below).
Relief - T	82/182	Refuel 15	04/2007	Refuel 15	See Note 1 (below).

Note 1: The existing weld contours limit the capability to perform volumetric inspections of the existing welds. Therefore, inspections of the weld overlays are to be performed after overlay installation.

### LIST OF COMMITMENTS

The following table identifies an action 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.

<b>COMMITMENT</b>	<b>Due Date/Event</b>
Pre-emptive full structural weld overlays for the nozzle-to-safe end dissimilar metal and safe end-to-piping stainless steel butt welds associated with the pressurizer and connected piping at Callaway will be installed and examined during Refuel 15.	Prior to completion of Refuel 15 outage.
The NRC will be informed if AmerenUE revises any of the information contained in this letter (ULNRC-05360).	Upon revision of any of the information contained in this letter.