

April 10, 2008

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

ULNRC-05504



Ladies and Gentlemen:

**DOCKET NUMBER 50-483  
CALLAWAY PLANT UNIT 1  
UNION ELECTRIC CO.  
FACILITY OPERATING LICENSE NPF-30  
THREE-MONTH RESPONSE TO NRC GENERIC LETTER 2008-01,  
"MANAGING GAS ACCUMULATION IN EMERGENCY CORE COOLING,  
DECAY HEAT REMOVAL, AND CONTAINMENT SPRAY SYSTEMS"  
(TAC NO. MD7806)**

The Nuclear Regulatory Commission (NRC) issued Generic Letter (GL) 2008-01 to request that each licensee evaluate the licensing basis, design, testing, and corrective action programs for the Emergency Core Cooling System (ECCS), Residual Heat Removal (RHR) system, and Containment Spray system to ensure that gas accumulation is maintained less than the amount that challenges operability of these systems, and that appropriate action is taken when conditions adverse to quality are identified. In accordance with the Generic Letter, this 3-month response letter is being submitted because Union Electric Company (AmerenUE) will not be able to complete all of the evaluations required by the GL within the specified completion date of 9 months from the date of the Generic Letter.

The NRC, in GL 2008-01, requested each licensee to submit a written response in accordance with 10 CFR 50.54(f) within 9 months of the date of the GL to provide the following information:

- (a) A description of the results of evaluations that were performed pursuant to the requested actions of the GL. This description should provide sufficient information to demonstrate that the licensee is or will be in compliance with the quality assurance criteria in Sections III, V, XI, XVI, and XVII of

Appendix B to 10 CFR Part 50 and the licensing basis and operating license as those requirements apply to the subject systems of the GL;

(b) A description of all corrective actions, including plant, programmatic, procedure, and licensing basis modifications that the licensee determined were necessary to assure compliance with these regulations; and

(c) A statement regarding which corrective actions were completed, the schedule for completing the remaining corrective actions, and the basis for that schedule.

Additionally, the NRC requested that if a licensee cannot meet the requested 9-month response date, the licensee "shall provide a response within 3 months of the date of this GL" in which the licensee is expected to describe the alternative course of action that it proposes to take, including the basis for the acceptability of the proposed alternative course of action. Pursuant to this provision and guidance, Enclosure I to this letter provides AmerenUE's 3-month response to GL 2008-01. Also provided is Enclosure II which identifies a commitment for making a final response to the Generic Letter.

Please contact Tom Elwood, Supervising Engineer, Regulatory Affairs and Licensing at 573-676-6479 for any questions you may have regarding this issue.

I declare under penalty of perjury that the foregoing is true and correct.

Sincerely,

Executed on: 4-10-08



Luke H. Graessle  
Manager, Regulatory Affairs

BFH/nls

Enclosures: I Generic Letter 2008-01 3 Month Response  
II List of Commitments

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**THREE-MONTH RESPONSE TO NRC GENERIC LETTER 2008-01,  
“MANAGING GAS ACCUMULATION IN EMERGENCY CORE COOLING,  
DECAY HEAT REMOVAL, AND CONTAINMENT SPRAY SYSTEMS”**

This response to Generic Letter (GL) 2008-01, “Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems,” constitutes the 3-month response requested in the GL. This response discusses:

- 1) the required evaluations that will not be complete by October 11, 2008 (9 months from the date of GL 2008-01),
- 2) the alternative course of action planned, and
- 3) the basis for the acceptability of the alternative course of action.

As noted in the Requested Information section of GL 2008-01, the licensee is asked to provide information that includes “a description of the results of evaluations that were performed [pursuant to the requested actions specified in the GL].” The evaluations are those required to ensure that gas accumulations are maintained less than the amount that challenges operability of the noted systems. For some piping segments the existing drawings may not be sufficiently accurate to complete the required evaluations, and consequently, walkdowns are required to accurately assess the configurations (i.e., verify system high point vent locations and piping layouts).

In some cases, it will not be possible to perform the walkdown(s) of the affected piping segments before October 11, 2008 because of the need for a refueling outage to perform the walkdown(s) (i.e., the walkdowns cannot be performed during plant operation). The next refueling outage for Callaway Plant is Refuel 16 which is scheduled for the Fall 2008. (The outage is currently scheduled to begin on October 11.) Therefore, the requested evaluations for these piping segments will not be complete by October 11, 2008 since they are to be done during the refueling outage.

The walkdown(s) for these piping segments will not be completed until the refueling outage due to the following reasons.

- Scaffolding needs to be erected,
- Insulation needs to be removed from piping,
- System operability could be impacted by the walkdown/inspection activities,
- High radiation areas during power operation would need to be entered, and/or
- Prolonged containment entries during power operation would need to be made.

As noted above, during the walkdowns of piping in the systems identified in GL 2008-01, numerous levelness readings will be completed via civil surveying, a carpenter’s level, or some other acceptable method on insulated and uninsulated piping identified as having the potential for gas accumulation.

Prior to Refuel 16, Engineering will complete the system walkdowns for piping that is outside of the Containment Building. In addition, numerous levelness readings will be completed on uninsulated piping and insulated piping with the insulation in place outside the Containment Building. If insulation removal is required for levelness measurements and the removal of the insulation would not cause a system to be inoperable, this will be performed prior to Refuel 16.

During Refuel 16, Engineering will complete the system walkdowns for piping that is inside of the Containment Building. In addition, numerous levelness readings will be completed on insulated and uninsulated piping inside the Containment Building. For insulated piping outside the Containment Building that could not be evaluated due to system operability issues during plant operation, levelness readings of that piping will also be completed during Refuel 16.

It should be noted that, in the past, Callaway has experienced some limited gas voiding in ECCS piping. This resulted in a limited evaluation of the safety injection (SI) discharge piping and the installation of 4 additional local vents that are used to fill and vent the SI discharge piping. In addition, two vents were installed on the containment spray pump casing to allow gas venting. The associated system procedures and surveillance were evaluated and revised to incorporate this information. Callaway performs monthly venting of the ECCS vent points in accordance with the Technical Specifications and performs limited UT measurements around vent points to verify no gas voids. Since implementing these actions, Callaway has not identified any significant gas voiding issues.

Based on the current design basis (previous drawing reviews and/or design basis verifications), plant specific operational experience noted above, and the results of previous system inspections and modifications, AmerenUE has concluded that the subject systems are in compliance with the current licensing and design bases and applicable regulatory requirements, and that suitable design, operational, and testing control measures are in place for maintaining this compliance.

With regard to the evaluations required per GL 2008-01 and the intended timeframe for completing the response to the GL, AmerenUE intends to perform all of the required evaluations by the end of the Refuel 16 outage such that the information requested in GL 2008-01 will be provided within 60 days following the end of the Refuel 16 outage. This commitment, as proposed, is summarized in Enclosure II.

**LIST OF COMMITMENTS**

The following table identifies those actions committed to by AmerenUE in this document. Any other statements in this document are provided for information purposes and are not considered commitments. Please direct questions regarding these commitments to Tom Elwood, Supervising Engineer, Regulatory Affairs and Licensing at 573-676-6479.

<b>COMMITMENT</b>	<b>Due Date/Event</b>
Submit the Generic Letter 2008-01 requested information to the NRC.	Within 60 days following the end of the Refuel 16 outage.