

July 21, 2003



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

ULNRC-04867

Ladies and Gentlemen:

**REPLY TO NOTICE OF VIOLATION  
INSPECTION REPORT NO. 50-483/2003-008  
CALLAWAY PLANT  
UNION ELECTRIC CO.**

This responds to Mr. Thomas P. Gwynn's letter dated June 20, 2003, which transmitted a Notice of Violation for events discussed in Inspection Report 50-483/2003-08 and Enforcement Action EA-03-060. Our response to the violation is presented in the attachment.

None of the material in the response is considered proprietary by Union Electric. No new commitments are being made in this correspondence.

If you have any questions regarding this response, or if additional information is required, please let me know.

Very truly yours,

A handwritten signature in black ink that reads "Keith D. Young".

Keith D. Young  
Manager,  
Regulatory Affairs

KDY/MAR/slk  
Attachment: 1) Response to Violation

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### **Statement of Violation**

During an NRC inspection conducted February 10 through March 21, 2003, a violation of NRC requirements was identified. In accordance with the "General Statement of Policy and Procedure for NRC Enforcement Actions," NUREG-1600, the violation is listed below:

10 CFR 50.54(q) provides in part that "[a] licensee authorized to possess and operate a nuclear power reactor shall follow . . . emergency plans which meet the standards in [section] 50.47(b). . . ."

10 CFR 50.47(b) requires that the onsite emergency response plans for nuclear power reactors must meet each of 16 planning standards, of which, standard (5) states, in part: the ". . . means to provide early notification and clear instruction to the populace within the plume exposure pathway Emergency Planning Zone have been established." The licensee's emergency plan described the means to provide early notification and clear instruction to the populace within the plume exposure pathway Emergency Planning Zone (EPZ) to include tone alert radios and emergency sirens.

Contrary to the above, from 1998 through November 2002, the licensee failed to follow its emergency plan designed to meet planning standard (5) in 10 CFR 50.47(b). Specifically, the licensee failed to provide tone alert radios to 98 residences in portions of the EPZ that relied upon tone alert radios as the primary means of emergency notification (i.e., areas of the EPZ that were outside of the range of emergency sirens).

### **Reason for the Violation**

There were three causal factors identified by the formal root cause evaluation:

1. Callaway Plant missed a prior opportunity to promptly identify and correct deficiencies in the tone alert radio database. A review of the database was conducted in 1998, prompted, in part, by a national change from the Emergency Broadcast System to the Emergency Alert System. Identified corrective actions required a complete audit of the database. AmerenUE was unable to provide a report limited to customers residing in the EPZ making it difficult to identify residences requiring tone alert radios. As a result, the AmerenUE portion of the database was not audited. The corrective action document tracking this process was inappropriately closed without having performed a complete audit of the database.

2. Field Follow-up Memos were used as the means to identify AmerenUE customers requiring tone alert radios. The treatment and processing of these Field Follow-up Memos was not proceduralized, which resulted in failures to update the tone alert radio database.
3. Instructions used by personnel implementing the tone alert radio program were inadequate. No guidance existed to question the failure to receive Field Follow-up Memos during an extended period of time or to perform appropriate follow-up actions.

#### **Corrective Steps Taken and Results Achieved**

The following immediate actions were taken upon discovery of the condition:

- |                   |  |
|-------------------|--|
| November 26, 2002 | The occurrence was entered into the Callaway Plant corrective action program as Callaway Action Request (CAR) 200208007 to evaluate and correct issues related to this condition.  |
| November 26, 2002 | The Callaway County Emergency Management Director (EMD) was contacted and advised of the condition and the affected area. A request was made, and granted, to implement immediate route alerting for the affected area in the event of an emergency declaration requiring activation of the alert and notification system (ANS). This action fully restored the ability to implement Callaway Plant RERP ANS functions for the protection of Public health and safety. |
| November 27, 2002 | Due to the importance associated with the ANS, CAR 200208007 was assigned the highest significance level. This ensures the use of a formal root cause process and the dedication of resources necessary to resolve the matter in a manner consistent with its significance.  |
| November 27, 2002 | To improve the efficiency of compensatory route alerting, Callaway County officials were provided with a complete listing of affected residences.  |
| November 27, 2002 | Tone alert radios were packaged and mailed to the 65 initially identified residences requiring radios.   |

November 27, 2002      The condition was evaluated for reportability under federal requirements. Although the condition was determined not to be reportable, a notification was made to the NRC and FEMA as a matter of prudence.

The following additional remedial actions were taken:

Interviews were conducted with the three utilities controlling electrical service areas within the EPZ. Service histories, present service territories within the EPZ and the processes being used to provide Callaway Plant with customer information were verified.

An address-by-address baseline audit of the tone alert radio database was conducted. The audit included a review of all customer locations provided by the utilities against maps indicating the design siren coverage and EPZ borders. The audit identified 33 additional residences, which were incorporated into the database and provided with tone alert radios.

Implementation of these actions fully restored the design capabilities of the alert and notification system as described in the Callaway Plant RERP.

#### **Corrective Steps to Avoid Further Violations**

Based on the causal factors and root causes identified through the formal root cause analysis the following primary corrective actions to prevent recurrence (CATPR) were identified:

Accuracy of the tone alert radio database was re-established through the baseline audit. The tone alert radio maintenance program was revised to clarify existing program elements designed to maintain database accuracy. Specifically, clarification was provided to ensure selected portions of the database will be compared against utility provided customer data for accuracy and completeness. Additional clarification specifies a rotation through each utility to ensure a periodic verification of the entire database.

The tone alert radio maintenance program has been revised to require regular contact with utilities having service territories within the EPZ. In addition, the program now requires the development and maintenance of a Letter of Agreement between Callaway Plant and each of these utilities. Regular communication ensures the timely review of data reporting processes and territory changes or transfers with the provisions of the applicable Letter of Agreement.

Field Follow-up Memos are no longer used for tone alert radio program maintenance due to an independent, internal AmerenUE change. AmerenUE instituted an electronic customer management process, which allowed the development and implementation of an automated reporting process for customers located within the Callaway Plant EPZ.

The Emergency Preparedness department and other personnel implementing the tone alert radio program collaborated on a critical review of program guidance. The review was conducted in unison with a process analysis performed to identify and incorporate critical attributes necessary for successful program maintenance. Additional revisions were made to address longstanding weaknesses, including the addition of specific follow-up actions to be performed in the event a monthly report is not received from one or more utilities serving the EPZ. All tone alert radio program guidance is now maintained in plant procedures.

Individuals normally performing tone alert radio functions were involved in the address-by-address baseline audit. Participation in the audit served as a training and coaching tool to enhance familiarity and understanding of unique program elements related to the tone alert radio program. In addition, supervisors providing oversight of these individuals were involved in the baseline audit to strengthen their understanding of program bases and functions. This insight will provide for more thorough and effective oversight of these functions and enhance the ability to perform or monitor the turnover process when new individuals are assigned tone alert radio maintenance functions. In addition, lessons learned through this process have been incorporated into program guidance including a requirement for the Emergency Preparedness department to maintain program oversight.

As required by the established corrective action process, an effectiveness review will be performed to determine if identified actions and their implementation were effective in preventing recurrence. CAR 200300851 has been entered into the Callaway Plant corrective action program to track and document results of the effectiveness review.

These actions and the overall response to the event were reviewed and approved by the Onsite Review Committee on March 27, 2003.

**Date When Full Compliance will be Achieved**

Compensatory measures to implement back-up alerting capabilities were initiated immediately upon discovery of the condition. Distribution of tone alert radios to all affected residences identified through the baseline audit was completed on March 1, 2003. This fully restored the primary alerting capabilities described in the Callaway Plant RERP.

All corrective actions associated with the violation were completed by May 30, 2003, and CAR 200208007 has been closed. Therefore, full compliance with the requirements of 10 CFR 50.47(b)(5) to establish and maintain in effect the "means to provide early notification and clear instruction to the populace within the plume exposure pathway Emergency Planning Zone" has been achieved.