

May 8, 2002

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

ULNRC-04653



Gentlemen:

**REPLY TO NOTICE OF VIOLATION
INSPECTION REPORT NO. 50-483/2002-007
ENFORCEMENT ACTION EA-02-046
CALLAWAY PLANT
UNION ELECTRIC CO.**

This responds to Mr. Ellis W. Merschoff's letter dated April 9, 2002, which transmitted a Notice of Violation for events discussed in Inspection Report 50-483/2002-007 and Enforcement Action EA-02-046. Our response to the violation is presented in the attachment.

New commitments are identified in this correspondence.

None of the material in the response is considered proprietary by Union Electric.

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 "Michael S. Evans".

Michael S. Evans
Manager, Nuclear Engineering

Handwritten initials "MSE/MAR/slk" in black ink.
MSE/MAR/slk

Attachments: 1) Response to Violation
 2) List of Commitments

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Statement of Violation

During an NRC inspection conducted between January 28 and February 27, 2002, 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 Part 50, Appendix B, Criterion XVI, requires, in part, that measures shall be established to assure that conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and nonconformances are promptly identified and corrected. For significant conditions adverse to quality, the measures shall assure that the cause of the condition is determined and corrective actions taken to preclude recurrence. The identification of significant conditions adverse to quality shall be documented and reported to appropriate levels of management.

Contrary to the above, between January 1992 and January 31, 2002, the licensee failed to promptly identify and correct a significant condition adverse to quality involving the potential for foreign material to be in the auxiliary feedwater system and condensate storage tank. In addition, between January 25 and 29, 2002, the identification of a significant condition adverse to quality was not reported to the appropriate levels of management. Specifically, there were several missed opportunities to identify and correct the degraded condensate storage tank diaphragm seal, including the following examples:

- (1) In 1992, Corrective Action Tracking System Item 31040, which had been initiated to generate an inspection of the condensate storage tank diaphragm seal, was closed without having completed the inspection. The inspection was to have been completed in response to NRC Information Notice 91-82, "Problems With Diaphragms in Safety Related Tanks."
- (2) During the Spring and Summer of 2000, the inspection of the condensate storage tank diaphragm was deferred on two occasions without adequate justification. The deferrals were based on the chemistry specifications of the condensate storage tank water and did not consider the potential for degradation of the diaphragm seal.

- (3) On October 17, 2000, an inadequate inspection of the condensate storage tank diaphragm seal was performed. The inspection did not identify the degraded condition of the diaphragm seal.
- (4) On January 15, 2002, foreign material was not considered a credible failure mechanism even though polyurethane foam was discovered in the seal water cooling line for auxiliary feedwater Pump A.
- (5) Between January 25 and 30, 2002, a significant condition adverse to quality was not reported to appropriate levels of management in a timely manner. Information regarding the as-found condition of the condensate storage tank diaphragm seal was incorrectly reported. Consequently, broad corrective actions to assess the extent of condition associated with the failure of the diaphragm seal were delayed.

This violation is associated with a White Significance Determination Process finding.

Reason for the Violation

(1) As described, the Callaway Action Tracking System (CATS) Item 31040 status was changed due to a computer error without initiation of the specified inspection work documents. It should be noted that Information Notice 91-82 described concerns with tanks with flexible bladders and was not directly applicable to the Condensate Storage Tank configuration. While all tanks with flexible bladders were inspected and appropriate actions were taken, the incorrect status of the CATS item was not identified until 1999. Detection of the improper closure of the action item was not likely to occur, since the CATS action monitoring was passive.

(2) & (3) A more thorough inspection of the floating cover seal was not conducted for two primary reasons. First, the vendor stated that even if degradation of the seal occurred, the foam would float. Second, no industry Operating Experience relative to this type of seal had been identified. Therefore, the inspection was limited in its scope.

(4) Based on the rapid recovery of the pump and the subsequent successful pump surveillance (after venting) verifying normal vibration and flow parameters, the Root Cause Analysis focused on causes other than foreign material. An obstruction of the pump suction was recognized as a potential cause for the failure experienced. However, this was considered to be unlikely due to industry operating experience, which suggested system voids were more likely to be the cause. Additionally, industry

experience with foreign material manifested itself in ways that typically did not allow rapid pump recovery. Failure of the pump caused by a suction obstruction was not pursued until all other potential causes were eliminated. Therefore, the significance of the polyurethane foam found in the seal water cooling line for the 'A' auxiliary feedwater pump was not initially challenged.

(5) Limited inspection criteria for the Condensate Storage Tank (CST) coupled with Callaway's philosophy for degraded component evaluations resulted in less than adequate communication. Specifically, insufficient communication occurred between inspection personnel and plant management to ensure the as found condition of the CST was understood and responded to appropriately. Written reports, which were characterized as "Operability Evaluations", did not identify the required technical elements/functions, nor the extent of the observed Degraded or Non-Conforming Condition, consistent with Generic Letter 91-18 guidance.

Corrective Steps Taken and Results Achieved:

(1) The CATS was re-opened and a Work document was initiated to accomplish the inspection. The computer error that caused the incorrect CATS status could not be reproduced.

(2) (3) & (4) The inspection was completed and the floating cover was removed.

(5) An interim guidance document for Operability Determinations was developed. Training was provided to selected Engineers, Emergency Duty Officers (EDOs) and Engineering Duty Supervisors (EDS) from February 27 through March 1, 2002. Additionally, this guidance was discussed at the Shift Supervisor (SS) meeting on February 25, 2002. An Operations Night Order was also issued providing further discussion of how to conduct these Operability Determinations until procedure APA-ZZ-00500, 'Corrective Action Program' was revised to include the guidance.

In addition, all Significance Level 1 Callaway Action Requests (CARs) were reviewed by the Vice President, Nuclear and Nuclear Division Managers. Review criteria included adequacy of the root cause determination as well as specified corrective actions.

Corrective Steps to Avoid Further Violations:

(1) The CATS application has been replaced with the Callaway Action Request System (CARS). The CARS application has active monitoring capabilities versus the passive

monitoring capabilities of the CATS application, and will prevent undetected closure of action items. The CARS application went into production in February 2001.

(2) & (3) The old seal has been removed. A new seal will be installed during the Refuel 12 outage. Specific inspection frequency and inspection criteria for the new seal will be established prior to startup from Refuel 12.

(4) & (5) Procedure APA-ZZ-00500, 'Corrective Action Program', Revision 32, was issued March 22, 2002. Key elements of the revision included:

- Requirement to complete Operability Determinations within 24 hours.
- Requirement for the Manager, Callaway Plant, or his designee, to identify the Root Cause Team composition, scope and due date within two working days of designation of a Significance Level 1 CARs.
- Requirement for completion of Significance Level 1 & 2 CARs evaluations within 45 days or sooner commensurate with significance and plant needs.

Performance Indicators have been enhanced to assure effective monitoring of the Corrective Action Program.

In addition, the APA-ZZ-00500 revision also incorporated significant changes to embrace the Generic Letter 91-18 philosophy. Follow up training for the corrective action program changes is being provided using an outside consultant. This will assist in providing the "cultural shift" necessary to address the concerns identified. A series of two-day sessions is being conducted from April 11 through June 14, 2002. Additional training will be provided to Operations personnel during Continued Operations Training.

Date when Full Compliance will be Achieved:

Training on the changes to the Corrective Action Program will be complete prior to startup for Refuel 12. Installation of the condensate storage tank seal will be completed during Refuel 12. Condition monitoring, including scope, acceptance criteria, and frequency for the replacement seal will be established prior to startup from Refuel 12. All other actions are complete.

LIST OF COMMITMENTS

The following table identifies those actions committed to by Callaway Plant in this document. Any other statements in this submittal are provided for information purposes and are not considered to be commitments. Please direct questions regarding these commitments to Mr. Mark A. Reidmeyer, Regional Regulatory Affairs Supervisor (573) 676-4306.

COMMITMENT	Due Date/Event
Training on the changes to the Corrective Action Program.	Prior to Refuel 12.
Replacement of the condensate storage tank seal.	Refuel 12
Condition monitoring, including scope, acceptance criteria and frequency, for the replacement seal will be established.	Prior to restart from Refuel 12.

Note: Refuel 12 is currently scheduled to start October 23, 2002.