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March 22, 1984

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Mr. J. F. Streeter, Chief
Engineering Branch 1
U.S. Nuclear Regulatory Commission
Region III
799 Roosevelt Road
Glen Ellyn, IL 60137

ULNRC- 776

Dear Mr. Streeter:

INSPECTION REPORT NO. 50-483/84-01(DE)

This reply is in response to your letter of February 22, 1984 which transmitted the report of the inspection conducted at Callaway Plant, Unit 1 during the period of January 4-27, 1984. Our responses to the items of noncompliance are presented below in the order listed within the body of inspection report number 50-483/84-01(DE).

None of the material in the inspection report or in this response is considered proprietary by Union Electric Company.

50-483/84-01-01 SEVERITY LEVEL IV VIOLATION

10 CFR 50, Appendix B, Criterion XI, as implemented by SNUPPS Quality Assurance Programs for Design and Construction, Section 17.1.11, required that a test program be established to assure that structures, systems, and components will perform as designed.

Contrary to the above, the test program for the spent fuel cooling system did not assure the system and components would perform as designed in that Preoperational Test Procedure CS-03EC01, Spent Fuel Cooling and Cleanup System, did not provide for testing or criteria for evaluation of the antisiphon devices. In addition, the review process for the preoperational test results package failed to identify the lack of testing of the antisiphon devices.

Corrective Action Taken and the Results Achieved:

An evaluation of the requirement to test the spent fuel pool cooling antisiphon feature was performed by the Architect Engineer (Bechtel). The SNUPPS design utilizes three-inch

diameter vent holes in the ten-inch diameter pipes to preclude a siphon effect. Calculations have been performed on these lines to verify that this design is adequate. Since this design uses a fixed piping configuration rather than an antisiphon device, such as a check valve or mechanical vacuum breaker, additional testing is not considered to be required.

Corrective Action to be Taken to Avoid Further Noncompliance:

The Bechtel evaluation of testing requirements indicates that no additional testing of the antisiphon feature is required.

The Date When Full Compliance Will Be Achieved:

The Bechtel report confirming the above was provided on March 14, 1984.

(50-483/84-01-05) SEVERITY LEVEL IV VIOLATION

10 CFR 50, Appendix B, Criterion V, as implemented by SNUPPS Quality Assurance Programs for Design and Construction, Section 17.1.5, requires that activities affecting quality be performed in accordance with documented instructions and procedures of a type appropriate to the circumstances.

Contrary to the above, existing procedures do not provide adequate coordination to assure that interference between temporary alterations, testing, and maintenance does not result in unplanned or uncontrolled plant conditions. This was evidenced by the following occurrences:

a. I&C technicians deenergized power to a process control cabinet to replace a connector. In doing so, the Cold Calibrated Pressurizer Level Indication which was being used to monitor pressurizer level during the Integrated Leak Rate Test was deenergized.

b. During the performance of CS-03NE01, Diesel Generator Electrical Test, startup engineers and technicians setting prerequisites for CS-03NF02, LOCA Sequencer, landed terminations for control room diesel generator indication with plastic screws which resulted in the loss of control room indication and interrupted the performance of the 35 start test sequence for the B Diesel Generator.

c. The occurrences of unplanned and uncontrolled plant conditions as detailed in Inspection Report 50-483/83-27(DE), Unresolved Item 483/83-27-05(DE), Paragraph 8.

Summary of Specific Problems Identified and the Results Achieved:

a. Loss of pressurizer level indication during performance of the Integrated Leak Rate Test was the result of inadequate communication with the Test Director. The resultant loss of this data point does not impact the acceptance criteria of the test. Pressurizer level indication was restored and testing continued.

b. Loss of Control Room indication during performance of CS-03NE01 occurred due to a lack of communication between the CS-03NE01 Test Director and the CS-03NF02 Test Director. At a time when the Diesel Generator Test (CS-03NE01) sequence was stopped for a relay inspection and cleaning, control room diesel generator indicator terminations were landed with plastic screws by startup engineers and technicians setting prerequisites for CS-03NF02 (LOCA Sequencer). Lack of control room indication due to the plastic screws was discovered upon diesel restart following relay inspection and cleaning. Subsequent to restoration of control room indication, the 35 start test sequence for the B Diesel Generator was recommenced and satisfactorily completed.

c. Items associated with unresolved item 483/83-27-05(DE) are as follows:

1. The trip of a Service Water Pump and resultant loss of instrument air pressure resulted from inadequate evaluation of the scope of the Startup Work Request being performed by construction crafts. The service water pump was returned to service and the valve lineup restored.

2. The trip of all four Reactor Coolant Pumps (RCP's), due to removal of jumpers in the Solid State Protection System, occurred due to inadequate communication with the Shift Test Director. The jumpers were relanded and the RCP's restored and the problem was documented in the Test Log and on SFR-2-SU-20.

3. Uncontrolled cooldown of the RCS, due to RHR system flow control valve failure to the fully opened position occurred upon removal of a construction power substation from service. This resulted from failure to coordinate the work with the Shift Test Director. An evaluation of the resultant minor, but uncontrolled cooldown by the Shift Supervisor and the Shift Test Director, concluded that further evaluation was not required prior to continuation. Additional documentation of this problem was provided by SFR-YY-111A. Power was restored and testing continued.

4. Closure of all four MSIV's and the resultant temperature/pressure transient occurred due to inadequate evaluation and communication prior to performing a generic loop check on the steam generator pressure loop. This problem was fully documented in the Test Log and by preparation of SFR-YY-115A.

5. Closure of the MSIV's due to temporary alteration restoration was due to inadequate evaluation and communication with the Shift Test Director. This problem was documented in the Test Log.

6. The loss of letdown, pressurizer spray, pressurizer liquid temperature indication and Reactor Coolant Pump A seal flow indication due to trip of power to cabinet 5 of the process control system, resulted from lack of communication with the Shift Test Director. This is documented in the test Log and via SFR-SU-12.

Corrective Action Taken and the Results Achieved:

In general, all items noted in this finding resulted from inadequate evaluation of the work to be performed and inadequate coordination of work activities with the Test Directors.

In order to provide a higher level of coordination of plant work activities and better evaluation of impact on plant conditions, several programmatic and administrative changes have been implemented. In addition, changes in the program resulting from the completion of systems testing and turnover will result in better control due to reduced multi-organization involvement. A summary of these is as follows:

1. Administrative Control of Workman's Protection Assurance has been shifted to the Operations program.

2. Administrative control of temporary alterations has been expanded to require increased Operations involvement.

3. Establishment of Shift Coordinator and Building Coordinator positions (temporary) to better coordinate/control work activities.

4. Additional emphasis on performance of work utilizing Work Requests under the Operations program.

5. Increased turnover of plant components and systems to Operations provides for consolidated planning and coordination of work activities.

Corrective Action to be Taken to Avoid Further Noncompliance

The actions as noted above are intended to resolve the problem. No further actions are anticipated.

The Date When Full Compliance Will Be Achieved:

Actions as noted above were completed as of March 7, 1984.

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

Very truly yours,

Donald F. Schnell

JES/msc

cc: B. L. Forney, NRC Region III
NRC Resident Inspectors, Callaway Plant (2)
Missouri Public Service Commission