



Callaway Plant

June 5, 2018

ULNRC-06441

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

Ladies and Gentlemen:

**DOCKET NUMBER 50-483  
CALLAWAY PLANT UNIT 1  
UNION ELECTRIC CO.  
RENEWED FACILITY OPERATING LICENSE NPF-30  
SPECIAL REPORT 2018-02:  
NON-FUNCTIONALITY OF AN ACCIDENT MONITORING INSTRUMENT FOR  
GREATER THAN 30 DAYS**

Enclosed is a special report addressing the non-functionality of an accident monitoring instrument at the Callaway plant.

No new commitments are identified in this correspondence, and none of the material in the report is considered proprietary by Union Electric Company (Ameren Missouri).

If you have any questions or require additional information, please contact Mr. Thomas Elwood, Supervising Engineer, Regulatory Affairs and Licensing at 314-225-1905.

Sincerely,

A handwritten signature in blue ink, appearing to read "Roger Wink".

Roger Wink

Manager, Regulatory Affairs

Enclosure

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**Hardcopy:**

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## **Special Report 2018-02**

### **Requirement**

Callaway Plant's Final Safety Analysis Report (FSAR) Section 16.3.3.4 contains requirements for accident monitoring instrumentation. Specifically, the accident monitoring instrumentation channels shown in Table 16.3-7 are required to be FUNCTIONAL in MODES 1, 2, and 3. Action A of FSAR section 16.3.3.4 states, "With the number of FUNCTIONAL accident monitoring instrumentation channels less than the Total Number of Channels shown in Table 16.3-7, restore the nonfunctional channel(s) to FUNCTIONAL status within 30 days or prepare and submit a Special Report to the Commission within the following 14 days, outlining the preplanned alternate method of monitoring, the cause of the non-functionality, and the plans and schedule for restoring the channels to FUNCTIONAL status."

### **Background**

During the performance of routine calibration testing on 04/23/18 to perform a zero and span check on GSAI0010, "Containment Hydrogen Concentration Train 'B' Analysis Indicator," the analyzer response was not as expected. The output of the unit was slow to respond following the application of span gas, and subsequent investigations determined that the unit continued to experience operational concerns.

### **Alternate Monitoring Plans**

Alternate train indicator GSAI0019, "Containment Hydrogen Concentration Train 'A' Analysis Indicator," is being monitored, and it is currently providing (or capable of providing) reliable indication of containment hydrogen concentration.

### **Cause of the NON-FUNCTIONALITY of the "B" hydrogen analyzer**

Troubleshooting is currently ongoing per job 18001773, "Investigate GSAI0010 not Responding Properly During Zero and Span Check." At this time, however, the cause of the NON-FUNCTIONALITY of the "B" hydrogen analyzer has not been determined.

### **Plans and Schedule for Restoring the Instrument to FUNCTIONAL status**

Plans for restoring the Instrument to FUNCTIONAL status are to continue troubleshooting activities and then repair the instrument after the cause of failure is known. Investigation is continuing, and repair is planned under sub-tasks to job 18001773. At this time, Callaway Plant expects the Containment Hydrogen Concentration Train 'B' Analysis Indicator to be returned to FUNCTIONAL status by July 31, 2018 contingent on determination of the cause of failure.