AmerenUE
Callaway Plant

PO Box 620
Fulton, MO 65251

December 22, 2008

ULNRC-05576

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

NRC Order EA-03-09

Ladies and Gentlemen:

DOCKET NUMBER 50-483
CALLAWAY PLANT UNIT 1
UNION ELECTRIC CO.
FACILITY OPERATING LICENSE NPF-30
RESULT OF REACTOR PRESSURE VESSEL HEAD INSPECTION

NRC Order EA-03-09 (First Revised) requires inspections of reactor pressure vessel (RPV) heads and associated penetration nozzles at pressurized water reactors in light of concerns about the susceptibility of RPV head penetrations to primary water stress corrosion cracking. In the event of a boron deposit found on the surface of the RPV head or related insulation, licensees are required to "perform inspections of the affected RPV head surface and penetrations appropriate to the conditions found to verify the integrity of the affected area and penetrations."

As a result of performing an examination of Callaway's RPV head following the discovery of boron on the reactor head's insulation during the recently completed refueling outage at Callaway, this letter provides details of the inspection methodology and presents the results of the examination, pursuant to the requirement in the Order for submitting such a report within 60 days after returning the plant to operation.

Background:

During a boric acid walkdown conducted during the recently completed refueling outage (Refuel 16) at Callaway, boron was found on canopy seal weld number 24. Upon further investigation, white residue/stains were found on canopy seal number 55 as well as on the reactor head insulation by stud number 16.

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Canopy seal leak repair was completed for seal weld number 24 during Refuel 16. The white stains on canopy seal number 55 were determined to be dye penetrant developer, based on the opaque appearance and lack of evidence of crystallization.

In response to NRC Order EA-03-09, a visual inspection of select portions of the reactor vessel head under the insulation was performed during the refueling outage as further described below. No boric acid was found during this inspection.

Inspection Methodology:

A videoscope was selected as the most appropriate tool for visual inspection. The scope was inserted under the insulation in the area of canopy seal weld number 24 as well as the area around stud number 16 where white residue was discovered.

Inspection Results:

No boric acid was discovered on the reactor vessel head itself, including in the area of stud number 16, and therefore no further action was taken as a result of the inspection findings.

If there are any questions concerning this report, please contact us. In addition, it is noted that this letter contains no new commitments.

Sincerely,

M. A. McLachlan
Manager, Engineering Services

DJW/nls

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