



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
WASHINGTON, D.C. 20555-0001

August 9, 2012

Mr. Adam C. Heflin
Senior Vice President and
Chief Nuclear Officer
Union Electric Company
P.O. Box 620
Fulton, MO 65251

**SUBJECT: CALLAWAY PLANT, UNIT 1 – REQUEST FOR ADDITIONAL INFORMATION
RE: VERBAL AUTHORIZATION VR-01, PROPOSED ALTERNATIVE
REGARDING ASME OM CODE REPLACEMENT INTERVAL FOR MAIN
STEAM ISOLATION VALVE ACTUATOR RUPTURE DISKS (TAC NO. ME8319)**

Dear Mr. Heflin:

By letter dated March 30, 2012, as supplemented by letter dated April 19, 2012 (Agencywide Documents Access and Management System (ADAMS) Accession Nos. ML12090A501 and ML121150347, respectively), Union Electric Company, (the licensee) submitted alternative request VR-01 for the Callaway Plant, Unit 1, for U.S. Nuclear Regulatory Commission (NRC) review and approval. The NRC staff provided verbal authorization on April 25, 2012, for the proposed alternatives described in request alternative VR-01 until the next plant outage providing plant conditions to replace the main steam isolation valve (MSIV) actuator rupture disks (i.e., Mode 4 or 5), but no later than the end of the Callaway Plant, Unit 1, Refueling Outage 19, which is currently scheduled for June 2013.

The NRC staff has reviewed the information provided in your application and determined that additional information is required in order to complete its formal review. The enclosed questions were provided to Mr. S. Maglio of your staff on July 18, 2012. Please provide a response to the questions by September 10, 2012.

A. Heflin

- 2 -

The NRC staff considers that timely responses to requests for additional information help ensure sufficient time is available for NRC staff review and contribute toward the NRC's goal of efficient and effective use of NRC staff resources. If circumstances result in the need to revise the requested response date, please contact me at 301-415-2296 or via e-mail at Fred.Lyon@nrc.gov.

Sincerely,

for

Carl F. Lyon, Project Manager
Plant Licensing Branch IV
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-483

Enclosure:
As stated

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REQUEST FOR ADDITIONAL INFORMATION

VERBAL AUTHORIZATION VR-01

CALLAWAY PLANT

DOCKET NO. 50-483

The U.S. Nuclear Regulatory Commission (NRC) staff has reviewed the information provided by the licensee for Callaway Plant in its letter dated March 30, 2012, as supplemented by letter dated April 19, 2012, and determined that additional information is necessary to complete the review of the amendment request. Please provide a response which addresses the following questions.

1. Please provide information to identify the events considered in Final Safety Analysis Report (FSAR) Chapter 15 analysis that credited the main steam isolation valve (MSIV) for mitigating the event consequences and specify the specific features of the MSIV that were credited in the identified events. If the MSIV closure time is credited in the analysis, please specify the analytical closure time and provide information including plant data and applicable analysis to show that the credited MSIV closure time can be maintained for the conditions when the required 5-year surveillance replacement of the rupture disc is not met.
2. Please address whether the requested MSIV rupture disc replacement extension will result in new events that were not previously analyzed. For example, if the disc rupture occurs during the extension period, discuss what events will result.
3. If the new events were not analyzed previously, please provide the analyses of the events based on the approved methods and assumptions in accordance with the approach used in FSAR Chapter 15 analysis, and provide results for the NRC to review and approve. The information should include: (1) postulated initial core and reactor conditions; (2) the methods of the thermal-hydraulic analyses; (3) the sequence of events; (4) the assumed reaction of reactor system components; (5) the functional and operational characteristics of the reactor protection system; (6) operator actions; and (7) the proposed acceptance criteria and the results of the transient analyses.

Enclosure

A. Heflin

- 2 -

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Sincerely,

/RA by KKalyanam for/

Carl F. Lyon, Project Manager
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ADAMS Accession No.: ML12220A232

*email dated July 17, 2012

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