



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

April 14, 2014

LICENSEE: Union Electric Company d/b/a Ameren Missouri

FACILITY: Callaway Plant, Unit 1

SUBJECT: SUMMARY OF TELEPHONE CONFERENCE CALL HELD ON
JANUARY 30, 2014, BETWEEN THE U.S. NUCLEAR REGULATORY
COMMISSION AND UNION ELECTRIC COMPANY (AMEREN MISSOURI),
CONCERNING REQUESTS FOR ADDITIONAL INFORMATION PERTAINING
TO THE CALLAWAY PLANT, UNIT 1, LICENSE RENEWAL APPLICATION
(TAC. NO. ME7708)

The U.S. Nuclear Regulatory Commission (NRC or the staff) and representatives of Union Electric Company (Ameren Missouri) held a telephone conference call on January 30, 2014, to discuss and clarify the staff's requests for additional information concerning the Callaway Plant, Unit 1, license renewal application.

Enclosure 1 provides a listing of the participants and Enclosure 2 contains a description of the staff concerns discussed with the applicant. A brief description on the status of the items is also included.

Ameren Missouri had an opportunity to comment on this summary.

A handwritten signature in black ink, reading "John W. Daily, Sr.", is positioned above the typed name.

John W. Daily, Sr. Project Manager
Projects Branch 1
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket No. 50-483

Enclosures:

1. List of Participants
2. List of Requests for Additional Information

cc w/encls: Listserv

April 14, 2014

LICENSEE: Union Electric Company d/b/a Ameren Missouri

FACILITY: Callaway Plant, Unit 1

SUBJECT: SUMMARY OF TELEPHONE CONFERENCE CALL HELD ON JANUARY 30, 2014, BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION AND UNION ELECTRIC COMPANY (AMEREN MISSOURI), CONCERNING REQUESTS FOR ADDITIONAL INFORMATION PERTAINING TO THE CALLAWAY PLANT, UNIT 1, LICENSE RENEWAL APPLICATION (TAC. NO. ME7708)

The U.S. Nuclear Regulatory Commission (NRC or the staff) and representatives of Union Electric Company (Ameren Missouri) held a telephone conference call on January 30, 2014, to discuss and clarify the staff's requests for additional information concerning the Callaway Plant, Unit 1, license renewal application.

Enclosure 1 provides a listing of the participants and Enclosure 2 contains a description of the staff concerns discussed with the applicant. A brief description on the status of the items is also included.

Ameren Missouri had an opportunity to comment on this summary.

/RA/

John W. Daily, Sr. Project Manager
Projects Branch 1
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket No. 50-483

Enclosures:

1. List of Participants
2. List of Requests for Additional Information

cc w/encls: Listserv

DISTRIBUTION: See next page

ADAMS Accession No.: ML14093B338

*concurrent via email

OFFICE	LA:RPB2:DLR	PM:RPB1:DLR	BC:RPB1:DLR	PM:RPB1:DLR
NAME	IKing	JDaily (SCuadrado De Jesus for)	YDiaz-Sanabria	JDaily
DATE	4/08/14	4/10/14	4/10/14	4/14/14

OFFICIAL RECORD COPY

SUBJECT: SUMMARY OF TELEPHONE CONFERENCE CALL HELD ON JANUARY 30, 2014, BETWEEN THE U.S. NUCLEAR REGULATORY COMMISSION AND UNION ELECTRIC COMPANY (AMEREN MISSOURI), CONCERNING REQUESTS FOR ADDITIONAL INFORMATION PERTAINING TO THE CALLAWAY PLANT, UNIT 1, LICENSE RENEWAL APPLICATION (TAC. NO. ME7708)

DISTRIBUTION:

HARD COPY:

DLR RF

E-MAIL:

PUBLIC

RidsNrrDlr Resource

RidsNrrDlrRpb1 Resource

RidsNrrDlrRpb2 Resource

RidsNrrDlrRarb Resource

RidsNrrDlrRapb Resource

RidsNrrDlrRasb Resource

RidsNrrDlrRerb Resource

RidsNrrDlrRpob Resource

JDaily

THartman

DMorey

MSpencer (OGC)

GPick (RIV)

**SUMMARY OF TELEPHONE CONFERENCE CALL
CALLAWAY PLANT, UNIT 1
LICENSE RENEWAL APPLICATION**

LIST OF PARTICIPANTS

January 30, 2014

PARTICIPANTS

Samuel Cuadrado de Jesús
Allen Hiser
James Medoff
Dave Shafer
Eric Blocher
Andrew Burgess
Sarah Kovaleski
Sharon Merciel
Mike Hoehn

AFFILIATIONS

U.S. Nuclear Regulatory Commission (NRC)
NRC
NRC
Callaway (Ameren Missouri)
Ameren Missouri
Ameren Missouri
Ameren Missouri
Ameren Missouri
Ameren Missouri

**SUMMARY OF TELEPHONE CONFERENCE CALL
CALLAWAY PLANT, UNIT 1
LICENSE RENEWAL APPLICATION
January 30, 2014**

The U.S. Nuclear Regulatory Commission (NRC or the staff) and representatives of Union Electric Company (Ameren Missouri) held a telephone conference call on January 30, 2014, to discuss and clarify the following new request for additional information (RAI) concerning the Callaway Plant, Unit 1, license renewal application (LRA).

Draft RAI 3.1.2.1-6 (clevis bolts)

Discussion: On January 27, 2014, the staff provided Ameren Missouri with draft RAI 3.1.2.1-6. By request of Ameren Missouri a telephone conference call was held to discuss and clarify the draft RAI. The following is a summary of the telephone conference call discussion.

Draft RAI 3.1.2.1-6 stated the following:

Draft RAI 3.1.2.1-6

Background:

By letter dated October 24, 2012, Union Electric Company (Ameren Missouri) provided LRA Amendment No. 13 which revised LRA Table 3.1.2-1, "Reactor Vessel, Internals, and Reactor Coolant System – Summary of Aging Management Evaluation – Reactor Vessel and Internals," to provide an amended aging management review (AMR) for the reactor vessel internals clevis insert bolts. In this amended AMR, the applicant confirmed that the clevis insert bolts are fabricated from nickel alloy materials (presumably X-750 bolts) and that potential cracking and loss of material due to wear will be managed by the applicant's American Society of Mechanical Engineers (ASME) Section XI Inservice Inspection (ISI), Subsections IWB, IWC, and IWD Program. This is equivalent to the aging management basis that would be used if the Pressurized Water Reactor (PWR) Vessel Internals Program were credited for aging management of the clevis insert bolts. Specifically, since the PWR Vessel Internals Program invokes the methodology in Electric Power Research Institute (EPRI) Technical Report No. 1022863, "Materials Reliability Program: PWR Internals Inspection and Evaluation Guidelines (MRP-227-A)," the program would call for the inspections of the clevis insert bolts to be performed using the ASME Section XI Examination Category B-N-3 inspection requirements and basis for removable core support structures and their components. In turn, this ASME examination category calls for VT-3 visual inspections to be performed on the accessible surfaces of the clevis insert bolts if they were part of the removable core support structure, as performed on a 10-year frequency.

Issue:

Appendix A to MRP-227-A indicates that failures of nickel alloy (Alloy X-750) clevis insert bolts were reported by the licensee for one domestic Westinghouse-designed PWR in 2010. The ASME Section XI visual VT-3 inspections of the clevis insert assemblies on a 10-year frequency may not be adequate to ensure the integrity of clevis insert assemblies during design basis events if multiple bolt failures occur prior to detection and a design basis event occurs.

Request:

- (a) Describe the configuration of clevis insert assemblies at Callaway Plant Unit 1 (Callaway) (including number of bolts in the assemblies). Specify the material of fabrication, including any applicable heat treatment, that were used for the design of the clevis insert bolts at Callaway.
- (b) Discuss and justify whether the operating experience associated with cracking of the clevis insert bolts is applicable to clevis insert assembly designs at Callaway. For example, clarify the type of visual inspection coverage that was achieved during implementation of the past VT-3 visual inspections that were performed on the clevis insert bolts in accordance with ASME Section XI requirements. Clarify the ASME examination category that applies to inspections of the clevis insert bolts (and identify the applicable inspection method and frequency) and whether the past examinations have resulted in the detection of any indications of cracking or failures of the clevis insert bolts that are included in the clevis insert assembly designs. If so, provide the details of the inspection results and clarify the corrective actions that were taken at the facility to justify the structural integrity of the clevis insert assemblies and the intended safety function of the plant's core support structure and its components during plant operations.
- (c) Based on your responses to parts (a) and (b) of this request, clarify whether the 10-year ISI basis for the clevis insert bolts is sufficient to manage cracking and wear of the bolts during the period of extended operation. Justify your response to this request.

With regards to Request (b) Ameren Missouri stated that it has operating experience associated to Callaway from its Spring 2013 refueling outage; however, a final report on external industry operating experience is being developed and will not be available until February 2014. Therefore, Ameren Missouri stated that it will be able to only respond based on Callaway's operating experience. The staff stated that there's already external operating experience that the applicant can use in its response but providing a response on Callaway plant-specific operating experience is the staff major interest. The staff also stated that it will split Request (b) into two requests in order to separately ask for Callaway's and industry operating experience.

With regards to Requests (a) and (b) Ameren Missouri stated that additional information may be needed from Westinghouse in order for a complete response to be provided. Ameren Missouri stated that it'll need between 60-90 days to obtain Westinghouse information and respond to the staff request. The staff stated that it'll provide Ameren Missouri 60-90 days to provide a response to the RAI. The staff also asked Ameren Missouri whether, if pictures of the clevis bolts were taken during the Spring 2013 outage inspection, it could make them available for the staff to review in Callaway's Portal. Ameren stated that it will make the picture available in Callaway's portal.

Ameren Missouri understood the staff concerns in draft RAI 3.1.2.1-6.

Action: Draft RAI 3.1.2.1-6 Request (b) to be revised and issued formally.

MRP-227-A (cold work components)

Discussion: Ameren Missouri stated that Westinghouse has completed the review of 80% of Callaway's reactor vessel internals (RVIs) components and currently no negative information has been identified on cold work components. Therefore, Ameren Missouri plans to address cold work components with a commitment to augment the RVI Program if the review of the remaining 20 percent components has negative results associated with cold works. The staff stated that for it to reach reasonable assurance that the aging effect of RVIs components will be adequately managed during the period of extended operation the information on 100 percent of the components needs to be completed and evaluated by the staff or a more conservative commitment needs to be provided. The staff stated that an example of a conservative approach for a commitment can be found on Davis-Besse Nuclear Power Station final safety evaluation report license condition on MRP-227-A. The staff stated that if a commitment is provided by Ameren Missouri and found acceptable the staff will make it a license condition. The applicant understood that it needs to take a more conservative approach in its commitment and stated that it'll provide its commitment in the month of February 2014.

Action: Ameren Missouri to provide a commitment on unresolved action item associated with cold work components.