



March 28, 2014

ULNRC-06106

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

10 CFR 2.101  
10 CFR 2.109(b)  
10 CFR 50.4  
10 CFR 50.30  
10 CFR 51.53(c)  
10 CFR 54

Ladies and Gentlemen:

**DOCKET NUMBER 50-483  
CALLAWAY PLANT UNIT 1  
UNION ELECTRIC CO.  
FACILITY OPERATING LICENSE NPF-30  
SUPPLEMENTAL RESPONSE TO RAI B2.1.6-4d, PART (a)**

- References:
- 1) ULNRC-05830 dated December 15, 2011
  - 2) NRC Letter, "Request for Additional Information for the Review of the Callaway Plant, Unit 1, License Renewal Application, Set 29 (TAC No. ME7708)," dated December 2, 2013
  - 3) ULNRC-06079 dated February 5, 2014
  - 4) NRC Letter, "Safety Evaluation Report with Open Items Related to the License Renewal of Callaway Plant, Unit 1 (TAC No. ME7708)," dated April 23, 2013

By the Reference 1 letter, Union Electric Company (Ameren Missouri) submitted a license renewal application (LRA) for Callaway Plant Unit 1. Reference 2, dated December 2, 2013, transmitted the twenty-ninth (29) Request for Additional Information (RAI) related to this application. Reference 3 transmitted a response to RAI B2.1.6-4d, Part (a) related to reactor vessel internals cold worked material, including a commitment describing options if reactor vessel internals' components were determined to be subject to 20% or greater cold work and 30 ksi operating stresses. The response to this RAI was also the subject of a public meeting between the staff and Ameren Missouri personnel held on February 20, 2014.

Enclosure 1 contains a supplemental response to RAI B2.1.6-4d, Part (a) which provides the results of an evaluation by Westinghouse Electric Company, the plant nuclear steam supply system design entity. This cold work evaluation concluded that the plant-specific material fabrication and design are consistent with MRP-191, "*Materials Reliability Program: Screening, Categorization, and Ranking of Reactor Internals Components for Westinghouse and Combustion Engineering PWR Design*" and the MRP-227-A, "*Materials Reliability Program: Pressurized Water Reactor Internals Inspection and Evaluation Guidelines*," aging management requirements as related to cold work and are directly applicable to Callaway Unit 1.

This supplemental response provides information intended to assist the staff in closing Open Item B2.1.6-1 identified in Reference 4.

It should be noted that there are no changes to commitments contained in this transmittal; however, based on the information provided in this response, it is Ameren Missouri's plan to revise Commitment 44 (LRA Table A4-1) to show it closed in the next LRA amendment. The next LRA amendment is anticipated to be submitted in conjunction with the response to LRA RAI Set #31 on or before April 24, 2014.

Also note that the information related to the evaluation performed by Westinghouse and summarized in this response is copywrited by Westinghouse Electric Company LLC.

If you have any questions with regard to this supplemental RAI response, please contact Ms. Sarah Kovalski at (573) 489-9435 or Mr. Roger Wink at (314) 225-1561.

I declare under penalty of perjury that the foregoing is true and correct.

Sincerely,



Greg Kremer  
Director, Engineering Programs

Executed on: March 28, 2014

DS/nls

Enclosure: 1) Supplemental Response to Request for Additional Information (RAI) B2.1.6-4d, part (a)

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