



Callaway Plant

December 21, 2011  
10 CFR 52.75

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

ALNRC 00054

Subject: Ameren Missouri, Callaway Plant, Unit 2  
(NRC Docket No. 52-037)  
10 CFR 50.46(a)(3) Annual Report

Reference: Letter from Sandra M. Sloan (AREVA NP Inc.) to Document Control Desk,  
USNRC, "10 CFR 50.46 Report for the U.S. EPR Design Certification," dated  
December 16, 2011

Ameren Missouri, as the applicant for Callaway Plant, Unit 2, hereby provides a required report pursuant to 10 CFR 50.46, "Acceptance Criteria for Emergency Core Cooling Systems for Light-Water Nuclear Power Reactors". AREVA NP Inc. (AREVA) submitted a report pursuant to 10 CFR 50.46 (a)(3) for the U.S. EPR (Docket 52-020) via the referenced letter. This same regulation requires a similar report from a combined license (COL) applicant if the applicant is also affected by the change. Ameren Missouri incorporates the U.S. EPR Design Certification Document by reference in its application for Callaway Plant, Unit 2 and therefore also utilizes the peak cladding temperature calculations performed by AREVA. As such, the referenced AREVA report is applicable to the Callaway Plant, Unit 2 COL application; Attachments A and B to that report provide the required information regarding the nature of the ECCS model change or error and its estimated effect on the limiting ECCS analysis.

Due to the sum of the absolute magnitudes of the errors being greater than 50 degrees F, AREVA has also committed to provide the NRC a follow-up letter by January 31, 2012, which will provide a proposed schedule for providing reanalysis or taking action as may be needed to show compliance with 10 CFR 50.46. That follow-up letter and associated reanalysis or other actions will apply to the Callaway Unit 2 COLA and will, upon completion of all reanalysis of other actions, complete this matter with respect to Callaway Plant, Unit 2.

*It should also be recognized that review of the Callaway Plant, Unit 2 COLA is currently suspended as described in our June 23, 2009 letter to NRC and NRC's June 29, 2009 letter to Ameren Missouri.*

Should you have questions or need additional information, please contact the undersigned at (573) 676-8519 or Pat Cryderman at (314) 225-1037.

Sincerely,

Scott Bond  
Manager, Nuclear Development

DS/WMC/brd

A002  
NRO

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