



December 11, 2013

ALNRC 00061

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

10 CFR 50.46(a)(3)

Ladies and Gentlemen:

DOCKET NUMBER 52-037
Ameren Missouri, Callaway Plant Unit 2
10 CFR 50.46(a)(3) Annual Report

- References:
1. Letter from Pedro Salas (AREVA NP Inc.) to Document Control Desk, U.S. Nuclear Regulatory Commission, "10 CFR 50.46 Report for the U.S. EPR Design Certification," dated November 26, 2013.
 2. ALNRC 00058, Ameren Missouri, Callaway Plant, Unit 2 (NRC Docket NO. 52-037), 10 CFR 50.46(a)(3) Annual Report, dated December 13, 2012.
 3. ALNRC 00041, AmerenUE, Callaway Plant, Unit 2 (NRC Docket No. 52-037) Request to Suspend Review of COL Application, dated June 23, 2009.
 4. USNRC letter to AmerenUE, Staff Review of the Combined License Application for Callaway Plant Unit 2 Nuclear Power Plant, dated June 29, 2009.

Ameren Missouri, as the applicant for Callaway Plant, Unit 2, hereby provides a 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 Design Certification via Reference 1. 10 CFR 50.46 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 of Reference 1 provide the required summary of changes and errors for the large and small break loss of coolant accident evaluation models for the U.S. EPR Standard Design (Docket 52-020). Ameren Missouri's 2012 annual report was provided via Reference 2.

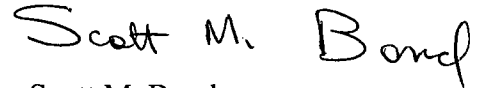
It should be noted that review of the Callaway Plant, Unit 2 COL application is currently suspended as described in References 3 and 4.

ADD
MRO

This letter does not contain new commitments.

Should you have questions or need additional information, please contact the undersigned at (573) 864-7408 or Roger Wink at (314) 225-1561.

Sincerely,

A handwritten signature in black ink that reads "Scott M. Bond". The signature is written in a cursive style with a large, prominent "S" and "B".

Scott M. Bond
Director Nuclear Development

RCW/slk

cc: Mr. Marc L. Dapas
Regional Administrator
U. S. Nuclear Regulatory Commission
Region IV
1600 East Lamar Boulevard
Arlington, TX 76011-4511

Senior Resident Inspector
Callaway Resident Office
U.S. Nuclear Regulatory Commission
8201 NRC Road
Steedman, MO 65077

Mr. Fred Lyon
Project Manager, Callaway Plant
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Mail Stop O-8B1
Washington, DC 20555-2738

John Segala, Chief
Licensing Branch 1
Division of New Reactor Licensing
Office of New Reactors
John.Segala@nrc.gov

Prosanta Chowdhury
Project Manager
Licensing Branch 1
Division of New Reactor Licensing
Office of New Reactors
Prosanta.Chowdhury@nrc.gov