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September 25, 2014

Mr. Pedro Salas  
Director, Regulatory Affairs  
AREVA NP, Inc.  
3315 Old Forest Road  
P.O. Box 10935  
Lynchburg, VA 24506-0935

SUBJECT: U.S. EPR DESIGN CERTIFICATION APPLICATION - ADVANCED SAFETY  
EVALUATION REPORT FOR CHAPTER 10, "STEAM AND POWER  
CONVERSION SYSTEMS"

Dear Mr. Salas:

By letter dated December 11, 2007, as supplemented by letters dated February 7, 2008, and February 20, 2008, AREVA NP Inc. (AREVA) submitted an application to the U.S. Nuclear Regulatory Commission (NRC) for a standard design certification (DC) of the U.S. EPR, pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) Part 52, "Licenses, Certifications, and Approvals for Nuclear Power Plants." Subsequent to the original application, AREVA has submitted Revision 5 of the U.S. EPR Final Safety Analysis Report (FSAR) by letter dated July 19, 2013 (Agencywide Documents Access and Management System (ADAMS) Accession Number ML13219B139). Revision 5 of the FSAR includes changes associated with responses to NRC requests for additional information (RAIs) submitted through June 2013.

Based on our review of the application, the NRC staff prepared the enclosed advanced safety evaluation (ASE) (Accession No. ML101100524), for Chapter 10, "Steam and Power Conversion Systems." Unless otherwise stated in the advanced SE, the NRC staff's review was based on Revision 6 of the FSAR and AREVA's responses to RAIs. The advanced SE is being provided to support a meeting of the subcommittee of the Advisory Committee on Reactor Safeguards (ACRS) and a meeting date has yet to be determined. Issuance of this advanced SE is an important milestone in the NRC staff's review to determine whether AREVA's application meets the Commission's regulations.

The NRC staff concludes that the enclosed advanced SE does not contain any information for which exemption from public disclosure has been sought or approved. However, the NRC will withhold the enclosed advanced SE from public disclosure for ten calendar days from the date of this letter to allow you the opportunity to verify the staff's conclusion that the advanced SE contains no such exempt information.

**Document transmitted herewith  
contains sensitive unclassified  
information. When separated from  
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If within that time, you do not request that all or portions of the advanced SE be withheld from public disclosure in accordance with 10 CFR 2.390, "Public Inspections, Exemptions, Requests for Withholding," the enclosure will be made available for public inspection through the NRC's Public Document Room and the Publicly Available Records component of the NRC's ADAMS. ADAMS is accessible from the Public Electronic Reading Room section of the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

If you have any questions or comments concerning this matter, I can be reached at 301-415-1494 or via e-mail at [George.Wunder@nrc.gov](mailto:George.Wunder@nrc.gov)

Sincerely,

*/RA/*

George Wunder, Lead Project Manager  
Licensing Branch 1  
Division of New Reactor Licensing  
Office of New Reactors

Docket No. 52-020

Enclosure:

Safety Evaluation Report: U.S. EPR Nuclear Power Plant Design Certification Advanced Safety Evaluation Report for Chapter 10, Steam and Power Conversion Systems

cc w/o encl: See next page

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If you have any questions or comments concerning this matter, I can be reached at 301-415-1494 or via e-mail at [George.Wunder@nrc.gov](mailto:George.Wunder@nrc.gov)

Sincerely,

/RA/

George Wunder, Lead Project Manager  
Licensing Branch 1  
Division of New Reactor Licensing  
Office of New Reactors

Docket No. 52-020

Enclosure:

Safety Evaluation Report: U.S. EPR Nuclear Power Plant Design Certification Advanced Safety Evaluation Report for Chapter 10, Steam and Power Conversion Systems

cc w/o encl: See next page

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**ADAMS ACCESSION NUMBERS:**

Package: ML14122A118

SE : ML101110524

Letter: ML144122A105

Concurrence Sheet: ML14122A111

**NRO-002**

<b>OFFICE</b>	DNRL/LB1:PM	DNRL/LB1:LA	DNRL/LB1:LPM
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<b>DATE</b>	09/22/2014	09/24/2014	09/25/2014

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(Revised 06/03/2014)

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