

AUDIT PLAN TO REVIEW SELECTED AREAS RELATED TO U.S. EPR FSAR
CHAPTER 15 AND DCD SECTION 4.2

APPLICANT: AREVA NP, Inc.

APPLICANT CONTACT: Martin Bryan
Jerald Holm

TIME: 8:00 am to 5:00 pm on 09/14/2010
8:00 am to 5:00 pm on 09/15/2010
8:00 am to 11:30 am on 09/16/2010 (if required)

LOCATION: AREVA NP, Inc.
3315 Old Forest Road
Lynchburg, VA

REVIEWERS: Fred Forsaty (NRO, Audit Lead)
Jason Carneal (NRO)
Shanlai Lu (NRO)
Carl Beyer (PNNL)
Nicholas Klymyshyn (PNNL)

BACKGROUND

AREVA NP, Inc. (AREVA) has submitted by a letter dated December 11, 2007 to the U.S. Nuclear Regulatory Commission (NRC) a Final Safety Analysis Report (FSAR) for its application of the U.S. EPR design, accessible by Agencywide Documents Access and Management System (ADAMS) Accession No. ML073520305. NRC initiated the design certification review on March 19, 2008. During the review of the U.S. EPR design certification application, NRC staff identified the need for additional information concerning the employed seismic-LOCA analysis methodology. An on-site audit was conducted simultaneously at AREVA's Lynchburg, VA and Richland, WA offices in January 2010. This audit provided a general overview of the seismic-LOCA analysis methodology, however a number of specific technical issues were not fully resolved. Requests for additional information (RAIs) were issued and AREVA's draft response (ANP-10285Q8P) did not fully resolve the issues.

To facilitate a discussion of the important outstanding technical issues, NRC provided six talking points to AREVA for a June 2010 conference call. In a July 2010, the staff planned an on-site audit to discuss a path forward for resolving all the outstanding technical issues. This audit will include access to AREVA technical experts and existing technical documentation. This audit is needed to support the resolution of issues and accomplishing the U.S. EPR review schedule in an efficient manner, particularly in reference to Standard Review Plan (SRP) Section 4.2.

PURPOSE AND APPROACH

The purpose of this audit is to review several issues identified by the staff regarding the seismic-LOCA analysis employed in the U.S. EPR design, and to discuss a path forward for resolution of the technical issues. The proposed agenda, provided in Attachment A, identifies blocks of time for "Technical Discussions," which are intended to be used by AREVA to plan specific discussions of the unresolved technical issues. The audit team will include experts from NRC and consulting organizations. The staff will document the audit findings in an audit report.

AUDIT ACTIVITIES AND SCHEDULE

The NRC staff will conduct the review over a period of two business days. The staff may request an ad-hoc extension of the audit by one half day at the same location as needed. Such an extension will be requested before the meeting is adjourned on 09/14/2010 by the NRC staff responsible for the audit.

Following the audit, each technical reviewer and consulting organization will prepare a separate audit report with specific findings and will send the report to Fred Forsaty by 10/01/2010. The NRC staff responsible for the audit will assemble and prepare a final audit report. The final report will be made available to all contributors for their concurrence by 10/07/2010. Any final notes by the contributors will be communicated to Fred Forsaty no later than 10/07/2010.

A proposed agenda for the audit is presented in Attachment A. If necessary, any circumstances related to the conductance of the audit will be communicated to Fred Forsaty (NRC) at 301-415-8523 or at Fred.Forsaty@nrc.gov.

**Proposed Agenda
NRC Fuel Seismic-LOCA Methodology Audit
Pertaining to the Review of the U.S. EPR FSAR, Chapter 15
September 14-16, 2010
AREVA NP, Inc., 3315 Old Forest Road,
Lynchburg, VA**

Tuesday, September 14, 2010: AUDIT – proprietary

8:00-10:00 NRC Documentation Review..... [NRC]
10:00-12:00 AREVA-Led Technical Discussions [NRC/AREVA]
12:00-13:00 Lunch Break..... [NRC/AREVA]
13:00-16:30 AREVA-Led Technical Discussions [NRC/AREVA]
16:30-17:00 NRC Internal Caucus [NRC]
17:00 **Adjourn**

Wednesday, September 15, 2010: AUDIT – proprietary

8:00-8:30 NRC Documentation Review..... [NRC]
8:30-12:00 AREVA-Led Technical Discussions [NRC/AREVA]
12:00-13:00 Lunch Break..... [NRC/AREVA]
13:00-16:00 AREVA-Led Technical Discussions [NRC/AREVA]
16:00-16:30 NRC Documentation Review..... [NRC]
16:30-17:00 Exit Meeting or Review of Thursday Session [NRC/AREVA]
17:00 **Adjourn**

Thursday, September 16, 2010 (If necessary): AUDIT – proprietary

8:00-10:30 AREVA-Led Technical Discussions [NRC/AREVA]
10:30-11:00 NRC Internal Caucus [NRC]
11:00-11:30 Exit Meeting [NRC/AREVA]
11:30 **Adjourn**