

August 14, 2014

MEMORANDUM TO: Anna Bradford, Acting Chief
Licensing Branch 1
Division of New Reactor Licensing
Office of New Reactors

FROM: Michael Eudy, Project Manager /RA/
Licensing Branch 1
Division of New Reactor Licensing
Office of New Reactors

SUBJECT: AUDIT REPORT FOR THE MARCH 26 – MARCH 28, 2014, AUDIT OF
U.S. EPR FUKUSHIMA SAFEGUARD BUILDINGS AND MAIN
CONTROL ROOM HEATUP ANALYSES AND MAIN CONTROL ROOM
PORTABLE COOLER SIZING EVALUATION TO SUPPORT THE
SAFETY REVIEW OF THE U.S. EPR DESIGN CERTIFICATION

By letter dated December 11, 2007, as supplemented by letters dated February 7, 2008, and February 20, 2008, AREVA 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 Regulation* Part 52, "Licenses, Certifications, and Approvals for Nuclear Power Plants."

On March 26 through March 28, 2014, the NRC staff conducted an audit at the AREVA's secure on-line Electronic Reading Room to review the AREVA documents pertaining to AREVA's Fukushima safeguards buildings and main control room heatup analyses to support the safety review of the U.S. EPR DC application. The objective was to gain in-depth understanding of the analyses, supporting assumptions and uncertainties used to verify information, and/or to identify information that will require docketing to support the basis of the licensing or regulatory decision.

No audit issues were identified and no requests for additional information were requested. Enclosed is a summary report of the audit. The original audit plan can be found at (Agencywide Documents Access and Management System (ADAMS) Accession No. ML13127A342) dated May 9, 2013.

Docket No.: 52-020

Enclosure: As stated

cc: See next page

CONTACT: Michael Eudy, NRO/DNRL
301-415-3104

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SUBJECT: AUDIT REPORT FOR THE MARCH 26 – MARCH 28, 2014, AUDIT OF
U.S. EPR FUKUSHIMA SAFEGUARD BUILDINGS AND MAIN CONTROL
ROOM HEATUP ANALYSES AND MAIN CONTROL ROOM PORTABLE
COOLER SIZING EVALUATION TO SUPPORT THE SAFETY REVIEW OF
THE U.S. EPR DESIGN CERTIFICATION

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*via email

NRO-002

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NAME	MEudy	JMcLellan	JMcKirgan	MEudy
DATE	08/08/2014	08/07/2014	08/14/2014	08/14/2014

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Audit Report

APPLICANT: AREVA, INC.

PROJECT: EPR DESIGN CERTIFICATION

SUBJECT: AUDIT REPORT FOR THE MARCH 26 – MARCH 28, 2014, AUDIT OF
U.S. EPR FUKUSHIMA SAFEGUARD BUILDINGS AND MAIN CONTROL
ROOM HEATUP ANALYSES AND MAIN CONTROL ROOM PORTABLE
COOLER SIZING EVALUATION

BACKGROUND

To facilitate the safety evaluation of AREVA's heatup analyses to support Fukushima event mitigation, the documents related to the analysis are requested for audit.

AUDIT APPROACH

The approach of the audit is to review the Fukushima safeguard buildings and main control room heatup analyses and supporting evaluation. The objective is to gain in-depth understanding of the analyses, supporting assumptions and uncertainties used to verify information, and/or to identify information that will require docketing to support the basis of the licensing or regulatory decision. Performing this audit will help the NRC staff conduct its review of the applicant's response to Request for Addition Information (RAI) 563, Question 19-356 more efficiently.

DOCUMENTATION REVIEWED

The NRC staff reviewed the following documentations at the AREVA Electronic Reading Room:

AREVA Doc. 32-7014009-002, "Safeguard Building Heatup during an ELAP (SB2)"
AREVA Doc. 32-7014090-000, "Control Room Heatup following ELAP Study"
AREVA Doc. 32-7014669-000, "Safeguard Building 1 Heatup during ELAP Event"
AREVA Doc. 51-7014092-000, "Evaluation for MCR Heatup following ELAP Event"
AREVA Doc. 32-7013607-001, "Airrex 7 Ton Spot Cooler"

AUDIT SUMMARY

The information presented in the documents provided the NRC staff with a better understanding of the U.S. EPR Fukushima safeguard buildings and control room heatup analyses, and main control room portable cooler sizing evaluation. This information will support the safety review of the applicant's response to RAI 563, Question 19-356 more efficiently. No new RAI resulted from this audit.

Enclosure

DC AREVA - EPR Mailing List
cc:

(Revised 06/03/2014)

Dr. Charles L. King
Licensing Manager, IRIS Project
Westinghouse Electric Company
Science and Technology Department
20 International Drive
Windsor, CT 06095

Mr. Marvin Lewis
3133 Fairfield Street
Philadelphia, PA 19136

Mr. Robert E. Sweeney
IBEX ESI
4641 Montgomery Avenue
Suite 350
Bethesda, MD 20814

Ms. Ruth Thomas
354 Woodland Dr.
Columbus, NC 28722

Mr. Gary Wright, Director
Division of Nuclear Facility Safety
Illinois Emergency Management Agency
1035 Outer Park Drive
Springfield, IL 62704

DC AREVA - EPR Mailing List

Email

alau@washdc.whitecase.com (Albie Lau)
awc@nei.org (Anne W. Cottingham)
bgattoni@roe.com (William (Bill) Gattoni))
cwaltman@roe.com (C. Waltman)
david.hinds@ge.com (David Hinds)
david.lewis@pillsburylaw.com (David Lewis)
erg-xl@cox.net (Eddie R. Grant)
Gayle.Elliott@areva.com (Gayle Elliott)
gcesare@enercon.com (Guy Cesare)
George_Stramback@Charter.net (George Stramback)
greg.gibson@unistarnuclear.com (Greg Gibson)
James.Ransom@areva.com (James Ransom)
james1.beard@ge.com (James Beard)
jerald.head@ge.com (Jerald G. Head)
Joseph_Hegner@dom.com (Joseph Hegner)
judy.romine@areva.com (Judy Romine)
KSutton@morganlewis.com (Kathryn M. Sutton)
kwaugh@impact-net.org (Kenneth O. Waugh)
Ichandler@morganlewis.com (Lawrence J. Chandler)
Len.Gucwa.ext@areva.com (Len Gucwa)
maria.webb@pillsburylaw.com (Maria Webb)
marvlewis@juno.com (M. Lewis)
mcintyba@westinghouse.com (Brian McIntyre)
media@nei.org (Scott Peterson)
mjcaverly@ppl.web.com (Michael Caverly)
MSF@nei.org (Marvin Fertel)
Nathan.Hottle@areva.com (Nathan Hottle)
nirsnet@nirs.org (Michael Mariotte)
Nuclaw@mindspring.com (Robert Temple)
patriciaL.campbell@ge.com (Patricia L. Campbell)
paul.gaukler@pillsburylaw.com (Paul Gaukler)
Paul@beyondnuclear.org (Paul Gunter)
pbessette@morganlewis.com (Paul Bessette)
pedro.salas@areva.com (Pedro Salas)
RJB@NEI.org (Russell Bell)
rrsgarro@pplweb.com (Rocco Sgarro)
ryan_sprengel@mnes-us.com (Ryan Sprengel)
sabinski@suddenlink.net (Steve A. Bennett)
sfrantz@morganlewis.com (Stephen P. Frantz)
Sherry.Mcfaden@areva.com (Sherry McFaden)
SRubin@numarkassoc.com (Stuart Rubin)
stephan.moen@ge.com (Stephan Moen)
Tiffany.Wills@areva.com (Tiffany Wills)

DC AREVA - EPR Mailing List

tkkibler@scana.com (Tria Kibler)
Tony.McNulty@hse.gsi.gov.uk (Tony McNulty)
trsmith@winston.com (Tyson Smith)
Vanessa.quinn@dhs.gov (Vanessa Quinn)
vijukrp@westinghouse.com (Ronald P. Vijuk)
Wanda.K.Marshall@dom.com (Wanda K. Marshall)
wayne.marquino@ge.com (Wayne Marquino)
whorin@winston.com (W. Horin)