

July 11, 2012

MEMORANDUM TO: John Segala, Chief  
Licensing Branch 1  
Division of New Reactor Licensing  
Office of New Reactors

FROM: William Gleaves, Senior Project Manager  
Licensing Branch 1  
Division of New Reactor Licensing  
Office of New Reactors

SUBJECT: SUMMARY OF MAY 2, 2012, PUBLIC MEETING WITH  
AREVA NP, INC., TO DISCUSS THE U.S. EPR DESIGN  
CERTIFICATION – REACTOR FUEL DESIGN METHODOLOGY

On May 2, 2012, the U.S. Nuclear Regulatory Commission (NRC) held a Category I public meeting with AREVA NP, Inc., at the NRC headquarters building in Rockville, MD. During the meeting, the NRC staff and representatives of AREVA discussed the closure plan for the AREVA U.S. EPR reactor design certification, specifically, the reactor fuel mechanical and seismic design. The meeting notice was revised and both the original and the revised notice were available through both the NRC public meeting website and the Agencywide Documents Access and Management System (ADAMS) at Accession No. ML121030118. The meeting notice included the meeting agenda. A list of attendees is included as Enclosure 1.

The public portion of the meeting began at 9:00 a.m. Eastern Time (ET) and was open to the public since only non-proprietary information was discussed. After opening remarks and introduction of attendees, meeting ground-rules, and logistics were announced. The NRC staff briefly reviewed the meeting agenda. The meeting presentations began with AREVA staff discussing recent events regarding the reactor fuel design. The last U.S. EPR fuel design methodology closure plan was submitted to NRC in August 2011. Based on comments from a February 29, 2012, public meeting, AREVA revised the U.S. EPR fuel design methodology closure plan. AREVA went on to discuss changes to the closure plan that will accommodate NRC comments. AREVA outlined the major changes to the closure plan as: (1) modification of the design of certain U.S EPR fuel assembly spacer grids; (2) reducing by one case the design basis soil cases for the reactor core to reduce the seismic demand on the core; and (3) submitting a new Technical Report that will detail the U.S. EPR fuel design methodology and its application. The NRC staff had comments and questions for AREVA. The NRC staff comments included: (1) stating that NRC appreciates that AREVA is willing to meet and discuss issues relating to the review, (2) that NRC may not support a separate audit on topical report Request for Additional Information (RAIs) 64, 65, and 66 and favors auditing all the topical report RAIs at the same time, (3) and the comment that if the proposed U.S. EPR fuel technical report will subsume previous RAI responses, in that the letter transmitting the technical report will note the RAIs as appropriate. Following the presentation and summary of the meeting, comments were requested from the public present and on the teleconference bridge. No comments or questions were received.

The public portion of the meeting was closed at 9:40 a.m. and at 10:00 a.m., the meeting was reopened as a closed meeting in order to discuss information classified as proprietary by AREVA directly relating to the general topics and proposed changes from the proprietary portion of the meeting. AREVA and the NRC staff again discussed proprietary details of the proposed changes to the fuel design methodology closure plan, including details of the changes to the design basis reactor core soil cases, the changes to the U.S. EPR fuel assembly spacer grids, and details of information for the proposed technical report and its impact on the final safety analyses report (FSAR) and the current U.S. EPR fuel topical report.

Prior to the conclusion of the meeting, the NRC staff met separately to discuss progress. Following this short break, the NRC staff summarized the meeting as follows: The NRC staff believes that this meeting was productive and shows AREVA's intent to resolve outstanding U.S. EPR fuel design questions. The NRC staff also believes that the proposed design basis soil cases for the U.S EPR reactor core, proposed to differ from the balance of the U.S. EPR facility, does not have precedent, and that the NRC staff will work to identify any review issues that may be raised by this unique proposal. The NRC staff agreed with AREVA that an early conference call on the frequency sweep methodology is needed to identify if review questions exist. The NRC staff concluded by stating that the best approach for submitting the previously-discussed documents are: A letter by AREVA containing revised RAI responses and FSAR pages; a separate letter containing the revised Topical Report; and (3) a separate letter with the new Technical Report on U.S. EPR fuel design methodology.

Sincerely,

*/RA/*

William (Billy) Gleaves, Senior Project Manager  
EPR Projects Branch  
Division of New Reactor Licensing  
Office of New Reactors

Docket No.: 52-020

Enclosures:   1.   List of Attendees  
                  2.   AREVA presentation slides (non-proprietary)  
                  3.   AREVA presentation slides (proprietary)

cc: See next page

The public portion of the meeting was closed at 9:40 a.m. and at 10:00 a.m., the meeting was reopened as a closed meeting in order to discuss information classified as proprietary by AREVA directly relating to the general topics and proposed changes from the proprietary portion of the meeting. AREVA and the NRC staff again discussed proprietary details of the proposed changes to the fuel design methodology closure plan, including details of the changes to the design basis reactor core soil cases, the changes to the U.S. EPR fuel assembly spacer grids, and details of information for the proposed technical report and its impact on the final safety analyses report (FSAR) and the current U.S. EPR fuel topical report.

Prior to the conclusion of the meeting, the NRC staff met separately to discuss progress. Following this short break, the NRC staff summarized the meeting as follows: The NRC staff believes that this meeting was productive and shows AREVA's intent to resolve outstanding U.S. EPR fuel design questions. The NRC staff also believes that the proposed design basis soil cases for the U.S EPR reactor core, proposed to differ from the balance of the U.S. EPR facility, does not have precedent, and that the NRC staff will work to identify any review issues that may be raised by this unique proposal. The NRC staff agreed with AREVA that an early conference call on the frequency sweep methodology is needed to identify if review questions exist. The NRC staff concluded by stating that the best approach for submitting the previously-discussed documents are: A letter by AREVA containing revised RAI responses and FSAR pages; a separate letter containing the revised Topical Report; and (3) a separate letter with the new Technical Report on U.S. EPR fuel design methodology.

Sincerely,

*/RA/*

William (Billy) Gleaves, Senior Project Manager  
EPR Projects Branch  
Division of New Reactor Licensing  
Office of New Reactors

Docket No.: 52-020

Enclosures: 1. List of Attendees  
2. AREVA presentation slides (non-proprietary)  
3. AREVA presentation slides (proprietary)

cc: See next page

**DISTRIBUTION:**

Public	RidsNroDnrILb1	RidACrsAcnwMailCenter
RidsOgcMailCenter	JSegala	WGleaves
JMcLellan	JDonoghue	MHayes
GTesfaye	SLu	

**ADAMS Accession No.:** ML12142A133

NRO-002

<b>OFFICE</b>	DNRL/NARP: PM	DNRL/NARP: LA	DNRL/NARP: PM	DNRL/NARP: BC
<b>NAME</b>	WGleaves	JMcLellan	GTestfaye	JSegala (MMiernicki for)
<b>DATE</b>	05/25/2012	06/06/2012	06/07/2012	07/11/2012

**OFFICIAL RECORD COPY**



**Public Meeting with AREVA NP, Inc to Discuss the EPR Design Certification Reactor Fuel Design Methodology**

**May 2, 2012**

**Rockville, MD**

<b>Name</b>	<b>Organization</b>
Shanlai Lu	NRC/NRO
Michelle Hayes	NRC/NRO
Joe Donoghue	NRC/NRO
John Segala by telephone	NRC/NRO
Billy Gleaves	NRC/NRO
Getachew Testfaye	NRC/NRO
Paul Clifford	NRC/NRR
Jim Gilmer	NRC/NRO
Ralph Landry	NRC/NRO
Jim Xu	NRC/NRO
Jeff Schmidt	NRC/NRO
Shih-Liang Wu	NRC/NRR
Harold Scott	NRC/RES
Mathew Panicker	NRC/NRR
Robert Weisman	NRC/OGC
Gene Hsi	NRC/NRO
Nick Klymyshyn	PNNL (NRC contractor)
Brett Matthews	AREVA
Jerry Holm	AREVA
Darrell Gardner by telephone	AREVA
Victor Hatman	AREVA

Brian McIntyre	AREVA
Rick Williamson	AREVA
Joel Hartman	AREVA
Richard Harne	AREVA
Dennis Gottuso	AREVA
Sebastien Thomas	UniStar Nuclear
Masatoshi Nagai	MNES
David Diamond	BNL
Daddy Setyawan	BAPE TEM
Kurt R Walter	MNES

DC AREVA - EPR Mailing List

(Revised 05/21/2012)

cc:

Ms. Michele Boyd  
Legislative Director  
Energy Program  
Public Citizens Critical Mass Energy  
and Environmental Program  
215 Pennsylvania Avenue, SE  
Washington, DC 20003

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

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

Ms. Sherry McFaden  
AREVA NP Inc.  
3315 Old Forest Road, OF-16  
Lynchburg, VA 24501

Mr. Tony Robinson  
AREVA NP, Inc.  
3315 Old Forest Road  
Lynchburg, VA 24501

Mr. Steve Seitz  
AREVA NP Canada Ltd.  
100 Dean Road  
East Lyme, CT 06333

Ms. Sandra Sloan  
AREVA NP Inc.  
3315 Old Forrest Road  
P.O. Box 10935  
Lynchburg, VA 24506-0935

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

## DC AREVA - EPR Mailing List

### Email

alau@washdc.whitecase.com (Albie Lau)  
APH@NEI.org (Adrian Heymer)  
awc@nei.org (Anne W. Cottingham)  
bgattoni@roe.com (William (Bill) Gattoni)  
BrinkmCB@westinghouse.com (Charles Brinkman)  
cwaltman@roe.com (C. Waltman)  
darrell.gardner@areva.com (Darrell Gardner)  
david.hinds@ge.com (David Hinds)  
david.lewis@pillsburylaw.com (David Lewis)  
dennis.williford@areva.com (Dennis Williford)  
erg-xl@cox.net (Eddie R. Grant)  
gcesare@enercon.com (Guy Cesare)  
greg.gibson@unistarnuclear.com (Greg Gibson)  
james.p.mcquighan@constellation.com (Jim McQuighan)  
james1.beard@ge.com (James Beard)  
jason.parker@pillsburylaw.com (Jason Parker)  
jerald.head@ge.com (Jerald G. Head)  
Joseph\_Hegner@dom.com (Joseph Hegner)  
KSutton@morganlewis.com (Kathryn M. Sutton)  
kwaugh@impact-net.org (Kenneth O. Waugh)  
lchandler@morganlewis.com (Lawrence J. Chandler)  
Len.Gucwa.ext@areva.com (Len Gucwa)  
maria.webb@pillsburylaw.com (Maria Webb)  
mark.beaumont@wsms.com (Mark Beaumont)  
mark.t.hunter@unistarnuclear.com (Mark Hunter)  
Martin.Bryan.ext@AREVA.com (Martin Bryan)  
matias.travieso-diaz@pillsburylaw.com (Matias Travieso-Diaz)  
mbowling@numarkassoc.com (Marty Bowling)  
media@nei.org (Scott Peterson)  
mike\_moran@fpl.com (Mike Moran)  
MSF@nei.org (Marvin Fertel)  
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)  
RJB@NEI.org (Russell Bell)  
rrsgarro@pplweb.com (Rocco Sgarro)  
sabinski@suddenlink.net (Steve A. Bennett)  
sfrantz@morganlewis.com (Stephen P. Frantz)  
stephan.moen@ge.com (Stephan Moen)  
Steve.Graham@hse.gsi.gov.uk (Steve Graham)

DC AREVA - EPR Mailing List

strambgb@westinghouse.com (George Stramback)  
tkkibler@scana.com (Tria Kibler)  
tlharpster@pplweb.com (Terry Harpster)  
tom.miller@hq.doe.gov (Tom Miller)  
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)