

March 18, 2010

APPLICANT: AREVA NP, Inc.

SUBJECT: SUMMARY OF MAY 6, 2009, PUBLIC MEETING WITH AREVA NP INC.,  
REGARDING RESPONSES TO NUCLEAR REGULATORY COMMISSION  
REQUESTS FOR ADDITIONAL INFORMATION ON U.S. EPR CIVIL-  
STRUCTURAL REVIEW

On May 6, 2009, a public meeting was held between the U.S. Nuclear Regulatory Commission (NRC) and representatives of AREVA NP, Inc., at the AREVA NP office in Rockville, Maryland. The purpose of the meeting was to discuss AREVA NP's responses to requests for additional information (RAI) 155 and 161 on U.S. EPR Final Safety Analysis Report (FSAR) Tier 2, Sections 3.8 and 3.10. A meeting agenda is provided as Enclosure 1. A list of attendees is provided as Enclosure 2. AREVA NP provided a presentation entitled, "U.S. EPR Civil-Structural RAI Update," which can be accessed through the Agencywide Documents Access and Management System (ADAMS) under Accession No. ML091350464. This system provides text and image files of NRC public documents.

AREVA NP opened the meeting with a presentation on the status of civil/structural RAI responses. They discussed the current soil-structure analysis methods described in the FSAR, and the introduction of a 3-D finite element model to be able to respond to various NRC seismic-structural design concerns as expressed in several RAIs. They also described soil profile analysis adjustments being made to account for United States (U.S.) eastern hard rock site seismic characteristics and ground motions in the final soil cases for the U.S. EPR design. AREVA NP also discussed the qualitative and quantitative criteria developed for the selection of critical structural sections to be designed for the Nuclear Island common basemat structures. They presented a list of critical sections identified utilizing these criteria.

AREVA NP and NRC discussed the review schedule impacts of the design methodology changes that were presented. RAI response schedules, future audits, and NRC confirmatory analyses were identified as areas impacted by the changes presented by AREVA NP. The NRC staff generally agreed with the approach associated with the selection of critical sections. The potential for treating the NRC staff's review of the design of critical sections as a confirmatory activity, as a result of the development of specific criteria to identify critical sections, was discussed. It was agreed that this approach could be considered once the RAI 155 supplemental responses were received and reviewed by the NRC, and an audit of calculational methods was conducted. AREVA NP agreed to update RAI response schedules associated with the analyses methodology changes, as necessary.

Members of the public were present at the meeting.

Please direct any inquiries concerning this meeting to Michael Miernicki at 301-415-2304, or [Michael.Miernicki@nrc.gov](mailto:Michael.Miernicki@nrc.gov).

**/RA/**

Michael J. Miernicki, Senior Project Manager  
EPR Projects Branch  
Division of New Reactor Licensing  
Office of New Reactors

Docket No. 52-020

Enclosures:

1. Agenda
2. List of Attendees

cc: See next page

Please direct any inquires concerning this meeting to Michael Miernicki at 301-415-2304, or [Michael.Miernicki@nrc.gov](mailto:Michael.Miernicki@nrc.gov).

**/RA/**

Michael J. Miernicki, Senior Project Manager  
EPR Projects Branch  
Division of New Reactor Licensing  
Office of New Reactors

Docket No. 52-020

Enclosures:

1. Agenda
2. List of Attendees

cc: See next page

**DISTRIBUTION:**

PUBLIC

NARP R/F

KHawkins, NRO

MMiernicki, NRO

JXu, NRO

SChakrabarti, NRO

MChakravorty, NRO

GTesfaye NRO

JMcLellan, NRO

PTalukdar, NRO

RidsNroDnrl

RidsNroDeSeb2

RidsNroDe

RidsNroDnrlNarp

ADAMS Accession No. ML100480587 (package)

NRO-002

| OFFICE | PM:DNRL/NARP | LA:DNRL/NARP              | BC:DE/SEB2 | BC:DNR/NARP |
|--------|--------------|---------------------------|------------|-------------|
| NAME   | MMiernicki   | JMcLellan Priyam Talukdar | KHawkins   | JColaccino  |
| DATE   | 2/24/10      | 2/24/10                   | 3/16/10    | 3/18/10     |

**OFFICIAL RECORD COPY**

## **AGENDA**

### **DISCUSSION OF AREVA NP'S RESPONSES TO REQUESTS FOR ADDITIONAL INFORMATION SETS NO. 155 AND 161 ON U.S. EPR FSAR SECTIONS 3.8 and 3.10**

**May 6, 2009**

| <u>Time</u> | <u>Topic</u>                                                                                                                                                | <u>Led by</u> |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| 1:30 p.m.   | Introduction                                                                                                                                                | NRC / AREVA   |
| 1:40 p.m.   | Overview of Civil-Structural RAIs<br>(DC FSAR Sections 3.8 and 3.10)                                                                                        | AREVA         |
| 2:00 p.m.   | Schedule and Response Strategy for Remaining<br>RAI Responses <ul style="list-style-type: none"><li>- Methodology</li><li>- Confirmatory Analyses</li></ul> | AREVA         |
| 3:30 p.m.   | Modification of GMRS to Envelope<br>U.S. EPR COLA Sites                                                                                                     | AREVA         |
| 4:00 p.m.   | Summary and Next Steps                                                                                                                                      | NRC/ AREVA    |
| 4:20 p.m.   | Opportunity for Public Comment                                                                                                                              | NRC           |
| 4:30 p.m.   | Adjourn                                                                                                                                                     |               |

ENCLOSURE 1

**Public Meeting with AREVA NP to Discuss Civil-Structural  
RAI Responses for the U.S. EPR DC**

**May 6, 2009**

**Rockville, MD**

| <b>Name</b>       | <b>Organization</b> |
|-------------------|---------------------|
| Michael Miernicki | NRC                 |
| Manas Chakravorty | NRC                 |
| Ching Ng          | NRC                 |
| Getachew Tesfaye  | NRC                 |
| Jim Xu            | NRC                 |
| Guy Pastor        | UniStar             |
| Jay Leininger     | UniStar             |
| Brian McIntyre    | Areva NP            |
| Samir Chakrabarti | NRC                 |
| Michael Hoskins   | Areva NP            |
| Dan Fisher        | Areva NP            |
| Sandra Sloan      | Areva NP            |
| Christian Clement | UniStar             |
| Todd Oswald       | Areva NP            |
| Hikaru Ogasawara  | MNES                |
|                   |                     |

ENCLOSURE 2

DC AREVA - EPR Mailing List  
cc:

(Revised 03/17/2010)

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

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

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

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

Mr. Tom Sliva  
7207 IBM Drive  
Charlotte, NC 28262

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

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)  
APH@NEI.org (Adrian Heymer)  
awc@nei.org (Anne W. Cottingham)  
BrinkmCB@westinghouse.com (Charles Brinkman)  
carey.fleming@cengllc.com (Carey Fleming)  
chris.maslak@ge.com (Chris Maslak)  
christian.clement@unistarnuclear.com (Chrisitan Clement)  
cwaltman@roe.com (C. Waltman)  
david.hinds@ge.com (David Hinds)  
david.lewis@pillsburylaw.com (David Lewis)  
erg-xl@cox.net (Eddie R. Grant)  
gcesare@enercon.com (Guy Cesare)  
greg.gibson@unistarnuclear.com (Greg Gibson)  
james.beard@gene.ge.com (James Beard)  
james.p.mcquighan@constellation.com (Jim McQuighan)  
jason.parker@pillsburylaw.com (Jason Parker)  
jerald.head@ge.com (Jerald G. Head)  
jgutierrez@morganlewis.com (Jay M. Gutierrez)  
jim.riccio@wdc.greenpeace.org (James Riccio)  
JJNesrsta@cpsenergy.com (James J. Nesrsta)  
John.O'Neill@pillsburylaw.com (John O'Neill)  
Joseph\_Hegner@dom.com (Joseph Hegner)  
junichi\_uchiyama@mnes-us.com (Junichi Uchiyama)  
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)  
Marc.Brooks@dhs.gov (Marc Brooks)  
maria.webb@pillsburylaw.com (Maria Webb)  
mark.beaumont@wsms.com (Mark Beaumont)  
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)  
mwetterhahn@winston.com (M. Wetterhahn)  
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)  
pshastings@duke-energy.com (Peter Hastings)  
RJB@NEI.org (Russell Bell)  
Ronda.pederson@areva.com (Ronda Pederson)

## DC AREVA - EPR Mailing List

rrsgarro@pplweb.com (Rocco Sgarro)  
russell.wells@areva.com (Russell Wells)  
sabinski@suddenlink.net (Steve A. Bennett)  
sandra.sloan@areva.com (Sandra Sloan)  
sfrantz@morganlewis.com (Stephen P. Frantz)  
stephan.moen@ge.com (Stephan Moen)  
Steve.Graham@hse.gsi.gov.uk (Steve Graham)  
steven.hucik@ge.com (Steven Hucik)  
strambgd@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)