

January 4, 2012

COMPANY: BABCOCK & WILCOX NUCLEAR ENERGY

DESIGN: MPOWER REACTOR DESIGN

SUBJECT: SUMMARY OF NOVEMBER 17, 2011, CLOSED MEETING WITH BABCOCK & WILCOX NUCLEAR ENERGY TO DISCUSS THE CONTAINMENT SYSTEMS OVERVIEW, HUMAN FACTORS ENGINEERING CONCEPTUAL DESIGN UPDATE, AND ASME CODE OVERVIEW (TAC NO. RN6075)

On November 17, 2011, a closed meeting was held between the U.S. Nuclear Regulatory Commission (NRC) and representatives of Babcock & Wilcox Nuclear Energy (B&W NE) at NRC Headquarters, Two White Flint North, 11555 Rockville Pike, Room T-7A1, Rockville, Maryland. The purpose of the meeting was to discuss the containment systems overview, human factors engineering (HFE) conceptual design update, and American Society of Mechanical Engineers code overview for the mPower design.

B&W NE presented a comprehensive overview of the containment systems which included the containment layout overview, summary of containment design parameters, residual heat removal and containment cooling, containment isolation system, combustible gas control/containment purge, leakage and containment testing, containment analysis methodology, control room ventilation system, and other nuclear ventilation systems. The NRC staff asked questions and provided B&W feedback on the proposed designs. These topics will be discussed in future meetings with B&W NE as the design of the containment systems matures.

B&W NE also presented their HFE conceptual design update which included the HFE concept development and implementation for the B&W mPower design, evolution of concepts, technical basis document (TBD) and emergency operating guidelines (EOG) development, and discussion of HFE and human systems interface (HSI) planned submittals. The NRC staff asked questions and provided feedback. HFE discussions will continue with B&W in future meetings.

The final topic for the meeting was the American Society of Mechanical Engineers (ASME) code overview for the mPower design. B&W NE discussed recent presentations and interactions with ASME regarding the mPower design and plans for future discussions with ASME for Sections III and XI. The design optimization (425 MWt to 500 MWt) and key modifications, and in-service inspection (ISI) design were also discussed. The NRC staff asked questions and provided feedback. HFE discussions will continue with B&W in future meetings.

The meeting agenda and meeting attendees are included in Enclosures 1 and 2. B&W NE slide presentations are available through the Agencywide Documents Access and Management System (ADAMS). The ADAMS accession numbers for the non-proprietary, redacted version of the slide presentations are ML11325A173, ML11334A052, and ML11334A088. ADAMS is the system that provides text and image files of NRC's public documents. Documents are available electronically at the NRC's Electronic Reading Room at <http://www.nrc.gov/reading-room/adams.html>.

If you do not have access to ADAMS or have problems accessing the documents located in ADAMS, contact the NRC Public Document Room (PDR) staff at 1-800-397-4209, 301-415-4737, or pdrr@nrc.gov.

Please direct any inquiries to Jan Mazza at 301-415-0498 or Jan.Mazza@nrc.gov or Joelle Starefos at 301-415-6091 or Joelle.Starefos@nrc.gov.

Sincerely,

/RA/

Jan Mazza, Project Manager
Advanced Reactors Projects Branch
Division of Advanced Reactors and
Rulemaking
Office of New Reactors

Project No.: PROJ0776

Enclosure:

1. Agenda
2. List of Attendees

cc w/encl: DC B&W mPower Mailing List

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Please direct any inquiries to Jan Mazza at 301-415-0498 or Jan.Mazza@nrc.gov or Joelle Starefos at 301-415-6091 or Joelle.Starefos@nrc.gov.

Sincerely,

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Jan Mazza, Project Manager
Advanced Reactor Projects Branch
Division of Advanced Reactors and
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| LWheeler, NRO | JWalker, NRO | SBussey, HR |

ADAMS ACCESSION NO.: ML113400078

NRO-001

| | | |
|--------|------------------|------------------|
| OFFICE | NRO/DARR/APRB:PM | NRO/DARR/APRB:PM |
| NAME | JMazza | JStarefos |
| DATE | 12/12/2011 | 1/4/2012 |

AGENDA

CLOSED MEETING BETWEEN BABCOCK & WILCOX (B&W) AND THE U.S. NUCLEAR REGULATORY COMMISSION (NRC) STAFF

NOVEMBER 17, 2011

U.S. Nuclear Regulatory Commission

Two White Flint North

11555 Rockville Pike

Room T 7-A1

Rockville, MD 20852

| Time | Topic | Lead |
|---------------------|---|-------------|
| 9:00 am – 9:10 am | Opening Remarks & Introductions | NRC |
| 9:10 am – 10:15 am | Containment Systems Overview | B&W |
| 10:15 am – 10:25 am | Break | All |
| 10:25 am – 11:30 am | Containment Systems Overview (Cont.) | B&W |
| 11:30 am – 12:30 pm | Lunch | All |
| 12:30 pm – 1:30 pm | Human Factors Engineering Conceptual Design Update | B&W |
| 1:30 pm – 1:45 pm | Break | All |
| 1:45 pm – 3:00 pm | ASME Code Overview | B&W |
| 3:00 pm | Adjourn | All |

ATTENDANCE LIST
CLOSED MEETING WITH BABCOCK & WILCOX REGARDING CONTAINMENT SYSTEMS
OVERVIEW, HUMAN FACTORS ENGINEERING CONCEPTUAL DESIGN UPDATE, AND
ASME CODE OVERVIEW

November 17, 2011 9:00 am – 3:00 pm

TWFN 07-A1

| Name | Affiliation |
|----------------------|--------------------|
| Tom Spink | TVA |
| Steve Kline | Bechtel |
| J.V. Smith | Bechtel |
| Julie Jarvis | Bechtel |
| Martin Reifschneider | Bechtel |
| Kenneth Baity | B&W |
| Nate Bennett | Bechtel |
| Jim McNulty | Bechtel |
| Jack Demitz | Bechtel |
| Al Scott | Bechtel |
| Russ Goodwin | TVA |
| Ron Gibson | Bechtel |
| Chet Poslusny | B&W |
| Eric Williams | B&W |
| Mike Edwards | B&W |
| Anne-Marie Grady | NRC/NRO/DSRA |
| Greg Makar | NRC/NRO/DE/CIB1 |
| Jim Gilmer | NRC/NRO/DSRA |
| Joelle Starefos | NRC/NRO/DARR |
| Harry Wagage | NRC/NRO/DSRA |
| Rachel Vaucher | NRO/DE/CIB |
| John O'Hara | BNL |
| Larry Wheeler | NRO/DSRA/SBP |
| Ron LaVera | NRO/DCIP/CHPB |
| Joel Jenkins | NRO/DE/CIB |
| Mark Notich | NRO/DARR |
| Carl Weber | NRO/DCIP |
| Ross Moore | NRO/DARR |
| Steve Williams | NRO/DCIP/CHPB |
| Scott Bussey | NRC/ADM/TTC |
| Jim Saldarini | Bechtel |
| Jan Mazza | NRO/DARR |
| Neil Ray | NRO/DE |
| Raj Goel | NRO/DSRA |

Attendance List (Continued)

| Name | Affiliation |
|-----------------|--------------------|
| Mike Childerson | B&W |
| Craig Harbuck | NRO/DSRA |
| Jeff Halfinger | B&W |
| Nebiyu Tiruneh | NRO/DSER/RHEB |
| Vince Williams | NRC/NSIR |
| David Diec | NRC/NSIR |
| Hulbert Li | NRO/DE/ICE |
| Sunwoo Park | NRO/DE/SEB |
| Ed Fuller | NRO/DSRA/SPRA |
| Syed Haider | NRO/DSRA/SCVB |
| John McKirgan | NRO/DSRA/SCVB |
| Daniel Laughman | B&W |
| Troy Nguyen | Northrop Grumman |
| Thomas Graham | B&W |
| J. Bongarra | NRO/DCIP/COLP |
| Paul Pieringer | NRO/DCIP/COLP |
| Lewis Hartless | B&W |
| Kaihwa Hsu | NRC/NRO/DE |
| David Terao | NRO/DE/CIB |
| Robert Davis | NRO/DE/CIB |
| Pei-Ying Chen | NRO/DE/EMB |
| Stu Magruder | NRO/DARR |
| Jason Huang | NRO/DE/EMB |
| Arlon Costa | NRO/DARR |

DC B&W mPower
cc:

(Revised 11/16/2011)

Mr. Lionel Batty
Nuclear Business Team
Graftech
12300 Snow Road
Parma, OH 44130

Mr. Dobie McArthur
Director, Washington Operations
General Atomics
1899 Pennsylvania Avenue, NW
Suite 300
Washington, DC 20006

Russell Bell
Nuclear Energy Institute
1776 I Street, NW
Suite 400
Washington, DC 20006-3708

Mr. David Repka
Winston & Strawn LLP
1700 K. Street, NW
Washington, DC 20006-3817

Mr. Ian M. Grant
Canadian Nuclear Safety Commission
280 Slater Street, Station B
P.O. Box 1046
Ottawa, Ontario
K1P 5S9

Carlos Sisco
Senior Paralegal
Winston & Strawn LLP
1700 K Street NW
Washington, DC 20006

Mr. Eugene S. Grecheck
Vice President
Nuclear Support Services
Dominion Energy, Inc.
5000 Dominion Blvd.
Glen Allen, VA 23060

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

Michael L. Hammond
Technological Hazards Program Office
Radiological Emergency Preparedness
Program, Region X
U.S. Department of Homeland Security
130 228th Street, SW
Bothell, WA 98021

Mr. Brendan Hoffman
Research Associate on Nuclear Energy
Public Citizens Critical Mass Energy and
Environmental Program
215 Pennsylvania Avenue, SE
Washington, DC 20003

DC B&W mPower

Email

Alan.Levin@areva.com (Alan Levin)
APH@NEI.org (Adrian Heymer)
asi@ornl.gov (Anita Benn)
awc@nei.org (Anne Cottingham)
badwan@lanl.gov (Faris Badwan)
bevans@enercon.com (Bob Evans)
BrinkmCB@westinghouse.com (Charles Brinkman)
cee@nei.org
charles.bagnal@ge.com (Charles Bagnal)
collinlj@westinghouse.com (Leslie Collins)
curtisslaw@gmail.com (Jim Curtiss)
david.hinds@ge.com (David Hinds)
david.lewis@pillsburylaw.com (David Lewis)
deborah@hyperionpowergeneration.com (Deborah Ann Blackwell)
dsafer@comcast.net (Don Safer)
ed.burns@earthlink.net (Ed Burns)
elyman@ucsusa.org (Ed Lyman)
erg-xl@cox.net (Eddie R. Grant)
ewallace@nuscalepower.com (Ed Wallace)
F.Shahrokhi@AREVA.Com (Farshid Shahrokhi)
flowerspa@ornl.gov (Paula Flowers)
gcesare@enercon.com (Guy Cesare)
gmorg50@hotmail.com (Garry Morgan)
jahalfinger@babcock.com (Jeff Halfinger)
james.beard@gene.ge.com (James Beard)
jason.parker@pillsburylaw.com (Jason Parker)
jason.tokey@nuclear.energy.gov (Jason Tokey)
jcsaldar@bechtel.com (James Saldarini)
jerald.head@ge.com (Jerald G. Head)
Jim.Kinsey@inl.gov (James Kinsey)
jim.riccio@wdc.greenpeace.org (James Riccio)
JNR@NuScalePower.com (Jose N. Reyes)
klingscl@westinghouse.com (Charles King)
kouhestani@msn.com (Amir Kouhestani)
KSutton@morganlewis.com (Kathryn M. Sutton)
Kwelter@NuScalePower.com (Kent Welter)
lchandler@morganlewis.com (Lawrence J. Chandler)
lgorenflo@gmail.com (L. Gorenflo)
maria.webb@pillsburylaw.com (Maria Webb)
mark.a.giles@dom.com (Mark Giles)
mark.beaumont@wsms.com (Mark Beaumont)
mark.holbrook@inl.gov (Mark Holbrook)
mark@npva.net
matias.travieso-diaz@pillsburylaw.com (Matias Travieso-Diaz)

DC B&W mPower

murawski@newsobserver.com (John Murawski)
mwetterhahn@winston.com (M. Wetterhahn)
patriciaL.campbell@ge.com (Patricia L. Campbell)
Paul@beyondnuclear.org (Paul Gunter)
PLorenzini@NuScalePower.com (Paul Lorenzini)
poorewp@ornl.gov (Willis P. Poore III)
rbarrett@astminc.com (Richard Barrett)
rereimels@babcock.com (R.E. Reimels)
rnicholas@ge.com (Robert Nicholas)
RSnuggerud@NuScalePower.com (Ross Snuggerud)
sandra.sloan@areva.com (Sandra Sloan)
sfrantz@morganlewis.com (Stephen P. Frantz)
shobbs@enercon.com (Sam Hobbs)
spellmandj@ornl.gov (Donald J. Spellman)
stephan.moen@ge.com (Stephan Moen)
steven.hucik@ge.com (Steven Hucik)
steven.m.mirsky@saic.com (Steve Mirsky)
Tansel.Selekler@nuclear.energy.gov (Tansel Selekler)
tfeigenb@bechtel.com (Ted Feigenbaum)
tgado@roe.com (Burns & Roe)
timothy.beville@nuclear.energy.gov (Timothy Beville)
TJKim@babcock.com (T.J. Kim)
tom.miller@hq.doe.gov (Tom Miller)
tom.miller@nuclear.energy.gov (Thomas P. Miller)
TomClements329@cs.com (Tom Clements)
tommy_pe2001@yahoo.com (Tommy Le)
trsmith@winston.com (Tyson Smith)
Vanessa.quinn@dhs.gov (Vanessa Quinn)
whorin@winston.com (W. Horin)