

August 30, 2013

COMPANY: BABCOCK & WILCOX MODULAR NUCLEAR ENERGY

DESIGN: MPOWER REACTOR DESIGN

SUBJECT: SUMMARY OF FEBRUARY 16, 2012, CLOSED MEETING WITH BABCOCK & WILCOX MODULAR NUCLEAR ENERGY TO DISCUSS THE MPOWER CORE AND FUEL DESIGN UPDATE

On February 16, 2012, a Closed meeting was held between the U.S. Nuclear Regulatory Commission (NRC) and representatives of Babcock & Wilcox Modular Nuclear Energy (B&W) at NRC Headquarters, Two White Flint North, 11555 Rockville Pike, Room T-10A01, Rockville, Maryland. The purpose of the meeting was to discuss the B&W reactor core and fuel design update.

Fuel Design, Core Thermal Hydraulics, Core Design, Core Startup and Operation, and Benchmarking Status were discussed during the meeting. B&W noted that the fuel and core design parameters are now fixed. NRC staff acknowledged that B&W may utilize the NRC computer codes, FRAPCON and FRAPTRAN to support development of a B&W mPower specific code for licensing of the mPower reactor design. The codes may only be used consistent with the legal agreement for obtaining the codes and must have independent Title 10 of the *Code of Federal Regulations* Part 50, Appendix B quality analysis validation and verification prior to use for licensing basis applications. The NRC staff asked questions on the results of critical heat flux testing, core design results, MCNPX radial reflector benchmark results, and core start up and operation (approach to critical, reactor heat up, power ascension, and cycle operation). B&W will provide NRC with updates as the design and testing progress.

The meeting agenda and meeting attendees are included in Enclosures 1 and 2. B&W slide presentations are available through the Agencywide Documents Access and Management System (ADAMS). The ADAMS accession number for the non-proprietary, redacted version of the slide presentations are ML12032A194 and ML12058A314. 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-rm/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 pdr@nrc.gov.

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Please direct any inquiries to Courtney St. Peters at 301-415-5864 or Courtney.StPeters@nrc.gov or Joelle Starefos at 301-415-6091, or email Joelle.Starefos@nrc.gov.

Sincerely,

/RA/

Courtney A. St. Peters, Project Manager
Projects Branch
Division of Advanced Reactors and
Rulemaking
Office of New Reactors

Project No.: PROJ0776

Enclosure:

1. Agenda
2. List of Attendees

cc: Distribution via ListServ

Please direct any inquiries to Courtney St. Peters at 301-415-5864 or Courtney.StPeters@nrc.gov or Joelle Starefos at 301-415-6091, or email Joelle.Starefos@nrc.gov.

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Courtney A. St. Peters, Project Manager
Projects Branch
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Office of New Reactors

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OFFICE	PM:NRO/DARR/APRB	PM:NRO/DARR/APRB
NAME	CStPeters	JStarefos
DATE	08/22/2013	08/30/2013

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AGENDA

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

FEBRUARY 16, 2012; 8:30 AM – 3:00 PM

TWO WHITE FLINT NORTH, ROOM T-10A01

TIME	TOPIC	LEAD
8:30am-8:35am	Opening and Introductions	NRC/B&W
8:35am-9:00am	Overview of Fuel Design Changes	B&W
9:00am-9:30am	Core Thermal Hydraulics Update	B&W
9:30am-10:00am	Core Design Update	B&W
10:00am-10:10am	Break	NRC
10:10am-11:45am	Benchmarking Status and Plans	B&W
11:45am-12:45pm	Break for Lunch	NRC
12:45pm-2:45pm	Core Startup and Operation Overview	B&W
2:45pm-3:00pm	Conclusion	B&W/NRC
3:00pm	Adjourn	NRC

ATTENDANCE LIST

**CLOSED MEETING BETWEEN BABCOCK & WILCOX (B&W) AND
THE U.S. NUCLEAR REGULATORY COMMISSION (NRC)
REGARDING THE MPOWER CORE AND FUEL DESIGN UPDATE**

FEBRUARY 16, 2012

NAME	ORGANIZATION
John Voglewede	NRC/RES/DSA
Tom Lotz	B&W
Eric Barringer	B&W
Vince Bilovsky	B&W
Dudley Raine	B&W
Joe Divoky	B&W
Hassan Hassan	B&W
Jim Saldarini	Bechtel
Matt Humberstone	NRC/RES
Jan Kozyra	Bechtel
Thomas Boyle	NRC/NMSS
Ralph Landry	NRO/DSRA
Courtney St. Peters	NRO/DARR
John Budzynski	NRO/DSRA
George Thomas	NRO/DSRA
Yi-Hsiung Hsii	NRO/DSRA
Amrit Patel	NRO/DSRA
Stu Magruder	NRC/NRO
Joelle Starefos	NRO
Joe Williams	NRO
Chris Van Wert	NRO
Carl Weber	NRO
Chester Poslusny	B&W NE
Yanely Malave	NRC
Michelle Hayes	NRC
Joe Donoghue	NRC
Shanlai Lu	NRC
Gary Neeley	B&W
Madalina Erighin	B&W
Jan Mazza	NRC
Scott Bussey	NRC

ATTENDANCE LIST

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REGARDING THE MPOWER CORE AND FUEL DESIGN UPDATE**

FEBRUARY 16, 2012

NAME	ORGANIZATION
Tom Spink	TVA
Peter Hastings	B&W
Randy Belles	ORNL
Ted Ginzberg	BNL
Jim Gilmer	NRC
Steven Pope	B&W
Fred Forsaty	NRC
Peter Lien	NRC/RES
Ron LaVera	NRC/NRO/RPAC
Arlon Costa	NRC/NRO/DARR
Jeff Schmidt	NRC