

June 2, 2011

COMPANY: BABCOCK & WILCOX NUCLEAR ENERGY

DESIGN: MPOWER REACTOR DESIGN

SUBJECT: SUMMARY OF MAY 26, 2011, OPEN CATEGORY 1 AND CLOSED MEETING WITH BABCOCK & WILCOX NUCLEAR ENERGY, TO DISCUSS TECHNICAL AND QUALITY ASSURANCE TOPICS ASSOCIATED WITH THE MPOWER REACTOR PLANT DESIGN (TAC NO. RN6075)

On May 26, 2011, a public meeting was held between the U.S. Nuclear Regulatory Commission (NRC), and representatives of Babcock & Wilcox (B&W) Nuclear Energy, at the Legacy Hotel, 1775 Rockville Pike, Rockville, MD. The purpose of the meeting was to discuss instrumentation and control software quality assurance, the integrated systems test facility scaling, and the design basis loss of coolant accident (LOCA) modeling for the mPower reactor plant.

The licensee presented information on three topics. The first topic was related to the development of instrumentation and control software and the associated quality assurance program. B&W and their contractor, Northrop Grumman, discussed the software lifecycle plans under development, discussed the intent to design, develop, install, and maintain the software in accordance with NRC regulatory requirements, and their plans to submit a topical report to NRC prior to the design certification application (DCA). The second topic covered scaling of the integrated systems test (IST) facility for the mPower design. B&W discussed the IST approach, top-down scaling and bottom-up scaling approaches. The third topic addressed the RELAP5 modeling comparison of IST and mPower LOCA results.

The staff queried the vendor about several aspects of their presentations. The staff discussed the benefits and potential disadvantages of a licensing approach to submit a topical report for instrumentation and control software versus submitting a technical report to the NRC that would allow the staff to provide feedback during the pre-application period prior to the DCA being tendered. The staff stressed the importance of early and frequent interaction on this historically challenging topic.

Members of the public were in attendance. Public Meeting Feedback forms were not received.

The meeting agenda and meeting attendees are included in Enclosures 1 and 2. Babcock & Wilcox 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 is ML11152A094. 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 staff at 1-800-397-4209, 301-415-4737, or pdr@nrc.gov.

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Please direct any inquiries to Joelle Starefos at 301-415-6091, or email Joelle.Starefos@nrc.gov.

Sincerely,

/RA/

Joelle L. Starefos, Senior Project Manager
Advanced Reactor Branch 2
Advanced Reactor Program
Office of New Reactors

Project No.: PROJ0776

Enclosure:

1. Agenda
2. List of Attendees

cc w/encl: mPower DC Mailing List

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NRC-001

OFFICE	PM:NRO/ARP/ARB2	BC:NRO/ARP/ARB2
NAME	JStarefos	SMagruder
DATE	06/2/2011	06/2/2011

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

May 26, 2011, 10:00 a.m. – 3:45 p.m.

Time	Topic	Lead
10:00 a.m. – 10:10 a.m.	Opening Remarks & Introductions	NRC
10:10 a.m. – 11:50 a.m.	Instrumentation and Control I&C Software Quality Assurance	B&W
11:50 a.m. – 12:00 p.m.	Opportunity for Public Comment	NRC
12:00 p.m. – 1:00 p.m.	Closing of the Meeting to the Public and Lunch Break	NRC/ALL
1:00 p.m. – 3:30 p.m.	Discussion of Proprietary Issues <ul style="list-style-type: none">• Integrated Systems Test Facility Scaling• Design Basis LOCA Comparison	B&W
3:30 p.m. – 3:45 p.m.	Summary and Closing Remarks	NRC/B&W
3:45 p.m.	Adjourn	ALL

ATTENDANCE LIST

Public and Closed Meeting Between B&W and the NRC Regarding Technical and Quality Assurance Topics Associated with the mPower Reactor Plant Design

May 26, 2011; 10:00am – 3:45pm; Legacy Hotel

Names	Affiliation	Attended	
		Public Session	Closed Session
Brian Arnholt	B&W NE	X	
Mike Childersen	B&W NE	X	X
Doug Lee	B&W NE		X
Eric Williams	B&W NE		X
Bruce Allmon	B&W NE		X
Chester Poslusny	B&W NE	X	X
Billy Bingham	B&W NE		X
Jeff Burns	Northrop Grumman	X	
Tom Hutchinson	Northrop Grumman	X	
Dennis Heinke	Northrop Grumman	X	
Jerome Geeza	Northrop Grumman	X	
Gene Kern	Northrop Grumman	X	
Charlie McCarthy	Northrop Grumman	X	
Charles Fishe	Northrop Grumman	X	
Mark Jekel	Northrop Grumman PCS		X
Yanely Malave	NRC/NRO/ARP	X	X
Matt Humberstone	NRC/NRO/ARP	X	X
Joelle Starefos	NRC/NRO/ARP	X	X
Stephanie Devlin	NRC/NRO/ARP	X	X
Jan Mazza	NRC/NRO/ARP	X	X
Stu Magruder	NRC/NRO/ARP	X	
Thomas Boyle	NRC/NRO/ARP	X	
George Lipscomb	NRC/NRO/DCIP	X	
Paul Coco	NRC/NRO/DCIP	X	
Mike Junge	NRC/NRO/DCIP	X	
Ron LaVera	NRC/NRO/DCIP/CHPB	X	X
Rich McIntyre	NRC/NRO/DCIP/CQV	X	
Greg Galletti	NRC/NRO/DCIP/CQV	X	
Kerri Kavanagh	NRC/NRO/DCIP/CQV	X	
Neil Ray	NRC/NRO/DE	X	
Hulbert Li	NRC/NRO/DE/ICE2	X	
Erick Martinez	NRC/NRO/DE/ICE2	X	
Ian Jung	NRC/NRO/DE/ICE2	X	
Shanlai Lu	NRC/NRO/DSARA/SRSB		X

Names	Affiliation	Attended	
		Public Session	Closed Session
Y. Gene Hsii	NRC/NRO/DSRA		X
Syed I. Haider	NRC/NRO/DSRA		X
Andrzej Drozd	NRC/NRO/DSRA		X
James Gilmer	NRC/NRO/DSRA/SRSB		X
Bob Fitzpatrick	NRC/NRO/EEB	X	
Tung Truong	NRC/NRO/ICE1	X	
Malcolm Patterson	NRC/NRO/SRRA	X	
David Diec	NRC/NSIR	X	X
Pete Lee	NRC/NSIR/DSP	X	X
John Rycyna	NRC/NSIR/IPSCB	X	
Steve Bajorek	NRC/RES		X
Ray Skarda	NRC/RES		X
Peter Lien	NRC/RES/DSA		X
Joseph Staudenmeier	NRC/RES/DSA		X
Joshua Whitman	NRC/RES/DSA		X
Imtiaz Madni	NRC/RES/DSA/NARB		X
Allan McGuinness	via telephone: AREVA	X	
David White	via telephone: Member of the Public	X	
Tom Spink	via telephone: TVA	X	

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