

August 15, 2012

APPLICANT: MITSUBISHI HEAVY INDUSTRIES, LTD.

APPLICATION: UNITED STATES - ADVANCED PRESSURIZED WATER REACTOR  
DESIGN CERTIFICATION REVIEW

SUBJECT: SUMMARY OF THE MAY 31, 2012, CLOSED TELECONFERENCE  
WITH MITSUBISHI HEAVY INDUSTRIES, LTD., TO DISCUSS TEST  
RESULTS REGARDING REACTOR VESSEL MIXING AND BORON  
DILUTION DURING SMALL BREAK LOSS-OF-COOLANT ACCIDENT

On May 31, 2012, a closed teleconference was held between the U.S. Nuclear Regulatory Commission and Mitsubishi Heavy Industries, Ltd. (MHI). The meeting notice was issued on May 24, 2012, and was documented in the Agencywide Documents Access and Management System (ADAMS) under accession number ML12138A326. The notice included the meeting agenda. The purpose of the meeting was to discuss details of the test results regarding reactor vessel mixing and boron dilution during small break loss-of-coolant accident (SBLOCA) of the United States - Advanced Pressurized Water Reactor (US-APWR) design. The information discussed was proprietary. A list of attendees is provided as an enclosure.

As a result of the meeting, MHI is planning to submit a new technical report which will be referenced in the US-APWR Design Control Document, Section 15.6.5, "Loss-of-Coolant Accidents Resulting From Spectrum of Postulated Piping Breaks Within the Reactor Coolant Pressure Boundary." The report will address: 1) SBLOCA boron dilution scenario, 2) vessel mixing test results, and 3) recriticality analysis results. MHI plans to submit a draft version of this new technical report at the end of August 2012, and the final version by the end of October 2012.

Please direct any inquiries to me at 301-415-7871, or via e-mail to [Michael.Takacs@nrc.gov](mailto:Michael.Takacs@nrc.gov).

*/RA/*

Michael Takacs, Project Manager  
Licensing Branch 2  
Division of New Reactor Licensing  
Office of New Reactors

Docket No.: 52-021

Enclosure:  
List of Attendees

cc w/Enclosure: See next page

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**ADAMS Accession No.: ML12172A362**

**NRC-001**

<b>OFFICE</b>	NRO/DNRL/LB2: PM	NRO/DNRL/LB2: LA	NRO/DNRL/LB2: PM
<b>NAME</b>	MTakacs	CMurphy	JCiocco
<b>DATE</b>	08/15/2012	08/13/2012	08/15/2012

**OFFICIAL RECORD COPY**

List of Attendees

Closed teleconference with Mitsubishi Heavy Industries, Ltd., to discuss the results on reactor vessel mixing and boron dilution tests for Small Break Loss of Coolant Accident analysis for the United States – Advanced Pressurized Water Reactor design on May 31, 2012

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Hideaki Ikeda	Mitsubishi Nuclear Energy Systems
Yasushi Makino	Mitsubishi Nuclear Energy Systems
Mike Takacs	Nuclear Regulatory Commission
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Enclosure

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(Revised 05/21/2012)

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