

June 30, 2011

APPLICANT: MITSUBISHI HEAVY INDUSTRIES, LTD.

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

SUBJECT: SUMMARY OF THE JUNE 1 - 2, 2011, CLOSED MEETING WITH  
MITSUBISHI HEAVY INDUSTRIES, LTD. TO DISCUSS TOPICAL  
REPORT MUAP-07001, "THE ADVANCED ACCUMULATOR" AND  
TECHNICAL REPORT MUAP-09025, "CFD ANALYSIS FOR  
ADVANCED ACCUMULATOR"

On June 1 - 2, 2011, a closed meeting was held between the U.S. Nuclear Regulatory Commission (NRC), Brookhaven National Laboratory (NRC contractor), and representatives of Mitsubishi Heavy Industries, Ltd. (MHI), at the office of the NRC, Two White Flint North, 11455 Rockville Pike, Rockville, Maryland. The meeting notice was issued on May 4, 2011, and was documented in the Agencywide Documents Access and Management System (ADAMS) under accession number ML111470861. The notice included the meeting agenda, which was also available as a handout at the meeting. The purpose of the meeting was to discuss MHI's draft responses to the NRC staff's Request for Additional Information (RAI) regarding the Topical Report MUAP-07001, "The Advanced Accumulator" and Technical Report MUAP-09025, "CFD Analysis for Advanced Accumulator."

At the meeting, MHI presented information regarding the status of the scaling effects issue; key phenomenological study and Computational Fluid Dynamics analysis, impacts on Loss-of-Coolant Accident safety analyses, and resolution plans for the NRC staff's RAI. Also, at the meeting, the NRC staff discussed the RAI for Revision 3 of Topical Report MUAP-07001 and Revision 1 of Technical Report MUAP-09025; as well as MHI's draft responses to this RAI. The RAI was issued on May 27, 2011, and was documented in ADAMS however, it contains proprietary information and therefore is not available to the public. After the discussion, MHI requested, and NRC granted 60 days to answer RAI questions 70, 75, 78, 79; and 30 days to answer the remaining questions. At the end of the meeting, it was agreed that MHI will submit revisions of the technical and topical reports by the end of August 2011. A list of attendees is provided as Enclosure 1. MHI's presentation was documented in ADAMS however, it contains proprietary information and therefore is not available to the public.

- 2 -

Please direct any inquiries to me at 301-415-3249, or via e-mail to [Ruth.Reyes@nrc.gov](mailto:Ruth.Reyes@nrc.gov).

*/RA/*

Ruth C. Reyes, Project Manager  
US-APWR Projects Branch  
Division of New Reactor Licensing  
Office of New Reactors

Docket No. 52-021

Enclosure:  
List of Attendees

cc w/encl: See next page

Please direct any inquiries to me at 301-415-3249, or via e-mail to [Ruth.Reyes@nrc.gov](mailto:Ruth.Reyes@nrc.gov).

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Division of New Reactor Licensing  
Office of New Reactors

Docket No. 52-021

Enclosure:  
List of Attendees

cc w/encl: See next page

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**NRC-001**

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| DATE            | 06/29/2011    | 06/29/2011    | 06/30/2011    | 06/30/2011    |
| DNRL/NMIP: PM   |               |               |               |               |
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(Revised 05/18/2011)

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List of Attendees

Closed Meeting with Mitsubishi Heavy Industries, Ltd. to discuss Topical Report MUAP-07001, "The Advanced Accumulator" and Technical Report MUAP-09025, "CFD Analysis for Advanced Accumulator" for the meeting held on June 1, 2011 (Day 1)

| <b><u>NAME</u></b>      | <b><u>AGENCY/AFFILIATION</u></b>   |
|-------------------------|------------------------------------|
| Upendra (Kumar) Rohatgi | Brookhaven National Laboratory     |
| James Gibson            | Dominion Virginia Power            |
| Hideo Fukuda            | Mitsubishi Heavy Industries, Ltd.  |
| Hideaki Ikeda           | Mitsubishi Heavy Industries, Ltd.  |
| Atsushi Kumaki          | Mitsubishi Heavy Industries, Ltd.  |
| Takafumi Ogino          | Mitsubishi Heavy Industries, Ltd.  |
| Tadashi Shiraishi       | Mitsubishi Heavy Industries, Ltd.  |
| Tadahiko Suzuta         | Mitsubishi Heavy Industries, Ltd.  |
| Hiroshi Hamamoto        | Mitsubishi Nuclear Energy Systems  |
| Scott Kiffer            | Mitsubishi Nuclear Energy Systems  |
| Masanori Onozuka        | Mitsubishi Nuclear Energy Systems  |
| C. Keith Paulson        | Mitsubishi Nuclear Energy Systems  |
| Ryan Sprengel           | Mitsubishi Nuclear Energy Systems  |
| Ruriko Takanashi        | Mitsubishi Nuclear Energy Systems  |
| Erin Wisler             | Mitsubishi Nuclear Energy Systems  |
| Kenneth Armstrong       | U.S. Nuclear Regulatory Commission |
| Hosseini Hamzehee       | U.S. Nuclear Regulatory Commission |
| Yi-Hsiung Hsii          | U.S. Nuclear Regulatory Commission |
| Ruth Reyes              | U.S. Nuclear Regulatory Commission |
| Jeffrey Schmidt         | U.S. Nuclear Regulatory Commission |
| Ghani Zigh              | U.S. Nuclear Regulatory Commission |

### List of Attendees

Closed Meeting with Mitsubishi Heavy Industries, Ltd. to discuss Topical Report MUAP-07001, "The Advanced Accumulator" and Technical Report MUAP-09025, "CFD Analysis for Advanced Accumulator" for the meeting held on June 2, 2011 (Day 2)

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| Hideaki Ikeda           | Mitsubishi Heavy Industries, Ltd.  |
| Atsushi Kumaki          | Mitsubishi Heavy Industries, Ltd.  |
| Takafumi Ogino          | Mitsubishi Heavy Industries, Ltd.  |
| Tadashi Shiraishi       | Mitsubishi Heavy Industries, Ltd.  |
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| Ruth Reyes              | U.S. Nuclear Regulatory Commission |
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