

May 17, 2011

APPLICANT: MITSUBISHI HEAVY INDUSTRIES, LTD.

APPLICATION: UNITED STATES - ADVANCED PRESSURIZED WATER REACTOR
DESIGN CONTROL DOCUMENT

SUBJECT: SUMMARY OF THE APRIL 28, 2011, PUBLIC TELECONFERENCE
WITH MITSUBISHI HEAVY INDUSTRIES, LTD. TO DISCUSS THE
REVIEW STATUS AND DESIGN CHANGES RELATED TO THE UNITED
STATES - ADVANCED PRESSURIZED WATER REACTOR DIGITAL
INSTRUMENTATION AND CONTROLS

On April 28, 2011, a teleconference was held between the U.S. Nuclear Regulatory Commission (NRC), Mitsubishi Heavy Industries, Ltd. (MHI), Mitsubishi Nuclear Energy Systems, Inc. (MNES), and members of the public. The purpose of the teleconference was to discuss the status of the NRC staff's review of the United States - Advanced Pressurized Water Reactor (US-APWR) Digital Instrumentation and Controls (I&C) Design and also to plan for the next public meeting scheduled for May 11 - 12, 2011. The teleconference was publicly noticed on April 18, 2011, as documented in the Agencywide Documents Access and Management System (ADAMS) under accession number ML111080090. A list of participants is provided in the attached Enclosure.

The teleconference commenced with a brief introduction followed by the NRC staff stating three recently identified concerns regarding Request for Additional Information (RAI) 677-5325 and MHI's response to the RAI (ADAMS accession number ML110460010). The RAI questions focused on Technical Report, MUAP-07014, Revision 2, "Defense-in-Depth and Diversity Coping Analysis," under RAI 677-5325. Specifically, the RAI contained questions pertaining to the approach that MHI uses in mitigating a common cause failure of the digital I&C platform concurrent with the severe accident analysis events listed in Chapter 15 of the Design Control Document (DCD). The first concern was the expectation of an operator response without validating an alarm in specific circumstances. The second concern involved situational complexity and operator responses. The third concern involved the short time allotted for operator responses in two specific situations and how they conflicted with the approach used in Topical Report MUAP-07006, Revision 2, "Defense-in-Depth and Diversity." MHI acknowledged the concerns and asked for time to consider them. The NRC staff and MHI agreed that this should be a topic for full discussion during the May 11 - 12, 2011, public meeting and it was added to the agenda.

Next, the NRC staff informed MHI that it should continue with the plans to submit the revised versions of certain documents discussed in prior public meetings, on time as planned. The meeting notice including the meeting agenda for the May 11 - 12, 2011, meeting was then determined and has been posted in ADAMS under accession number ML111180139, dated April 28, 2011.

The last topic discussed was the responses to several RAIs. Specifically, the NRC staff noted that the response to Question 07.08-16 had a circular reference problem between the Defense-in-Depth Coping Analysis and the DCD. MHI agreed to resolve the issue and resubmit the response. Additional RAI questions and their resolutions are listed below.

Question Number(s)	Resolution
07.02-3	on delta-T equations, to be discussed further during the May 11 - 12, 2011, public meeting
07.06-3, -16, -21, -25, -26	can be submitted as final
07.09-12	needs a revised response, to be discussed further during the May 11 - 12, 2011, public meeting
07.09-20 and -22	the markup of the technical report should be included as part of the response
07.09-21, -23	can be submitted as final
14.03.05-12	was okay and will be closed
Safety I&C System (MUAP-07004, Revision 5), Questions 36 and 64	responses are okay, but will be confirmatory items pending the DCD revision

The public was given an opportunity to ask questions. One member asked for a clarification on part of an RAI discussion concerning the automatic operation of a safety system by a non-safety system. The example given was the pressurizer low-pressure signal turning on the pressurizer backup heaters. This satisfied the questioner.

The meeting adjourned in less than the allotted time of one hour.

Please direct any inquiries to me at 301-415-7038, or via e-mail at William.Ward@nrc.gov.

Sincerely,

/RA/

William R. Ward, Senior Project Manager
US-APWR Projects Branch
Division of New Reactor Licensing
Office of New Reactors

Docket No. 52-021

Enclosure:
List of Participants

cc w/encl: See next page

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ADAMS Accession No.: ML111260498

NRC-001

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Teleconference with Mitsubishi Heavy Industries, Ltd. to Discuss the Status of the Digital Instrumentation and Controls Design Review for the United States - Advanced Pressurized Water Reactor, Held on April 28, 2011

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(Revised 04/19/2011)

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