

May 18, 2010

Mr. Yoshiki Ogata, General Manager  
APWR Promoting Department  
Mitsubishi Heavy Industries, Ltd.  
16-5, Konan 2-Chome, Minato-Ku  
Tokyo, 108-8215 JAPAN

SUBJECT: UNITED STATES - ADVANCED PRESSURIZED WATER REACTOR DESIGN  
CERTIFICATION APPLICATION - SAFETY EVALUATION REPORT WITH  
OPEN ITEMS FOR CHAPTER 2, "SITE CHARACTERISTICS"

Dear Mr. Ogata:

By letter dated December 31, 2007, as supplemented by letter dated March 27, 2008, and April 16, 2008, Mitsubishi Heavy Industries, Ltd. (MHI) submitted an application to the U.S. Nuclear Regulatory Commission (NRC) for a standard design certification of the United States - Advanced Pressurized Water Reactor (US-APWR), pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) Part 52, "Licenses, Certifications, and Approvals for Nuclear Power Plants." Subsequent to the original application, MHI has submitted Revisions 1 and 2 of the US-APWR Final Safety Analysis Report (FSAR) by letters dated August 29, 2008, and October 27, 2009, in the Agencywide Documents Access and Management System (ADAMS) under Accession Numbers ML082480524 and ML093070198. The revisions to the FSAR include changes associated with responses to the NRC Requests for Additional Information (RAIs) submitted through August 2009.

Based on our review of the application, the NRC staff prepared the enclosed Safety Evaluation Report (SER) with Open Items for Chapter 2, "Site Characteristics." Unless otherwise stated in the SER with Open Items, the NRC staff's review was based on Revision 2 of the application and MHI's responses to the RAIs. The SER with Open Items is being provided to support the upcoming meeting of the subcommittee of the Advisory Committee on Reactor Safeguards (ACRS) scheduled to be held in June 2010. The ACRS Full Committee meeting will be held at a later date. Issuance of this SER is an important milestone in the NRC staff's review to determine whether MHI's application meets the Commission's regulations.

The open items identified in the SER have been previously provided to you as RAIs with the same identifying number. These open items are expected to be resolved during the Phase 4 review of your application. As such, the schedule we have established for your application assumes technically correct and complete responses to the RAIs prior to the start of Phase 4 review of Chapter 2 of the FSAR. If you are unable to provide an answer prior to the start of Phase 4 review, it is expected that a date for receipt of this information will be provided so that the NRC staff can assess how this information will impact the overall review schedule.

Y. Ogata

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The NRC staff concludes that the enclosed SER with Open Items does not contain any information for which exemption from public disclosure has been sought or approved. However, the NRC will withhold the enclosed SER from public disclosure for ten calendar days from the date of this letter to allow you the opportunity to verify the NRC staff's conclusion that the SER contains no such exempt information. If within that time, you do not request that all or portions of the SER be withheld from public disclosure in accordance with 10 CFR 2.390, "Public Inspections, Exemptions, Requests for Withholding," the enclosure will be made available for public inspection through the NRC's Public Document Room and the Publicly Available Records component of the NRC's ADAMS. ADAMS is accessible from the Public Electronic Reading Room section of the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

If you have any questions or comments concerning this matter, I can be reached at (301) 415-6391 or via e-mail at [Jeff.Ciocco@nrc.gov](mailto:Jeff.Ciocco@nrc.gov).

Sincerely,

***/RA BY Hossein Hamzehee Acting For/***

Jeffrey Ciocco, Sr. Project Manager  
US-APWR Projects Branch  
Division of New Reactor Licensing  
Office of New Reactors

Docket No. 52-021

Enclosure:  
Chapter 2 Safety Evaluation Report

cc: See next page

The NRC staff concludes that the enclosed SER with Open Items does not contain any information for which exemption from public disclosure has been sought or approved. However, the NRC will withhold the enclosed SER from public disclosure for ten calendar days from the date of this letter to allow you the opportunity to verify the NRC staff's conclusion that the SER contains no such exempt information. If within that time, you do not request that all or portions of the SER be withheld from public disclosure in accordance with 10 CFR 2.390, "Public Inspections, Exemptions, Requests for Withholding," the enclosure will be made available for public inspection through the NRC's Public Document Room and the Publicly Available Records component of the NRC's ADAMS. ADAMS is accessible from the Public Electronic Reading Room section of the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

If you have any questions or comments concerning this matter, I can be reached at (301) 415-6391 or via e-mail at [Jeff.Ciocco@nrc.gov](mailto:Jeff.Ciocco@nrc.gov).

Sincerely,

*/Hossein Hamzehee for/*

Jeffrey Ciocco, Sr. Project Manager  
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 Office of New Reactors

Docket No. 52-021

Enclosure:  
 Chapter 2 Safety Evaluation Report

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