



MITSUBISHI HEAVY INDUSTRIES, LTD.

16-5, KONAN 2-CHOME, MINATO-KU

TOKYO, JAPAN

June 5, 2009

Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Attention: Mr. Jeffrey A. Ciocco

Docket No. 52-021
MHI Ref: UAP-HF-09283

Subject: Transmittal of the Technical Report entitled "Thermal-Hydraulic Analysis for US-APWR Spent Fuel Racks" (MUAP-09014)

Reference: 1) MHI Letter from Y. Ogata ("MHI") to U.S. NRC; MHI Ref. UAP-HF-09026, "Responses to Request for Additional Information No. 131-1609 Revision 1" dated January 29, 2009
2) MHI Letter from Y. Ogata ("MHI") to U.S. NRC; MHI Ref. UAP-HF-09028, "Responses to Request for Additional Information No. 132-1538 Revision 1" dated January 29, 2009

With this letter, Mitsubishi Heavy Industries, Ltd. ("MHI") transmits to the U.S. Nuclear Regulatory Commission ("NRC") its technical report entitled "Thermal-Hydraulic Analysis for US-APWR Spent Fuel Racks (MUAP-09014)." This Report supplements the materials provided in the "Design Control Document for the US-APWR (Rev1)" ("DCD (Rev1)"), and is incorporated by reference in the DCD. Submittal of the enclosed technical report was one of the commitments in References 1 and 2.

The enclosed presentation materials contain information that MHI considers proprietary, and therefore, the report should be withheld from disclosure pursuant to 10 C.F.R. § 2.390 (a)(4) as trade secrets and commercial or financial information which is privileged or confidential. Accordingly, the technical report is being submitted in two versions, in separate compact discs. One version (in CD 1 of Enclosure 2) contains the complete proprietary version of the technical report. A non-proprietary version of the technical report is enclosed in CD 2 (Enclosure 3). In the non-proprietary version, the proprietary information, bracketed in the proprietary version, is replaced by the designation "[]". In accordance with the NRC submittal procedures, this letter includes an Affidavit (Enclosure 1) that identifies the reasons why the proprietary version of the Report should be withheld from disclosure pursuant to 10 C.F.R. § 2.390 (a)(4).

Please contact Dr. C. Keith Paulson, Senior Technical Manager, Mitsubishi Nuclear Energy Systems, Inc. if the NRC has questions concerning any aspect of this submittal. His contact information is provided below.

Sincerely,

Yoshiaki Ogata,
General Manager- APWR Promoting Department
Mitsubishi Heavy Industries, LTD.

DOB1
NR0

Enclosures:

1. Affidavit of Yoshiki Ogata
2. CD 1: "Thermal-Hydraulic Analysis for US-APWR Spent Fuel Racks"
– Version containing Proprietary information
3. CD 2: "Thermal-Hydraulic Analysis for US-APWR Spent Fuel Racks"
– Version not containing Proprietary information

The file contained in each CD is listed in Attachments 1 and 2 hereto.

CC: J. A. Ciocco
C. K. Paulson

Contact Information

C. Keith Paulson, Senior Technical Manager
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ENCLOSURE 1

**UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION**

In the Matter of)
MITSUBISHI HEAVY INDUSTRIES, LTD.)
US-APWR)
Standard Plant Design Certification Application)
)

AFFIDAVIT OF YOSHIKI OGATA

I, Yoshiki Ogata, state as follows:


1. I am General Manager, APWR Promoting Department, of Mitsubishi Heavy Industries, LTD ("MHI"), and have been delegated the function of reviewing MHI's US-APWR documentation to determine whether it contains information that should be withheld from public disclosure pursuant to 10 C.F.R. § 2.390 (a)(4) as trade secrets and commercial or financial information which is privileged or confidential.
2. In accordance with my responsibilities, I have reviewed the enclosed document entitled "Thermal-Hydraulic Analysis for US-APWR Spent Fuel Racks" dated June, 2009, and have determined that portions of the document contain proprietary information that should be withheld from public disclosure. Those pages containing proprietary information are identified with the label "Proprietary" on the top of the page and the proprietary information has been bracketed with an open and closed bracket as shown here "[]". The first page of the document indicates that all information identified as "Proprietary" should be withheld from public disclosure pursuant to 10 C.F.R. § 2.390 (a)(4).
3. The information identified as proprietary in the enclosed document has in the past been, and will continue to be, held in confidence by MHI and its disclosure outside the company is limited to regulatory bodies, customers and potential customers, and their agents, suppliers, and licensees, and others with a legitimate need for the information, and is always subject to suitable measures to protect it from unauthorized use or disclosure.
4. The basis for holding the referenced information confidential is that it describes the unique design of the spent fuel pit cooling and purification system related to the US-APWR specific design, developed by MHI and involved vendors and not used in the exact form by any of MHI's competitors. This information was developed at significant cost to MHI, since it required the performance of research and development and the performance of detailed hardware design and software development extending over several years.
5. The referenced information is being furnished to the Nuclear Regulatory Commission ("NRC") in confidence and solely for the purpose of information to the NRC staff.
6. The referenced information is not available in public sources and could not be gathered readily from other publicly available information. Other than through the provisions in paragraph 3 above, MHI knows of no way the information could be lawfully acquired by organizations or individuals outside of MHI.

7. Public disclosure of the referenced information would assist competitors of MHI in their design of new nuclear power plants without incurring the costs or risks associated with the design of the subject systems. Therefore, disclosure of the information contained in the referenced document would have the following negative impacts on the competitive position of MHI in the U.S. nuclear plant market:

- A. Loss of competitive advantage due to the costs associated with development of the unique plant design of the spent fuel pit cooling and purification system. Providing public access to such information permits competitors to duplicate or mimic the methodology without incurring the associated costs.
- B. Loss of competitive advantage of the US-APWR created by benefits of enhanced plant safety, and reduced operation and maintenance costs.

I declare under penalty of perjury that the foregoing affidavit and the matters stated therein are true and correct to the best of my knowledge, information and belief.

Executed on this 5th day of June, 2009.



Yoshiki Ogata,
General Manager- APWR Promoting Department
Mitsubishi Heavy Industries, LTD

ATTACHMENT 1

FILE CONTAINED IN CD 1

**CD 1: "Thermal-Hydraulic Analysis for US-APWR Spent Fuel Racks"
– Version Containing Proprietary Information**

Contents of CD

<u>File Name</u>	<u>Size</u>	<u>Sensitivity Level</u>
001 MUAP-09014P (R0).pdf	0.69 MB	Proprietary

ATTACHMENT 2

FILE CONTAINED IN CD 2

**CD 2: “Thermal-Hydraulic Analysis for US-APWR Spent Fuel Racks”
– Version Not Containing Proprietary Information**

Contents of CD

<u>File Name</u>	<u>Size</u>	<u>Sensitivity Level</u>
001 MUAP-09014NP (R0).pdf	0.68 MB	Non-Proprietary