

  
**MITSUBISHI HEAVY INDUSTRIES, LTD.**  
16-5, KONAN 2-CHOME, MINATO-KU  
TOKYO, JAPAN

October 30<sup>th</sup>, 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-09289

**Subject: Transmittal of the Topical Report entitled "HSI System Design Description and HFE Process".**

**Reference:** 1) Letter MHI Ref. UAP-HF-09288 from Y. Ogata ("MHI") to U.S NRC, MHI's Responses to NRC's 2nd Request for Additional Information on Topical Report MUAP-07007-P(R2), "HSI System Design and HFE Process", dated June 30, 2009.

With this letter, Mitsubishi Heavy Industries, LTD. ("MHI") transmits to the U.S. Nuclear Regulatory Commission ("NRC") the topical report entitled "HSI System Design Description and HFE Process Revision 3" for review and approval. MHI seeks NRC approval of this document for reference in the US-APWR design control document ("DCD") and for reference in License Amendment Requests for operating plants. The topical report is being submitted electronically in the two enclosed compact discs (CDs), one for the proprietary version and one for the non-proprietary version.

As indicated in the enclosed materials, the topical report contains information that MHI and Mitsubishi Electric Corporation ("MELCO"), consider proprietary, and therefore the entire Topical 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. A non-proprietary version of the topical report is also being submitted in this package (Enclosure 3). In the non-proprietary version, the proprietary information, bracketed in the proprietary versions, is replaced by the rationale for non-disclosure.

In accordance with the NRC submittal procedures for Topical Reports, this letter includes a copy of the proprietary version (Enclosure 2), a copy of the non-proprietary version (Enclosure 3), and the Affidavit of Yoshiki Ogata (Enclosure 1) which identifies the reasons MHI respectfully requests that all materials designated as "Proprietary" in Enclosure 2 be withheld from public 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 the submittals. His contact information is below.

Sincerely,

  
Yoshiki Ogata,



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

Enclosures:

1. Affidavit of Yoshiki Ogata
2. HSI System Design Description and HFE Process-(proprietary)  
(MUAP-07007-P, Rev.3)
3. HSI System Design Description and HFE Process-(non-proprietary)  
(MUAP-07007-NP, Rev.3)

The files contained in each CD are listed in Attachments 1 and 2 hereto.

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

Contact Information

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**MITSUBISHI HEAVY INDUSTRIES, LTD.**

**AFFIDAVIT**

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 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 topical report entitled "HSI System Design Description and HFE Process" dated September 2008, and have determined that portions of the report 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 proprietary information has been bracketed with an open and closed bracket as shown here "[ ]". The first page of the topical report 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 topical report has in the past been, and will continue to be, held in confidence by MHI and Mitsubishi Electric Corporation ("MELCO"), 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 Human System Interface System ("HSIS"), developed by MHI and MELCO and not used in the exact form by any of MHI's and MELCO's competitors. This information was developed at significant cost to MHI and MELCO, since it required the performance of Research and Development, detailed design for its software and hardware 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 supporting the NRC staff's review of the Topical Report.
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 article 3 above, MHI and MELCO know of no way the information could be lawfully acquired by organizations or individuals outside of MHI and MELCO.
7. Public disclosure of the referenced information would assist competitors of MHI and MELCO 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 topical report would have the following negative impacts on the competitive position of MHI and MELCO in the U.S. nuclear plant market:

- A. Loss of competitive advantage due to the costs associated with development of the HSIS. Providing public access to such information permits competitors to duplicate or mimic the HSIS design 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 associated with the HSIS.

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 30<sup>th</sup> day of October, 2009.



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

**ATTACHMENT 1**

**FILES CONTAINED IN CD 1**

**CD 1: "Topical Report MUAP-07007-P (R3) HSI System Design Description and HFE Process"  
– Version containing proprietary information**

**Contents of CD**

<u>File Name</u>	<u>Size</u>	<u>Sensitivity Level</u>
MUAP-07007-P HSI and HFE R3.pdf	11.065 MB	Proprietary

**ATTACHMENT 2**

**FILES CONTAINED IN CD 2**

**CD 2: “Topical Report MUAP-07007-NP (R3) HSI System Design Description and HFE Process”  
– Version not containing proprietary information**

**Contents of CD**

<b><u>File Name</u></b>	<b><u>Size</u></b>	<b><u>Sensitivity Level</u></b>
MUAP-07007-NP HSI and HFE R3.pdf	10.664 MB	Non-Proprietary