

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

December 17<sup>th</sup> 2008

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-08302

**Subject: Transmittal of the Technical Report MUAP-08014 entitled "US-APWR Human System Interface Verification and Validation (Phase1a)"**

With this letter, Mitsubishi Heavy Industries, Ltd. ("MHI") submits to the U.S. Nuclear Regulatory Commission ("NRC") the Technical Report MUAP-08014 entitled "US-APWR Human System Interface Verification and Validation (Phase1a)" (reference DCD Section 18.10.3, which refers to this report as "US Operator V&V Technical Report"). This report includes the US-APWR operating experience review (OER) report (reference DCD Section 18.2.3).

As indicated in the enclosed materials, this document contains information that MHI considers proprietary, and therefore 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. A non-proprietary version of the document is also being submitted in this package (Enclosure 3 and 4). In the non-proprietary version, the proprietary information, bracketed in the proprietary version, is replaced by the designation "[ ]".

This letter includes a copy of the proprietary version (Enclosure 2 and 3), a copy of the non-proprietary version (Enclosure 4 and 5), and the Affidavit of Yoshiki Ogata (Enclosure 1) which identifies the reasons MHI respectfully requests that all materials designated as "Proprietary" in Enclosure 2 and 3 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 this letter. His contact information is provided below.

Sincerely,



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

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Enclosures:

1. Affidavit of Yoshiki Ogata
2. CD 1: "Technical Report MUAP-08014-P (R0) US-APWR Human System Interface Verification and Validation (Phase1a)" (1 of 2)  
– Version containing Proprietary information
3. CD 2: "Technical Report MUAP-08014-P (R0) US-APWR Human System Interface Verification and Validation (Phase1a)" (2 of 2)  
– Version containing Proprietary information
4. CD 3: "Technical Report MUAP-08014-NP (R0) US-APWR Human System Interface Verification and Validation (Phase1a)" (1 of 2)  
– Version not containing Proprietary information
5. CD 4: "Technical Report MUAP-08014-NP (R0) US-APWR Human System Interface Verification and Validation (Phase1a)" (2 of 2)  
– Version not containing Proprietary information

The files contained in each CD are listed in Attachments 1, 2, 3 and 4 hereto.

CC: T. M. Magee  
C. K. Paulson

Contact Information

C. Keith Paulson, Senior Technical Manager  
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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 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 "US-APWR Human System Interface Verification and Validation (Phase1a) Revision 0" dated December 2008, 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 information and implementation plan of Human Factor Engineering, developed by MHI 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 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 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 and testing 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 US-APWR Human Factor Engineering. Providing public access to such information permits competitors to duplicate or mimic the Human Factor Engineering information without incurring the associated costs.
- B. Loss of competitive advantage of the US-APWR created by benefits of enhanced US-APWR Human Factor Engineering development costs associated with the Human System Interface System.

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 16th day of December, 2008.



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

**ATTACHMENT 1**

**FILES CONTAINED IN CD 1**

**CD 1: "Technical Report MUAP-08014-P (R0) US-APWR Human System Interface Verification and Validation (Phase1a)" (1 of 2)  
– Version containing proprietary information**

**Contents of CD**

<u>File Name</u>	<u>Size</u>	<u>Sensitivity Level</u>
Phase1a V&V TeR0 P(1of2).pdf	44MB	Proprietary

**ATTACHMENT 2**

**FILES CONTAINED IN CD 2**

**CD 2: "Technical Report MUAP-08014-P (R0) US-APWR Human System Interface Verification and Validation (Phase1a)" (2 of 2)  
– Version containing proprietary information**

**Contents of CD**

<b><u>File Name</u></b>	<b><u>Size</u></b>	<b><u>Sensitivity Level</u></b>
Phase1a V&V TeR0 P(2of2).pdf	38MB	Proprietary

**ATTACHMENT 3**

**FILES CONTAINED IN CD 3**

**CD 3: "Technical Report MUAP-08014-NP (R0) US-APWR Human System Interface Verification and Validation (Phase1a)" (1 of 2)  
– Version not containing proprietary information**

**Contents of CD**

<u>File Name</u>	<u>Size</u>	<u>Sensitivity Level</u>
Phase1a V&V TeR0 NP(1of2).pdf	24MB	Non-Proprietary

**ATTACHMENT 4**

**FILES CONTAINED IN CD 4**

**CD 4: "Technical Report MUAP-08014-NP (R0) US-APWR Human System Interface Verification and Validation (Phase1a)" (2 of 2)  
– Version not containing proprietary information**

**Contents of CD**

<u>File Name</u>	<u>Size</u>	<u>Sensitivity Level</u>
Phase1a V&V TeR0 NP(2of2).pdf	44MB	Non-Proprietary