

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

March 18, 2011

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

Attention: Mr. Jeffery A. Ciocco

Docket No. 52-021  
MHI Ref: UAP-HF-11062

**Subject: Transmittal of Technical Report MUAP-11003 Revision 1 "Summary of Stress Analysis Results for the US-APWR Pressurizer Surge Line" and MUAP-09013 Revision 2 "Summary of Stress Analysis Results for the US-APWR Main Steam Piping inside Containment Vessel"**

**Reference:** 1) Letter MHI Ref. UAP-HF-10207 from Y. Ogata ("MHI") to U.S. NRC, "Updated Design Completion Plan for US-APWR Piping Systems and Components" dated on July 21, 2010

With this letter, Mitsubishi Heavy Industries, Ltd. ("MHI") transmits to the U.S. Nuclear Regulatory Commission ("NRC") technical reports "Summary of Stress Analysis Results for the US-APWR Pressurizer Surge Line" and "Summary of Stress Analysis Results for the US-APWR Main Steam Piping inside Containment Vessel". The Report is being submitted electronically in compact discs (CDs). Submittal of the enclosed technical reports was one of the commitments in Reference 1.

As indicated in the enclosed materials, these documents 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 reports are being submitted in two versions, on separate compact discs. One version (in CD 1 of Enclosure 2) contains the complete proprietary version of the technical reports. A non-proprietary version of the technical reports is enclosed on 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).

Sincerely,

*Yoshiki Ogata for*

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

DO81  
NRO

Enclosures:

1. Affidavit of Atsushi Kumaki
2. CD 1: Technical Report, MUAP-11003-P Revision 1, "Summary of Stress Analysis Results for the US-APWR Pressurizer Surge Line (Proprietary)"

Technical Report, MUAP-09013-P Revision 2, "Summary of Stress Analysis Results for the US-APWR Main Steam Piping inside Containment Vessel (Proprietary)"

3. CD 2: Technical Report, MUAP-11003-NP Revision 1, "Summary of Stress Analysis Results for the US-APWR Pressurizer Surge Line (Non-Proprietary)"

Technical Report, MUAP-09013-NP Revision 2 "Summary of Stress Analysis Results for the US-APWR Main Steam Piping inside Containment Vessel (Non-Proprietary)"

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

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

Contact Information

C. Keith Paulson, Senior Technical Manager  
Mitsubishi Nuclear Energy Systems, Inc.  
300 Oxford Drive, Suite 301  
Monroeville, PA 15146  
E-mail: ck\_paulson@mnes-us.com  
Telephone: (412) 373-6466

## Enclosure 1

Docket No. 52-021  
MHI Ref: UAP-HF-11062

### **MITSUBISHI HEAVY INDUSTRIES, LTD.**

#### **AFFIDAVIT**

I, Atsushi Kumaki, state as follows:

1. I am Group Manager, Licensing Promoting Group in 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 documents listed in Attachment 1, 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 documents have 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 stress analysis results related to the US-APWR piping systems and components, 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 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 stress analysis. 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 18<sup>th</sup> day of March, 2011.



Atsushi Kumaki,  
Group Manager- Licensing Promoting Group in APWR Promoting Department  
Mitsubishi Heavy Industries, LTD.

**ATTACHMENT 1**

**FILES CONTAINED IN CDs**

**CD 1: Technical Report, MUAP-11003-P Revision 1, "Summary of Stress Analysis Results for the US-APWR Pressurizer Surge Line (Proprietary)"**

**Technical Report, MUAP-09013-P Revision 2, "Summary of Stress Analysis Results for the US-APWR Main Steam Piping inside Containment Vessel (Proprietary)"**

Contents of CD

<u>File Name</u>	<u>Size</u>	<u>Sensitivity Level</u>
MUAP-11003-P_R1_Stress Analysis(Surge Line).pdf	976KB	Proprietary
MUAP-09013-P_R2_Stress Analysis(MSL).pdf	1,175KB	Proprietary

**CD 2: Technical Report, MUAP-11003-NP Revision 1, "Summary of Stress Analysis Results for the US-APWR Pressurizer Surge Line (Non-Proprietary)"**

**Technical Report, MUAP-09013-NP Revision 2, "Summary of Stress Analysis Results for the US-APWR Main Steam Piping inside Containment Vessel (Non-Proprietary)"**

Contents of CD

<u>File Name</u>	<u>Size</u>	<u>Sensitivity Level</u>
MUAP-11003-NP_R1_Stress Analysis(Surge Line).pdf	506KB	Non-Proprietary
MUAP-09013-NP_R2_Stress Analysis(MSL).pdf	511KB	Non-Proprietary