MITSUBISHI HEAVY INDUSTRIES, LTD.

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TOKYO, JAPAN

November 1, 2010

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-10287

# Subject: Transmittal of Revision 2 to Topical Report MUAP-07013 'Small Break LOCA Methodology for US-APWR'

Reference: 1) Mitsubishi Heavy Industries, Ltd., 'MHI's Response to the NRC's Request for Additional Information on Topical Report MUAP-07013-P (R1) "Small Break LOCA Methodology for US-APWR" on 09/28/2010', UAP-HF-10266, September 30, 2010

With this letter, Mitsubishi Heavy Industries, Ltd. ("MHI") transmits to the U.S. Nuclear Regulatory Commission ("NRC") an official document entitled 'Revision 2 to Topical Report MUAP-07013 "Small Break LOCA Methodology for US-APWR". MHI provides this document in relation to the M-RELAP5 code modification described in Reference 1, as agreed between the NRC and MHI.

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 2). Any proprietary information that is written inside a bracket in the proprietary-version is replaced by the designation "[]" without any text, in the non-proprietary-version.

This letter includes one optical storage medium entitled "Revision 2 to Topical Report MUAP-07013 'Small Break LOCA Methodology for US-APWR'" (Enclosure 2) and the Affidavit of Atsushi Kumaki (Enclosure 1) which identifies the bases of MHI request that all materials designated as "Proprietary" in Enclosures 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 this submittal. His contact information is provided below.

Sincerely,

Atonah Kumah For

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

D068 MR0 Enclosures:

- 1. Affidavit of Atsushi Kumaki
- 2. Revision 2 to Topical Report MUAP-07013 'Small Break LOCA Methodology for US-APWR' (optical storage medium, proprietary)

The files contained in optical storage medium are listed in Attachment 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
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#### **ENCLOSURE 1**

#### MITSUBISHI HEAVY INDUSTRIES, LTD. AFFIDAVIT

I, Atsushi Kumaki, being duly sworn according to law, depose and state as follows:

- 1. I am Group Manager, Licensing Promoting Group of 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 "Revision 2 to Topical Report MUAP-07013 'Small Break LOCA Methodology for US-APWR'" (optical storage medium, Enclosure 2), and have determined that portions of the topical 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 the 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 in the report identified as proprietary by MHI 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 codes and files developed by MHI for the fuel of the US-APWR and also contains information provided to MHI under license from the Japanese Government. These codes and files were developed at significant cost to MHI, since they required the performance of detailed calculations, analyses, and testing extending over several years. The referenced information is not available in public sources and could not be gathered readily from other publicly available information. MHI knows of no way the information could be lawfully acquired by organizations or individuals outside of MHI and the Japanese Government.
- 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 MHI's Application for certification of its US-APWR Standard Plant Design.
- 6. Public disclosure of the referenced information would assist competitors of MHI in their design of new nuclear power plants without the costs or risks associated with the design of new fuel systems and components. Disclosure of the information identified as proprietary would therefore have negative impacts on the competitive position of MHI in the U.S. nuclear plant market.

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 1<sup>st</sup> day of November, 2010.

Atoushi Kumaki

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

## ATTACHMENT 1 FILES Contained in OSM

### UAP-HF-10287

## OSM: "Revision 2 to Topical Report MUAP-07013 'Small Break LOCA Methodology for US-APWR'" - Proprietary information

Contents of OSM (Optical Storage Medium)

File Name	<u>Size</u>	Sensitivity Level
<ul> <li>SBLOCA Topical Report Rev.2 Proprietary version</li> <li>MUAP-07013-P(R2).pdf</li> </ul>	34.5MB	Proprietary
<ul> <li>SBLOCA Topical Report Rev.2 Non-Proprietary version</li> <li>MUAP-07013-NP(R2).pdf</li> </ul>	34.5MB	Non-Proprietary