

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

August 31, 2011

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-11277

**Subject: Supplemental Documentation in Support of MHI's Revised 15<sup>th</sup> Response to NRC's Requests for Additional Information on US-APWR Topical Report: Non-LOCA Methodology, MUAP-07010-P (R1)**

- References:**
- 1) "MHI's Revised 15<sup>th</sup> Response to NRC's Requests for Additional Information on US-APWR Topical Report: Non-LOCA Methodology, MUAP-07010-P (R1)", MHI Letter UAP-HF-11264, dated August 12, 2011 (ML112290272).
  - 2) "Transmittal of the Revised US-APWR Topical Report: Non-LOCA Methodology, MUAP-07010-P/NP (R1)", MHI letter UAP-HF-10294, dated October 29, 2010 (ML103120250).
  - 3) "Technical Report on Mitsubishi Reload Evaluation Methodology (MUAP-07026) Submitted in Support of US-APWR design Certification Application", MHI letter UAP-HF-07187, dated December 31, 2007 (ML08029227).

Mitsubishi Heavy Industries, Ltd. ("MHI") transmits to the U.S. Nuclear Regulatory Commission ("NRC") the Optical Storage Medium ("OSM") entitled "Supplemental Documentation in Support of MHI's Revised 15<sup>th</sup> Response to NRC's Requests for Additional Information on US-APWR Topical Report: Non-LOCA Methodology, MUAP-07010-P (R1)". This OSM contains revisions of MUAP-07010 "Non-LOCA Methodology", previously transmitted via Reference 2 and MUAP-07026 "Mitsubishi Reload Evaluation Methodology", previously transmitted via Reference 3. These new revisions reflect the rod ejection analysis methodology described in Reference 1. Both of these reports supplement the materials provided in the "Design Control Document for the US-APWR" ("DCD"), and are incorporated by reference in the DCD. Changes to the DCD as a result of the revisions to the rod ejection methodology described in Reference 1 will be included with the response to RAI 785-5885 which will be transmitted separately.

The enclosed reports contain 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. Accordingly, the reports are being submitted in two versions on separate OSMs. One version (Enclosure 2) contains the complete proprietary versions of each of the two reports. The non-proprietary versions of the reports are included in Enclosure 3. In the non-proprietary versions, the proprietary information, bracketed in the proprietary version, is replaced by the designation "[ ]".

This letter includes a proprietary OSM (Enclosure 2), which includes a copy of the proprietary version of each of the reports; a non-proprietary OSM, which includes the non-proprietary version of each of the reports; and the Affidavit of Yoshiki Ogata (Enclosure 1) which identifies

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the reasons MHI respectfully requests that all material designated as "Proprietary" in Enclosure 2 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,



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

Enclosures:

1. Affidavit of Yoshiki Ogata
2. OSM 1: Supplemental Documentation in Support of MHI's Revised 15<sup>th</sup> Response to NRC's Requests for Additional Information on US-APWR Topical Report: Non-LOCA Methodology, MUAP-07010-P (R1) (proprietary) & MUAP-07026-P(R1) Mike Sabers 9/23/11
3. OSM 2: Supplemental Documentation in Support of MHI's Revised 15<sup>th</sup> Response to NRC's Requests for Additional Information on US-APWR Topical Report: Non-LOCA Methodology, MUAP-07010-NP (R1) (non-proprietary) & MUAP-07026-NP(R1) Mike Sabers 9/23/11

The files contained on OSM 1 and OSM 2 are listed in Attachments 1 and 2 hereto, respectively.

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

Contact Information

C. Keith Paulson, Senior Technical Manager  
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## ENCLOSURE 1

Docket No. 52-021

MHI Ref: UAP-HF-11277

### MITSUBISHI HEAVY INDUSTRIES, LTD.

#### AFFIDAVIT

I, Yoshiki Ogata, being duly sworn according to law, depose and 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 OSM entitled "OSM 1: Supplemental Documentation in Support of MHI's Revised 15<sup>th</sup> Response to NRC's Requests for Additional Information, US-APWR Topical Report: Non-LOCA Methodology, MUAP-07010-P (R1) (proprietary)", dated August 31, 2011, and have determined that the OSM contains proprietary information that should be withheld from public disclosure. The first page of each document contained on the OSM and the label on the OSM indicates that information identified as "Proprietary" should be withheld from public disclosure pursuant to 10 C.F.R. § 2.390 (a)(4).
3. The basis for holding the referenced information confidential is that it describes the unique design of the safety analysis, developed by MHI (the "MHI Information").
4. The MHI Information is 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. Therefore public disclosure of the materials would adversely affect MHI's competitive position.
5. The referenced information has in the past been, and will continue to be, held in confidence by MHI and is always subject to suitable measures to protect it from unauthorized use or disclosure.
6. The referenced information is not available in public sources and could not be gathered readily from other publicly available information.
7. 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.
8. 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 and testing of new 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 31<sup>st</sup> day of August, 2011.

A handwritten signature in black ink, appearing to read "Y. Ogata". The signature is written in a cursive style with a large initial "Y" and a stylized "Ogata".

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

ATTACHMENT 1

Docket No. 52-021  
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FILES CONTAINED ON OSM 1

**OSM 1: Supplemental Documentation in Support of MHI's Revised 15<sup>th</sup> Response to NRC's Requests for Additional Information on US-APWR Topical Report: Non-LOCA Methodology, MUAP-07010-P (R1) (proprietary)**

Contents of CD

	<u>File Name</u>	<u>Size</u>	<u>Sensitivity Level</u>
1.	001_MUAP-07010-P_R2.pdf	2363 KB	Proprietary
2.	002_MUAP-07026-P_R1.pdf	561 KB	Proprietary

## ATTACHMENT 2

Docket No. 52-021  
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### FILES CONTAINED ON OSM 2

**OSM 2: Supplemental Documentation in Support of MHI's Revised 15<sup>th</sup> Response to NRC's Requests for Additional Information on US-APWR Topical Report: Non-LOCA Methodology, MUAP-07010-NP (R1) (non-proprietary)**

#### Contents of CD

	<u>File Name</u>	<u>Size</u>	<u>Sensitivity Level</u>
1.	001_MUAP-07010-NP_R2.pdf	1909 KB	Non-Proprietary
2.	002_MUAP-07026-NP_R1.pdf	739 KB	Non-Proprietary