



MITSUBISHI HEAVY INDUSTRIES, LTD.

1-1, WADASAKI-CHO, 1-CHOME, HYOGO-KU,

KOBE, 652-8585 JAPAN

June 3, 2015

Document Control Desk

U.S. Nuclear Regulatory Commission

Washington, DC 20555-0001

Attention: Mr. William Ward

Docket No. 52-021
MHI Ref: UAP-HF-15004

Subject: MHI's Amended Response to US-APWR DCD RAI No. 1094-7466 (SRP 07.01)

- References: 1) "Request for Additional Information No. 1094-7466, SRP Section 07.01 – Instrumentation and Controls – Introduction - Application Section: 7.1," dated March 27, 2014, ML14086A571.
- 2) "MHI's Response to US-APWR DCD RAI No. 1094-7466 (SRP 07.01)," UAP-HF-14040, dated April 25, 2014, ML14119A193.
- 3) "AUDIT REPORT REGARDING CHAPTER 7, DIGITAL INSTRUMENTATION AND CONTROLS, OF THE UNITED STATES – ADVANCED PRESSURIZED WATER REACTOR DESIGN CERTIFICATION DOCUMENT," dated April 3, 2015, ML15078A448.

With this letter, Mitsubishi Heavy Industries, Ltd. (MHI) submits to the U.S. Nuclear Regulatory Commission (NRC) a document entitled "Amended Response to US-APWR DCD RAI No. 1094-7466 (SRP 07.01)."

Enclosed are the responses to the questions contained within Reference 1. This document revision incorporates the initial response to RAI 1094-7466 (Reference 2). The response is amended to reflect the audit result in the week of November 17th, 2014 (Reference 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 with the information identified as proprietary redacted and replaced by the designation "[]."

This letter includes a copy of the proprietary version of the RAI response (Enclosure 2), a copy of the non-proprietary version of the RAI response (Enclosure 3), and the Affidavit of Atsushi Kumaki (Enclosure 1) which identifies 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).

This letter also includes certain information, designated pursuant to the Commission guidance as sensitive unclassified non-safeguards information, referred to as security-related information (SRI), that is to be withheld from public disclosure under 10 C.F.R. § 2.390. The information that is SRI is identified by brackets. A redacted version is supplied which omits the SRI and is suitable for public disclosure. In the public version, the SRI is replaced by the designation "[Security-Related Information - Withheld under 10 CFR 2.390]."

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Each version of the response is included on a separate compact disc (CD). Attachment 1 is a listing of the files contained in Enclosures 2 and 3.

Please contact Mr. Joseph Tapia, General Manager of Regulatory Services, Mitsubishi Nuclear Energy Systems, Inc. if the NRC has questions concerning any aspect of this letter. His contact information is provided below.

Sincerely,



Atsushi Kumaki
Engineering Manager
Global Nuclear Project Department
Nuclear Energy Systems Division
Energy & Environment Domain
Mitsubishi Heavy Industries, Ltd.

Enclosures:

1. Affidavit of Atsushi Kumaki
2. CD 1:
Amended Response to US-APWR DCD RAI No. 1094-7466 (SRP 07.01)
(Proprietary)
 - Version containing proprietary information and security-related information
3. CD2
Amended Response to US-APWR DCD RAI No. 1094-7466 (SRP 07.01)
(Non-Proprietary)
 - Version not containing proprietary information or security-related information

CC: W. Ward
J. Tapia

Contact Information

Joseph Tapia, General Manager of Regulatory Services
Mitsubishi Nuclear Energy Systems, Inc.
13860 Ballantyne Corporate Place, Suite 250
Charlotte, NC 28277
E-mail: joseph_tapia@mnes-us.com
Telephone: (704) 945-2740

ENCLOSURE 1

Docket No. 52-021
MHI Ref: UAP-HF-15004

MITSUBISHI HEAVY INDUSTRIES, LTD.
AFFIDAVIT

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

1. I am Engineering Manager, Global Nuclear Project Department, Nuclear Energy Systems Division, Energy & Environment Domain, 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 "Amended Response to US-APWR DCD RAI No. 1094-7466 (SRP 07.01)," dated June, 2015 and have determined that the document contains 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 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 and methodology developed by MHI for the I&C design of the US-APWR.
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 safety I&C system. Providing public access to such information permits competitors to duplicate or mimic the safety I&C system 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 safety I&C 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 3rd day of June, 2015.

A handwritten signature in black ink, appearing to read "Atsushi Kumaki". The signature is fluid and cursive, with the first name "Atsushi" and last name "Kumaki" clearly distinguishable.

Atsushi Kumaki
Engineering Manager
Global Nuclear Project Department
Nuclear Energy Systems Division
Energy & Environment Domain
Mitsubishi Heavy Industries, Ltd.

ATTACHMENT 1

FILES CONTAINED IN CDs

CD 1:

**Amended Response to US-APWR DCD RAI No. 1094-7466 (SRP 07.01)
(Proprietary)**

- **Version containing proprietary information and security-related information**

Contents of CD

<u>File Name</u>	<u>Size</u>	<u>Sensitivity Level</u>
Amended Response to RAI 1094-7466-P.pdf	0.14MB	Proprietary
Attachment-1 to Amended Response to RAI 1094-7466-P.pdf	0.50MB	Non-proprietary
Attachment-2 to Amended Response to RAI 1094-7466-P.pdf	1.08MB	Proprietary, SRI included

CD 2:

**Amended Response to US-APWR DCD RAI No. 1094-7466 (SRP 07.01)
(Non-Proprietary)**

- **Version not containing proprietary information or security-related information**

Contents of CD

<u>File Name</u>	<u>Size</u>	<u>Sensitivity Level</u>
Amended Response to RAI 1094-7466-NP.pdf	0.16MB	Non-proprietary
Attachment-1 to Amended Response to RAI 1094-7466-NP.pdf	0.50MB	Non-proprietary
Attachment-2 to Amended Response to RAI 1094-7466-NP.pdf	0.93MB	Non-proprietary, SRI excluded