16-5, KONAN 2-CHOME, MINATO-KU TOKYO, JAPAN

October 16, 2013

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

Attention: Mr. Perry Buckberg

Docket No. 52-021 MHI Ref: UAP-HF-13249

Subject: MHI's Responses to US-APWR DCD Section 3.7 and 3.8

Reference:

- Letter MHI Ref. UAP-HF-13196 from Y. Ogata (MHI) to U.S. NRC, "US-APWR Updated to the Seismic Closure Plan and Submittals to DCD Chapter 3," dated August 2nd, 2013, ML13220A149.
- Letter MHI Ref. UAP-HF-13202 from Y. Ogata (MHI) to U.S. NRC, "MHI's Responses to US-APWR DCD RAIs Nos. 950-6575 (SRP 03.07.03)," dated August 7th, 2013, ML13220B003
- Letter MHI Ref. UAP-HF-09161 from Y. Ogata (MHI) to U.S. NRC, "MHI's Response to US-APWR DCD RAI No. 223-1996" dated April 14th, 2009, ML091060749
- 4) Letter MHI Ref. UAP-HF-13211 from Y. Ogata (MHI) to U.S. NRC, "Transmittal of Technical Report, "US-APWR CONTAINMENT PERFORMANCE FOR PRESSURE LOADS" (MUAP-10018, Revision 1)" dated August 23rd, 2013, ML13260A350

With this letter, Mitsubishi Heavy Industries, Ltd. (MHI) transmits to the U.S. Nuclear Regulatory Commission (NRC) the document entitled "MHI's Responses to US-APWR DCD Section 3.7 and 3.8" scheduled for submittal in accordance with Reference 1. Additionally, the response to RAI 950-6575 03.07.03-12 (Reference 2) is added supplemental information of site parameters and the response to RAI 223-1996 Question 03.08.01-03 (Reference 3) is revised to incorporate additional evaluation based upon MUAP-10018 Rev.1 issued in August (Reference 4).

This letter includes a copy of the proprietary (non-public) version of RAI responses (Enclosure 2), a copy of the non-proprietary (public) version of the RAI responses (Enclosure 3), and the Affidavit of Yoshiki Ogata (Enclosure 1) which identifies the reasons MHI respectfully requests that all materials designated as "Proprietary" in Enclosure 2 be withheld from public disclosure pursuant to 10 CFR § 2.390 (a)(4).

As indicated in the enclosed materials, this document contains information that MHI considers proprietary, and therefore should be withheld from public disclosure pursuant to the 10 CFR § 2.390 (a)(4) as trade secrets and commercial or financial information which is privileged or confidential. The non-proprietary version of the document is also being submitted with the information identified as proprietary redacted and replaced by the designation "[]." Attachment 1 provides a listing of the files contained in Enclosures 2 and 3. Attachment 2 provides a listing of those RAI responses contained in Enclosures 2 and 3. Attachment 3 provides a listing of those RAI responses, originally due in September, which are being

deferred to October. The reason for the deferral is to allow the necessary time to incorporate NRC feedback into responses based upon Public Meeting for basemat design.

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

Sincerely.

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Yoshiki Ogata, Executive Vice President Mitsubishi Nuclear Energy Systems, Inc. On behalf of Mitsubishi Heavy Industries, Ltd.

Enclosures:

- 1. Affidavit of Yoshiki Ogata
- 2. CD1: MHI's Responses to US-APWR DCD Section 3.7 and 3.8 Proprietary version
- 3. CD2: MHI's Responses to US-APWR DCD Section 3.7 and 3.8 Non-proprietary version

CC: P. Buckberg J. Tapia

Contact Information

Joseph Tapia, General Manager of Licensing Department Mitsubishi Nuclear Energy Systems, Inc. 11405 North Community House Road, Suite 300 Charlotte, NC 28277 E-mail: joseph_tapia@mnes-us.com Telephone: (704) 945-2740

<u>ATTACHMENT - 1</u>

FILES CONTAINED IN CDs

CD 1: MHI's Responses to US-APWR DCD Section 3.7 and 3.8 – Proprietary version

Contents of CD1

File Name 1. Includes proprietary information	Size	Sensitivity Level
RAI 958-6608 Q03.08.03-94(Proprietary).pdf	32.0 MB	Proprietary
RAI 958-6608 Q03.08.03-96(Proprietary).pdf	1.6 MB	Proprietary
2. Others (No relating proprietary information) RAI 852-6003 Q03.07.02-136.pdf	75.0 KB	None
RAI 852-6003 Q03.07.02-137.pdf	63.3 KB	None
RAI 950-6575 Q03.07.03-12 Supplemental.pdf	90.9 KB	None
RAI 223-1996 Q03.08.01-03.pdf	60.3 KB	None
RAI 858-6126 Q03.08.03-48.pdf	60.7 KB	None
RAI 894-6270 Q03.08.03-63.pdf	55.7 KB	None
RAI 977-6899 Q03.08.03-97.pdf	63.2 KB	None
RAI 977-6899 Q03.08.03-98.pdf	61.5 KB	None
RAI 977-6899 Q03.08.03-99.pdf	58.2 KB	None
RAI 1024-7053 Q03.08.03-111.pdf	1.01 MB	None
RAI 1024-7053 Q03.08.03-112.pdf	108 KB	None
RAI 1045-7141 Q03.08.05-54.pdf RAI 1045-7141 Q03.08.05-55.pdf	102 KB 1.14 MB 89.4 KB	None None None
RAI 1045-7141 Q03.08.05-56.pdf	09.4 ND	INOHE

CD 2: MHI's Responses to US-APWR DCD Section 3.7 and 3.8 – Non-proprietary version

Contents of CD2

File Name 1. Includes proprietary information	<u>Size</u>	Sensitivity Level
RAI 958-6608 Q03.08.03-94(Non-proprietary).pdf	27.0 MB	Non-Proprietary
RAI 958-6608 Q03.08.03-96(Non-proprietary).pdf	523 KB	Non-Proprietary
2. Others (No relating proprietary information) RAI 852-6003 Q03.07.02-136.pdf	75.0 KB	None
RAI 852-6003 Q03.07.02-137.pdf RAI 950-6575 Q03.07.03-12 Supplemental.pdf	63.3 KB 90.9 KB	None None
RAI 223-1996 Q03.08.01-03.pdf	60.3 KB	None
RAI 858-6126 Q03.08.03-48.pdf	60.7 KB	None
RAI 894-6270 Q03.08.03-63.pdf	55.7 KB	None
RAI 977-6899 Q03.08.03-97.pdf	63.2 KB	None
RAI 977-6899 Q03.08.03-98.pdf	61.5 KB	None
RAI 977-6899 Q03.08.03-99.pdf	58.2 KB	None
RAI 1024-7053 Q03.08.03-111.pdf	1.01 MB	None
RAI 1024-7053 Q03.08.03-112.pdf	108 KB	None
RAI 1045-7141 Q03.08.05-54.pdf	102 KB	None
RAI 1045-7141 Q03.08.05-55.pdf	1.14 MB	None
RAI 1045-7141 Q03.08.05-56.pdf	89.4 KB	None

<u>ATTACHMENT - 2</u> <u>LIST OF RAI RESPONSES</u>

RAI Letter No.	eRAI No.	Question No.	Question No. (Sub-number)
852	6003	03.07.02-136	
852	6003	03.07.02-137	
950	6575	03.07.03-12	
223	1996	03.08.01-03	
858	6126	03.08.03-48	
894	6270	03.08.03-63	
958	6608	03.08.03-94	
958	6608	03.08.03-96	
977	6899	03.08.03-97	
977	6899	03.08.03-98	
977	6899	03.08.03-99	
1024	7053	03.08.03-111	
1024	7053	03.08.03-112	
1045	7141	03.08.05-54	
1045	7141	03.08.05-55	
1045	7141	03.08.05-56	

<u>ATTACHMENT - 3</u> <u>LIST OF DEFERRED RAI RESPONSES</u>

RAI Letter No.	eRAI No.	Question No.	Question No. (Sub-number)	Submittal Date
1045	7141	03.08.05-51		11/29/2013 ¹⁾
1045	7141	03.08.05-59		11/29/2013 ¹⁾

Note

1) This RAI response was scheduled for submittal in September 2013 in accordance with the "US-APWR Update to the Seismic Closure Plan and Submittals related to DCD Chapter 3" (UAP-HF-13196, August 2nd, 2013).

Enclosure1

MITSUBISHI HEAVY INDUSTRIES, LTD. AFFIDAVÍT

I, Yoshiki Ogata, state as follows:

- I am Executive Vice President of Mitsubishi Nuclear Energy Systems, Inc., and have been delegated the function of reviewing MITSUBISHI HEAVY INDUSTRIES, LTD's (MHI) US-APWR documentation to determine whether it contains information that should be withheld from public disclosure pursuant to 10 CFR § 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 "MHI's Responses to US-APWR DCD Section 3.7 and 3.8" dated October 2013, 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 CFR § 2.390 (a)(4).
- 3. The information identified as proprietary in the enclosed document as 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 bases for holding the referenced information confidential are as follows;
 - A. They include the output of analyses used by mathematical models developed at significant cost to MHI, since it required the performance of detailed design calculations, supporting analyses, and testing. The information out of the analyses is not available in public sources and could not be gathered readily from other publicly available information.
 - B. They include the information that is provided to MHI pursuant to licensing agreements with third parties (the "Licensors") for MHI's use and under the obligation to maintain their confidentiality. Furthermore, MHI has an ownership interest in the referenced information by having paid significant sums of money to the Licensors for the rights to the intellectual property therein such that public disclosure of the materials would adversely affect MHI's competitive position.
- 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 methodology of modeling and analysis for building structure design. Providing public access to such information permits competitors to duplicate or mimic the methodology without incurring the associated 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 16th day of October, 2013.

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Yoshiki Ogata,

Executive Vice president

Mitsubishi Nuclear Energy Systems, Inc.