



MITSUBISHI HEAVY INDUSTRIES, LTD.

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

January 10, 2014

Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC20555-0001

Attention: Mr. Perry Buckberg

Docket No. 52-021
MHI Ref: UAP-HF-14004

Subject: Transmittal of the Technical Report "Axial Flow Damping Test of the Full Scale US-APWR Fuel Assembly" (MUAP- 13020 -P/NP, Revision 1)

- References:**
- 1) Letter MHI Ref. UAP-HF-13302 from Y. Ogata (MHI) to U.S. NRC, "MHI's Response to US-APWR DCD RAI No.1064-7302 (SRP 04.02)" dated December 19, 2013
 - 2) Letter MHI Ref. UAP-HF-13216 from Y. Ogata (MHI) to U.S. NRC, "Transmittal of the Technical Report "US-APWR Fuel Assembly Axial Flow Damping Test Report" (MUAP- 13020 -P/NP, Revision 0)" dated August 30, 2013

With this letter, Mitsubishi Heavy Industries, Ltd. ("MHI") transmits to the U.S. Nuclear Regulatory Commission ("NRC") the Technical Report "Axial Flow Damping Test of the Full Scale US-APWR Fuel Assembly", MUAP-13020-P/NP (R1). This revision of the technical report reflects changes stated in the response of the RAI submitted in Reference 1. The previous revision of the topical report was submitted in Reference 2.

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 (Enclosure 2), a copy of the non-proprietary version (Enclosure 3), and the Affidavit of Katsuhisa Takaura (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 C.F.R. § 2.390 (a)(4).

Each version of the technical report is included on a separate compact disc (CD). A list of the files contained in the CDs is provided in Attachment 1 to this letter.

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

DD 81
NRD

Sincerely,

K. Takaura ^{for}

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

Enclosures:

1. Affidavit of Katsuhisa Takaura
2. CD 1: MUAP-13020-P (R1) " Axial Flow Damping Test of the Full Scale US-APWR Fuel Assembly" (Proprietary version)
3. CD 2: MUAP-13020-NP (R1) " Axial Flow Damping Test of the Full Scale US-APWR Fuel Assembly" (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

ENCLOSURE 1

Docket No. 52-021
MHI Ref: UAP-HF-14004

MITSUBISHI HEAVY INDUSTRIES, LTD. AFFIDAVIT

I, Katsuhisa Takaura, state as follows:

1. I am Manager, APWR Project of Global Nuclear Project Department, of Mitsubishi Heavy Industries, LTD.(MHI), 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 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 "Axial Flow Damping Test of the Full Scale US-APWR Fuel Assembly" dated January 2014, 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 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 test method, conditions, parameters and result data for the US-APWR fuel development.
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 design of US-APWR fuel systems and components. Providing public access to such information permits competitors to duplicate or mimic the design of new fuel system and components without incurring the associated costs.

B. Loss of competitive advantage of the US-APWR created by benefits of enhanced development costs associated with the design of US-APWR fuel systems and components.

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 10th day of January, 2014.

A handwritten signature in black ink that reads "K. Takaura". The signature is written in a cursive style with a large, stylized initial "K".

Katsuhisa Takaura,
Manager- APWR Project
Of Global Nuclear Project Department
Mitsubishi Heavy Industries, LTD

ATTACHMENT 1

FILES CONTAINED IN CDs

CD 1: MUAP- 13020-P (R1) " Axial Flow Damping Test of the Full Scale US-APWR Fuel Assembly" (Proprietary version)

Contents of CD

<u>File Name</u>	<u>Size</u>	<u>Sensitivity Level</u>
001 MUAP-13020-P(R1).pdf	989KB	Proprietary

CD 2: MUAP-13020-NP (R1) " Axial Flow Damping Test of the Full Scale US-APWR Fuel Assembly" (Non-proprietary version)

Contents of CD

<u>File Name</u>	<u>Size</u>	<u>Sensitivity Level</u>
001 MUAP-13020-NP(R1).pdf	472KB	Non-proprietary