

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

June 28, 2013

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-13166

**Subject: Transmittal of the Topical Report "FINDS: Mitsubishi PWR Fuel Assemblies Seismic Analysis Code" (MUAP-07034-P/NP, Revision 4)**

- Reference:** 1) "US-APWR Fuel Seismic Closure Plan" (MHI Ref: UAP-HF-13133) dated June 14, 2013  
2) MHI Letter Ref.UAP-HF-10224 from Y.Ogata (MHI) to U.S. NRC, "Transmittal of the Revised Topical Reports MUAP-07008-P/NP(R2) and MUAP-07034-P/NP(R3) regarding Fuel System Design" dated July 30, 2010

With this letter, Mitsubishi Heavy Industries, Ltd. ("MHI") transmits to the U.S. Nuclear Regulatory Commission ("NRC") the topical report "FINDS: Mitsubishi PWR Fuel Assemblies Seismic Analysis Code," MUAP-07034-P/NP (R4). This revision of the topical report includes discussion of the Axial Flow Damping effect as stated in Reference 1. The previous revision of the topical report was submitted in Reference 2.

As indicated in the enclosed materials, the topical report 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 topical report is also being submitted with the information identified as proprietary redacted and replaced by the designation "[ ]".

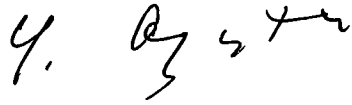
This letter includes a copy of the proprietary version (Enclosure 2), a copy of the non-proprietary version (Enclosure 3), and the Affidavit of Yoshiki Ogata (Enclosure 1) which identifies the reasons MHI respectfully requests that all materials designated as "Proprietary" in Enclosure 2 be withheld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

Each version of the topical 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 this submittals. His contact information is provided below.

DO81  
NRO

Sincerely,



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

Enclosures:

1. Affidavit of Yoshiki Ogata
2. CD 1: MUAP-07034-P (R4) "FINDS: Mitsubishi PWR Fuel Assemblies Seismic Analysis Code" (Proprietary version)
3. CD 2: MUAP-07034-NP (R4) "FINDS: Mitsubishi PWR Fuel Assemblies Seismic Analysis Code (Non-proprietary version)"

CC: J. A. Ciocco  
J. Tapia

Contact Information

Joseph Tapia, General Manager of Licensing Department  
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## Enclosure 1

Docket No. 52-021  
MHI Ref: UAP-HF-13166

### MITSUBISHI HEAVY INDUSTRIES, LTD. AFFIDAVIT

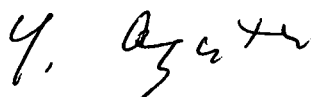
I, Yoshiki Ogata, state as follows:

1. 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 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 "FINDS: Mitsubishi PWR Fuel Assemblies Seismic Analysis Code" MUAP-07034-P/NP (R4) dated June 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 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 that have been developed by MHI for the fuel of the US-APWR and are 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.
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 systems 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 28<sup>th</sup> day of June, 2013.

A handwritten signature in black ink, appearing to read "Y. Ogata". The signature is written in a cursive, somewhat stylized font.

Yoshiki Ogata,  
Executive Vice President  
Mitsubishi Nuclear Energy Systems, Inc.

**ATTACHMENT 1**

**FILES CONTAINED IN CDs**

**CD 1: MUAP-07034-P(R4) "FINDS : Mitsubishi PWR Fuel Assemblies Seismic Analysis Code (proprietary)"**

**Contents of CD**

<u>File Name</u>	<u>Size</u>	<u>Sensitivity Level</u>
001 MUAP-07034-P(R4).pdf	14.1MB	Proprietary

**CD 2: MUAP-07034-NP(R4) "FINDS : Mitsubishi PWR Fuel Assemblies Seismic Analysis Code (non-proprietary)"**

**Contents of CD**

<u>File Name</u>	<u>Size</u>	<u>Sensitivity Level</u>
001 MUAP-07034-NP(R4).pdf	14.0MB	Nonproprietary