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

December 25, 2009

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-09572

Subject:

Transmittal of the Revised Topical Reports MUAP-07008-P/NP(R1), MUAP-07034-P/NP(R1) and Technical Report MUAP-07016-P/NP(R2)

regarding Fuel System Design

References: 1) Letter MHI Ref.UAP-HF-07049 from M. Kaneda (MHI) to U.S. NRC, "Transmittal of the Topical Report entitled "Mitsubishi Fuel Design Criteria and Methodology" dated on May 25, 2007

> 2) Letter MHI Ref.UAP-HF-08060 from M. Kaneda (MHI) to U.S. NRC, "Transmittal of the Topical Report "FINDS: Mitsubishi PWR Fuel Assemblies Seismic Analysis Code" (MUAP-07034)" dated on March 31, 2008

3) Letter MHI Ref.UAP-HF-09497 from Y. Ogata (MHI) to U.S. NRC, "Transmittal of the Technical Report, MUAP-07016-P/NP, Revision 1, "US-APWR Fuel System Design Evaluation"" dated on October 30, 2009

With this letter, Mitsubishi Heavy Industries, Ltd. ("MHI") transmits to the U.S. Nuclear Regulatory Commission ("NRC") the revised topical reports and technical report, which were submitted previously in References 1), 2) and 3). These Reports supplement the materials provided in the "Design Control Document for the US-APWR" ("DCD"), and are incorporated by references in the DCD. The Reports are being submitted electronically in compact discs (CDs). Submittals of the enclosed topical reports and technical report were the commitments made at the time MHI filed their application for NRC certification of the US-APWR design.

The enclosed reports contains information that MHI considers proprietary, and therefore the report 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. Accordingly, the Reports are being submitted in two versions, in separate compact discs. One version (in CD 1, 3 and 5) contains the complete proprietary version of the Reports. The non-proprietary versions of the Reports are enclosed in CD 2, 4 and 6. In the non-proprietary version, the proprietary information, bracketed in the proprietary version, is replaced by the designation "[]". In accordance with the NRC submittal procedures, this letter includes an Affidavit that identifies the reasons why the proprietary version of the Report should 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.



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

Enclosures:

- 1. Affidavit of Yoshiki Ogata,
- 2. CD 1: MUAP-07008-P (R1) "Mitsubishi Fuel Design Criteria and Methodology (proprietary)"
- 3. CD 2: MUAP-07008-NP (R1) "Mitsubishi Fuel Design Criteria and Methodology (non-proprietary)"
- 4. CD 3: MUAP-07034-P (R1) "FINDS: Mitsubishi PWR Fuel Assemblies Seismic Analysis Code (proprietary)"
- 5. CD 4: MUAP-07034-NP (R1) "FINDS: Mitsubishi PWR Fuel Assemblies Seismic Analysis Code (non-proprietary)"
- 6. CD 5: MUAP-07016-P (R2) "US-APWR Fuel System Design Evaluation (proprietary)"
- 7. CD 6: MUAP-07016-NP (R2) "US-APWR Fuel System Design Evaluation (non-proprietary)"

The files contained in each CD are listed in Attachments 1 hereto.

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

Contact Information

C. Keith Paulson, Senior Technical Manager Mitsubishi Nuclear Energy Systems, Inc. 300 Oxford Drive, Suite 301 Monroeville, PA 15146 E-mail: ck_paulson@mnes-us.com Telephone: (412) 373 – 6466

ENCLOSURE 1

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 documentations 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 reports, "Mitsubishi Fuel Design Criteria and Methodology" MUAP-07008-P/NP (R1), "FINDS: Mitsubishi PWR Fuel Assemblies Seismic Analysis Code" MUAP-07034-P/NP (R1) and "US-APWR Fuel System Design Evaluation" MUAP-07016-P/NP (R2) and have determined that portions of the report 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 technical report indicates that all information identified as "Proprietary" should be withheld from public disclosure pursuant to 10 C.F.R. § 2.390 (a).
- 3. The information in the report identified as proprietary by MHI 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 developed by MHI for the fuel of the US-APWR. That design was developed at significant cost to MHI, since it required the performance of detailed design calculations, analyses, and testing extending over several years. The referenced information is not available in public sources and could not be gathered readily from other publicly available information. MHI knows of no way the information could be lawfully acquired by organizations or individuals outside of MHI.
- 5. 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.
- 6. 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 of new fuel 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 25th day of December, 2009.

y, agata

Yoshiki Ogata, General Manager- APWR Promoting Department

Mitsubishi Heavy Industries, LTD.

ATTACHMENT 1

FILES CONTAINED IN CDs

CD 1: MUAP-07008-P (R1),"Mitsubishi Fuel Design Criteria and Methodology (proprietary)"

Contents of CD

File Name

<u>Size</u>

Sensitivity Level

001 MUAP-07008-P(R1).pdf

13.9MB

proprietary

CD 2: MUAP-07008-NP (R1),"Mitsubishi Fuel Design Criteria and Methodology (non-proprietary)"

Contents of CD

File Name

<u>Size</u>

Sensitivity Level

001 MUAP-07008-NP(R1).pdf

13.2MB

Nonproprietary

CD 3: MUAP-07034-P (R1) ""FINDS : Mitsubishi PWR Fuel Assemblies Seismic Analysis Code (proprietary)"

Contents of CD

File Name

Size

Sensitivity Level

001 MUAP-07034-P(R1).pdf

8.4MB

Proprietary

CD 4: MUAP-07034-NP (R1) "FINDS: Mitsubishi PWR Fuel Assemblies Seismic Analysis Code (non-proprietary)"

Contents of CD

File Name

Size

Sensitivity Level

001 MUAP-07034-NP(R1).pdf

12.2MB

Nonproprietary

CD 5: MUAP-07016-P (R2) "US-APWR Fuel System Design Evaluation (proprietary)"

Contents of CD

File Name

001 MUAP-07016-P(R2).pdf

<u>Size</u> 3.5 MB Sensitivity Level

Proprietary

CD 6: MUAP-07016-NP (R2) "US-APWR Fuel System Design Evaluation (non-proprietary)"

Contents of CD

File Name

001 MUAP-07016-NP(R2).pdf

<u>Size</u>

3.0 MB

Sensitivity Level

Nonproprietary