



MITSUBISHI HEAVY INDUSTRIES, LTD.

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

December 31, 2007

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

Attention: Mr. R. William Borchardt
Director, Office of New Reactors

Project No.0751
MHI Ref: UAF-HF-07173

Subject: Technical Report on APWR Reactor Internals 1/5 Scale Model Flow Test Report (MUAP-07023) Submitted in Support of US-APWR Design Certification Application

Pursuant to 10 C.F.R. § 52.47(a), Mitsubishi Heavy Industries, Ltd. ("MHI") is pleased to submit to the U.S. Nuclear Regulatory Commission ("NRC") its technical report entitled "APWR Reactor Internals 1/5 Scale Model Flow Test Report (MUAP-07023)". This Report supplements the materials provided in the "Design Control Document for the US-APWR" ("DCD"), submitted concurrently herewith as part of MHI's US-APWR Design Certification Application, and is incorporated by reference in the DCD. The Report is being submitted electronically in compact discs (CDs).

The enclosed report entitled "APWR Reactor Internals 1/5 Scale Model Flow Test Report " 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) and 10 CFR § 9.17(a)(4) as trade secrets and commercial or financial information which is privileged or confidential. Accordingly, the Report is being submitted in two versions, in separate compact discs. One version (in CD 1) contains the complete proprietary version of the Report. A non-proprietary version of the Report is enclosed in CD 2. 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) and 10 CFR § 9.17(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.

Sincerely,

Masahiko Kaneda
General Manager- APWR Promoting Department
Mitsubishi Heavy Industries, Ltd.

DOB1
NRO

Enclosures:

1. Affidavit of Masahiko Kaneda
2. CD 1: "APWR Reactor Internals 1/5 Scale Model Flow Test Report "
– Version containing Proprietary information
3. CD 2: "APWR Reactor Internals 1/5 Scale Model Flow Test Report "
– Version not containing Proprietary information

The files contained in each CD are listed in Attachments 1 and 2 hereto.

CC: S. M. Coffin
S. R. Monarque
J. A. Ciocco
J. W. Chung
D. B. Matthews
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: ckpaulson@mnes.com
Telephone: (412) 373 – 6466

ENCLOSURE 1

**UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION**

In the Matter of)
MITSUBISHI HEAVY INDUSTRIES, LTD.)
US-APWR)
Standard Plant Design Certification Application)

AFFIDAVIT OF MASAHIKO KANEDA

I, Masahiko Kaneda, 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 documentation to determine whether it contains information that should be withheld from disclosure pursuant to 10 C.F.R. § 2.390 (a)(4) and 10 CFR § 9.17(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 " APWR Reactor Internals 1/5 Scale Model Flow Test Report" 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 methodology developed by MHI for assessing the vibration characteristics and structural integrity of the reactor internal components of the US-APWR reactor. That methodology 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 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 31st day of December, 2007.

M. Kaneda

Masahiko Kaneda

ATTACHMENT 1

FILES CONTAINED IN CD 1

**CD 1: "APWR Reactor Internals 1/5 Scale Model Flow Test Report "
– Version containing Proprietary information**

Contents of CD

<u>File Name</u>	<u>Size</u>	<u>Sensitivity Level</u>
001_RI Scale Model Test(Proprietary).pdf	5.4MB	Proprietary

ATTACHMENT 2

FILES CONTAINED IN CD 2

**CD 2: "APWR Reactor Internals 1/5 Scale Model Flow Test Report "
– Version non containing Proprietary information**

Contents of CD

<u>File Name</u>	<u>Size</u>	<u>Sensitivity Level</u>
001_RI Scale Model Test(Non-proprietary).pdf	1.8MB	Non-Proprietary