



MITSUBISHI HEAVY INDUSTRIES, LTD.
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TOKYO, JAPAN

August 5, 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-09416

Subject: Transmittal of the Technical Report Entitled "Calculation Methodology for Reactor Vessel Neutron Flux and Fluence"

References: 1) Letter MHI Ref. UAP-HF-09203 from Y. Ogata (MHI) to U.S. NRC, "MHI's Response to US-APWR DCD RAI No.284-2214 REVISION 1 and RAI No.285-2334 REVISION 1" dated on April 23, 2009

With this letter, Mitsubishi Heavy Industries, Ltd. ("MHI") transmits to the U.S. Nuclear Regulatory Commission ("NRC") its technical report entitled "Calculation Methodology for Reactor Vessel Neutron Flux and Fluence, MUAP-09018 Revision 0". The report is being submitted electronically in compact disc ("CD").

Submittal of the enclosed technical report was one of the commitments in Reference 1.

The enclosed 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) 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).

Per the request from the NRC during the DORT code Audit on June 25th, MHI is performing another benchmark calculation and analysis of effect about geometry modeling. These results will be included in the revised version of the technical report, MUAP-09018, and this revised version of the report will be submitted to the NRC by the end of September.

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.

DOB
KRO

Sincerely,



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

Enclosures:

1. Affidavit of Yoshiki Ogata
2. CD 1: Technical Report "Calculation Methodology for Reactor Vessel Neutron Flux and Fluence, MUAP-09018P Revision 0"
– Version containing Proprietary information
3. CD 2: Technical Report "Calculation Methodology for Reactor Vessel Neutron Flux and Fluence, MUAP-09018NP Revision 0"
– Version not containing Proprietary information

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

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

Contact Information

C. Keith Paulson, Senior Technical Manager
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Monroeville, PA 15146
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Telephone : (412) 373-6466

Enclosure 1

Docket No.52-021
MHI Ref: UAP-HF-09416

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 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 "Calculation Methodology for Reactor Vessel Neutron Flux and Fluence" dated August 2009, and have determined that the 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 methodology for evaluation to comply with Regulatory Guide 1.190, developed by MHI. This methodology was developed to significant cost to MHI, and with knowledge and know-how about using the DORT code.
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 5th day of August, 2009.

A handwritten signature in black ink, appearing to read "Y. Ogata". The signature is written in a cursive style with a large initial "Y" and a long horizontal stroke extending to the right.

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

ATTACHMENT 1

FILE CONTAINED IN CD1

**CD 1: Technical Report "Calculation Methodology for Reactor Vessel Neutron Flux and Fluence, MUAP-09018P Revision 0"
- Version containing Proprietary information**

Contents of CD

<u>File Name</u>	<u>Size</u>	<u>Sensitivity Level</u>
MUAP-09018P(R0).pdf	463 KB	Proprietary

ATTACHMENT 2

FILE CONTAINED IN CD2

**CD 2: Technical Report “Calculation Methodology for Reactor Vessel Neutron Flux and Fluence, MUAP-09018NP Revision 0”
- Version not containing Proprietary information**

Contents of CD

<u>File Name</u>	<u>Size</u>	<u>Sensitivity Level</u>
MUAP-09018NP(R0).pdf	255 KB	Non-Proprietary