MITSUBISHI HEAVY INDUSTRIES, LTD.
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TOKYO, JAPAN

August 30, 2011

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-11285

Subject: Transmittal of the Technical Report entitled "US-APWR Sump Strainer Downstream Effects" (MUAP-08013 Revision 2)

References: 1) US-APWR Sump Strainer Performance, MUAP-08001-P Revision 5, August 2011

This letter transmits the enclosed technical report entitled "US-APWR Sump Strainer Downstream Effects" (MUAP-08013 Revision 2) to the U.S. Nuclear Regulatory Commission (NRC) based on Mitsubishi Heavy Industries, Ltd. (MHI) staff review. The enclosed technical report has been revised for two reasons. The first is to reflect changes in the revision of MUAP-08001 (Reference 1), which was revised to reflect changes in debris amounts. The second is to reflect the change in MHI's position regarding the evaluation of the effect core inlet blockage. MHI's current position is that the results of MHI's core inlet blockage test program have demonstrated the post-LOCA long term cooling for US-APWR is maintained even if the debris effect is considered, and accordingly, that the analysis of the effect of core blockage using a analysis code is no longer necessary in MUAP-08013.
Further, the NRC recently issued a request for additional information (RAI), for MUAP-08013, regarding the debris arrival time at the core inlet after a LOCA accident. This RAI may prompt another report revision. MHI will, if necessary, incorporate into the report results of response to the RAIs and relevant discussions with the NRC.

As indicated in the enclosed materials, this document 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 technical report is being submitted in two versions, in separate compact discs. One version (in CD 1 of Enclosure 2) contains the complete proprietary version of the technical report. A non-proprietary version of the technical report is enclosed in CD 2 (Enclosure 3). 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 (Enclosure 1) 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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NRO

Sincerely,

Y. Ogata

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

Enclosures:

1. Affidavit of Yoshiki Ogata

2. CD 1: "US-APWR Sump Strainer Downstream Effects (MUAP-08013-P Revision 2)"
   – Version containing Proprietary information

3. CD 2: "US-APWR Sump Strainer Downstream Effects (MUAP-08013-NP Revision 2)"
   – Version not containing Proprietary information

The file contained in each CD is listed in Attachments 1 and 2 hereto.

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

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ENCLOSURE 1

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MHI Ref: UAP-HF-11285

MITSUBISHI HEAVY INDUSTRIES, LTD.

AFFIDAVIT

I, Yoshiki Ogata, 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 "US-APWR Sump Strainer Downstream Effects" dated August 30, 2011, 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 of the safety analysis, testing results related to the US-APWR specific design, developed by MHI and 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 the performance of detailed hardware design and software development 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 unique plant design of the safety analysis. Providing public access to such information permits competitors to duplicate or mimic the methodology without incurring the associated costs.

B. Loss of competitive advantage of the US-APWR created by benefits of enhanced plant safety, and reduced operation and maintenance costs. .

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 30th day of August, 2011.

Y. Ogata

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

ATTACHMENT 1

FILE CONTAINED IN CD 1

CD 1: "US-APWR Sump Strainer Downstream Effects (MUAP-08013-P Revision 2)" – Version Containing Proprietary Information

Contents of CD

File Name	Size	Sensitivity Level
001 MUAP-08013-P(R2).pdf	1.6 MB	Proprietary

ATTACHMENT 2

FILE CONTAINED IN CD 2

CD 2: "US-APWR Sump Strainer Downstream Effects (MUAP-08013-NP Revision 2)" – Version Not Containing Proprietary Information

Contents of CD

File Name	Size	Sensitivity Level
001 MUAP-08013-NP(R2).pdf	0.9 MB	Non-Proprietary