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

March 31, 2014

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

Attention: Mr. Perry Buckberg

Docket No. 52-021
MHI Ref: UAP-HF-14033

Subject: Transmittal of Accepted Version of the Small Break LOCA Topical Report 'Small Break LOCA Methodology for US-APWR, MUAP-07013, Revision 3'

References:
1) United States - Advanced Pressurized Water Reactor Final Safety Evaluation by the Office of New Reactors for Topical Report MUAP-07013-P, Revision 2 "Small Break LOCA Methodology for US-APWR," dated May 14, 2013 (ML13123A285).
2) MHI Letter No. UAP-HF-13278, "Transmittal of Topical Report 'Small Break LOCA Methodology for US-APWR, MUAP-07013 Revision 3," dated December 5, 2013 (ML13346A162).
3) United States - Advanced Pressurized Water Reactor Revised Final Topical Report Safety Evaluation for Topical Reports MUAP-07011-P, "Large Break LOCA Code Applicability Report for US-APWR," Revision 4; and MUAP-07013-P, "Small Break LOCA Methodology for US-APWR," Revision 3, dated February 24, 2014 (ML14050A053).

With this letter, Mitsubishi Heavy Industries, Ltd. ("MHI") transmits to the U.S. Nuclear Regulatory Commission ("NRC") the official document entitled "Accepted Version of the Small Break LOCA Methodology for US-APWR, MUAP-07013, Revision 3." The accepted versions of the Small Break LOCA topical report that were requested in Reference 3 are being submitted electronically on CD. The files contained on each CD are listed in the associated enclosure cover sheet.

MUAP-07013 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. Any proprietary information that is written inside a bracket in the proprietary-version is replaced by the designation "[ ]" without any text, in the non-proprietary-version.

This letter includes a copy of the proprietary version of the approved report on CD 1 (Enclosure 2), a copy of the non-proprietary version of the approved report on CD 2 (Enclosure 3), and the Affidavit of Katsuhisa Takaura (Enclosure 1) which identifies the bases of MHI request that all materials designated as "Proprietary" in Enclosure 2 be withheld from public disclosure pursuant to 10 C.F.R. § 2.390 (a)(4).

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 submittal. His contact information is provided below.

D081
NRO

Sincerely,

K. Takaura for

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

Enclosures:

1. Affidavit of Katsuhisa Takaura

2. CD 1: "Accepted Version of the Small Break LOCA Methodology for US-APWR, MUAP-07013-P-A, Revision 3"
   – Version containing Proprietary information

3. CD 2: "Accepted Version of the Small Break LOCA Methodology for US-APWR, MUAP-07013-NP-A, Revision 3"
   – Version **not** containing Proprietary information

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

CC: P. Buckberg
J. Tapia

Contact Information

Joseph Tapia, General Manager of Licensing Department
Mitsubishi Nuclear Energy Systems, Inc.
11405 N. Community House Rd., Ste. 300
Charlotte, NC 28277
E-mail: joseph_tapia@mnes-us.com
Telephone: (704) 945-2740

ENCLOSURE 1

Docket No.52-021
MHI Ref: UAP-HF-14033

MITSUBISHI HEAVY INDUSTRIES, LTD.

AFFIDAVIT

I, Katsuhisa Takaura, state as follows:

1. I am Manager, APWR Project of Global Nuclear Project 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 "Accepted Version of the Small Break LOCA Methodology for US-APWR, MUAP-07013, Revision 3" 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)(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 codes and files for the analysis of Loss-Of-Coolant Accident for US-APWR, developed by MHI. These codes and files were developed at significant cost to MHI, since they required the performance of detailed 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 the subject systems. 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.

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 US-APWR LOCA analysis codes and methodologies. Providing public access to such information permits competitors to duplicate or mimic the LOCA analysis codes and methodologies information without incurring the associated costs.

   B. Loss of competitive advantage of the US-APWR created by benefits of enhanced US-APWR LOCA analysis codes and methodologies development costs associated with the Emergency Core Coolant System.

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 31th day of March, 2014.

K. Takaura

Katsuhisa Takaura,
Manager- APWR Project
Of Global Nuclear Project Department
Mitsubishi Heavy Industries, Ltd.

ATTACHMENT 1

FILES CONTAINED IN CD 1

CD 1: "Accepted Version of the Small Break LOCA Methodology for US-APWR, MUAP-07013-P-A, Revision 3"
– Version containing Proprietary information

Contents of CD

File Name	Size	Sensitivity Level
1 MUAP-07013-P-A_(R3)(1of3).pdf	36.3 MB	Proprietary
2 MUAP-07013-P-A_(R3)(2of3).pdf	50.5 MB	Proprietary
3 MUAP-07013-P-A_(R3)(3of3).pdf	24.4 MB	Proprietary

ATTACHMENT 2

FILES CONTAINED IN CD 2

CD 2: "Accepted Version of the Small Break LOCA Methodology for US-APWR, MUAP-07013-NP-A, Revision 3"
– Version **not** containing Proprietary information

Contents of CD

File Name	Size	Sensitivity Level
1 MUAP-07013-NP-A_(R3)(1of3).pdf	33.5 MB	Non-Proprietary
2 MUAP-07013-NP-A_(R3)(2of3).pdf	28.4 MB	Non-Proprietary
3 MUAP-07013-NP-A_(R3)(3of3).pdf	19.0 MB	Non-Proprietary