


MITSUBISHI HEAVY INDUSTRIES, LTD.
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May 18, 2017

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

Attention: Mr. George Wunder

Docket No. 52-021
MHI Ref: UAP-HF-18004

Subject: Transmittal of the Topical Report MUAP-07001, Revision 7, "The Advanced Accumulator"

With this letter, Mitsubishi Heavy Industries, Ltd. (MHI) transmits to the U.S. Nuclear Regulatory Commission (NRC) a copy of the revision 7 of the topical report entitled "The Advanced Accumulator (MUAP-07001 Revision 7)" which was previously submitted in January 2017, as revision 6 and has been revised in response to comments from the NRC staff.

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 topical report is being submitted in two versions, on separate compact discs. One version (on CD 1 of Enclosure 2) contains the complete proprietary version of the topical report. A non-proprietary version of the topical report is enclosed on 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 Mr. Joseph Tapia, Principal Consulting Engineer, Mitsubishi Nuclear Energy Systems, Inc. if the NRC has questions concerning any aspect of this submittal. His contact information is provided below.

Sincerely,



Takayuki Mori,
Engineering Manager
Global Nuclear Project Department
Nuclear Energy Systems Division
Power Systems
Mitsubishi Heavy Industries, Ltd.

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NRD

Enclosure:

1. Affidavit of Takayuki Mori
2. CD: 1 'The Advanced Accumulator' MUAP-07001-P, Revision 7
- Version that contains proprietary information
3. CD: 2 'The Advanced Accumulator' MUAP-07001-NP, Revision 7
- Version that does not contain proprietary information

The files contained in the CDs are listed in attachment 1 and 2.

CC: G. Wunder
J. Tapia

Contact Information

Joseph Tapia, Principal Consulting Engineer
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ENCLOSURE 1

Docket No. 52-021
MHI Ref: UAP-HF-18004

MITSUBISHI HEAVY INDUSTRIES, LTD.

AFFIDAVIT

I, Takayuki Mori, state as follows:

1. I am Engineering Manager of Global Nuclear Project Department, Nuclear Energy Systems Division, Power Systems, Mitsubishi Heavy Industries, Ltd., and have been delegated the function of reviewing Mitsubishi Heavy Industries, Ltd.'s ("MHI") 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 "The Advanced Accumulator (MUAP-07001 Revision 7)" dated May, 2018, 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 Advanced Accumulator 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 detailed design for its software and hardware 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 and testing 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 and

testing of the Advanced Accumulator. Providing public access to such information permits competitors to duplicate or mimic the Advanced Accumulator design 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 associated with the Advanced Accumulator.

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 18th day of May, 2018.

A handwritten signature in black ink, appearing to read 'T. Mori', written in a cursive style.

Takayuki Mori,
Engineering Manager
Global Nuclear Project Department
Nuclear Energy Systems Division
Power Systems
Mitsubishi Heavy Industries, Ltd.

ATTACHMENT 1

FILES CONTAINED ON CD 1

**CD 1: 'The Advanced Accumulator' MUAP-07001-P Revision 7
- Version that contains proprietary information**

Contents of CD

<u>File Name</u>	<u>Size</u>	<u>Sensitivity Level</u>
ACC ToR-P R7 vol 1.pdf	26.1 MB	Proprietary
ACC ToR-P R7 vol 2.pdf	43.7 MB	Proprietary
ACC ToR-P R7 vol 3.pdf	43.8 MB	Proprietary
ACC ToR-P R7 vol 4.pdf	27.1 MB	Proprietary

ATTACHMENT 2

FILES CONTAINED ON CD 2

**CD 2: 'The Advanced Accumulator' MUAP-07001-NP Revision 7
- Version that does not contain proprietary information**

Contents of CD

<u>File Name</u>	<u>Size</u>	<u>Sensitivity Level</u>
ACC ToR-NP R7 vol 1.pdf	6.6 MB	Non-proprietary
ACC ToR-NP R7 vol 2.pdf	48.9 MB	Non-proprietary
ACC ToR-NP R7 vol 3.pdf	25.3 MB	Non-proprietary