



MITSUBISHI HEAVY INDUSTRIES, LTD.
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TOKYO, JAPAN

April 9, 2010

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-10096

Subject: Revision 4 of the Technical Report MUAP-07004-P "Safety I&C System Description and Design Process" and Revision 1 of the Technical Report MUAP-09020-P "US-APWR Functional Assignment Analysis for Safety Logic System"

References: 1 ML100210769, Forthcoming Meeting with Mitsubishi Heavy Industries, Ltd. to Discuss Safety Instrumentation and Controls and Safety Systems Digital Platform - MELTAC Topical Reports and the United States - Advanced Pressurized Water Reactor Design Control Document Chapter 7, dated January 21, 2010.

With this letter, Mitsubishi Heavy Industries, Ltd. ("MHI") transmits to the U.S. Nuclear Regulatory Commission ("NRC") revision 4 of the technical report entitled "Safety I&C System Description and Design Process", which was previously submitted in September 2009, as revision 3. In addition, MHI transmits revision 1 of the technical report "US-APWR Functional Assignment Analysis for Safety Logic System" which was previously submitted in October 2009, as revision 0. Both documents have been revised to reflect agreements reached with the NRC at the public meeting held on February 3, 2010 (References 1).

It is noted that MUAP-07004, "Safety I&C System Description and Design Process" was originally issued as a Topical Report because MHI was originally seeking approval of the design and design process described in MUAP-07004 for the US-APWR and for digital upgrades in operating plants. However, in Revision 4, MUAP-07004 was changed from a Topical Report to a Technical Report applicable only to the US-APWR; this change reflects the agreements of the public meeting held on February 3, 2010. Thus MUAP-07004 is withdrawn as a Topical Report, and then, MUAP-07004 is revised and submitted herein as a Technical Report for the US-APWR.

As indicated in the enclosed materials, these documents 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. A non-proprietary version of each document is also being submitted in this package. In the non-proprietary version, the proprietary information, bracketed in the proprietary version, is replaced by the designation "[]".

This letter includes a copy of the proprietary versions (Enclosure 2), a copy of the non-proprietary versions (Enclosure 3), and the Affidavit of Yoshiki Ogata (Enclosure 1) which identifies the reasons MHI respectfully requests 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 Dr. C. Keith Paulson, Senior Technical Manager, Mitsubishi Nuclear Energy

DCB1
NRO

Systems, Inc. if the NRC has questions concerning any aspect of the submittal. His contact information is below.

Sincerely,



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

Enclosures:

1. Affidavit of Yoshiki Ogata
2. CD 1: "Technical Report MUAP-07004-P(R4) Safety I&C System Description and Design Process " and "Technical Report MUAP-09020-P(R1) US-APWR Functional Assignment Analysis for Safety Logic System"
– Version containing Proprietary information
3. CD 2: "Technical Report MUAP-07004-NP(R4) Safety I&C System Description and Design Process" and "Technical Report MUAP-09020-NP(R1) US-APWR Functional Assignment Analysis for Safety Logic System"
– 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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MITSUBISHI HEAVY INDUSTRIES, LTD.**AFFIDAVIT**

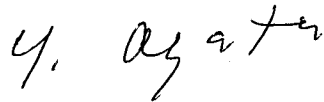
I, Yoshiki Ogata, state as follows:

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 documents entitled "Safety I&C System Description and Design Process Revision 4" dated March 2010, and "US-APWR Functional Assignment Analysis for Safety Logic System" dated March 2010 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 I&C system 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 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 of the safety I&C system. Providing public access to such information permits competitors to duplicate or mimic the safety I&C system 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 safety I&C 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 9th day of April, 2010.

A handwritten signature in black ink, appearing to read "Y. Ogata". The signature is written in a cursive, somewhat stylized font.

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

ATTACHMENT 1

FILES CONTAINED IN CD 1

**CD 1: “Technical Report MUAP-07004-P(R4) Safety I&C System Description and Design Process” and “Technical Report MUAP-09020-P(R1) US-APWR Functional Assignment Analysis for Safety Logic System”
– Version containing proprietary information**

Contents of CD

| <u>File Name</u> | <u>Size</u> | <u>Sensitivity Level</u> |
|----------------------------------|-------------|--------------------------|
| SafetyI&C_TR_R4(Proprietary).pdf | 11.3MB | Proprietary |
| SLS_TR_R1(Proprietary).pdf | 0.5MB | Proprietary |

ATTACHMENT 2

FILES CONTAINED IN CD 2

**CD 2: "Technical Report MUAP-07004-NP(R4) Safety I&C System Description and Design Process" and "Technical Report MUAP-09020-NP(R1) US-APWR Functional Assignment Analysis for Safety Logic System"
– Version not containing proprietary information**

Contents of CD

| <u>File Name</u> | <u>Size</u> | <u>Sensitivity Level</u> |
|--------------------------------------|-------------|--------------------------|
| SafetyI&C_TR_R3(Non-proprietary).pdf | 10.6MB | Non-Proprietary |
| SLS_TR_R1(Non-Proprietary).pdf | 0.2MB | Non-Proprietary |