

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

January 31, 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-11020

**Subject: Revision 3 of the Technical Report MUAP-07017-P "US-APWR Software Program Manual" and Revision 2 of the Technical Report JEXU-1012-1132-P "MELTAC Platform Basic Software Program Manual"**

**References:**

1. ML103420424, US-APWR SPM Letter, dated December 22, 2010

With this letter, Mitsubishi Heavy Industries, Ltd. ("MHI") transmits to the U.S. Nuclear Regulatory Commission ("NRC") revision 3 of the Technical Report MUAP-07017-P "US-APWR Software Program Manual", which was previously submitted in September 2010, as revision 2. In addition, MHI transmits revision 2 of the Technical Report JEXU-1012-1132-P "MELTAC Platform Basic Software Program Manual", which was previously submitted in September 2010, as revision 1. These documents have been revised to reflect feedback received from the NRC at the public meeting held on January 20, 2011 and NRC staff requests for improvement of both Software Program Manuals in the "US-APWR SPM Letter", dated December 22, 2010 (Reference 1).

As indicated in the enclosed materials, these documents contain information that MHI and Mitsubishi Electric Corporation ("MELCO") 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 "[ ]".

And one version includes certain information, designated pursuant to the Commission guidance as sensitive unclassified non-safeguards information, referred to as security-related information ("SRI"), that is to be withheld from public disclosure under 10 CFR § 2.390. The information that is SRI is identified by braces "{ }". On the other hand, another version omits the SRI and is suitable for public disclosure. In the public version of the DCD, the SRI is replaced by the designation "{Security Related Information - Withheld Under 10 CFR 2.390}".

This letter includes a copy of the proprietary versions (Enclosure 3), a copy of the non-proprietary versions (Enclosure 4), and the Affidavit of Katsumi Akagi (Enclosure 1) and Yoshiki Ogata (Enclosure 2) which identify the reasons MELCO and MHI respectively request that all materials designated as "Proprietary" in Enclosure 3 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 Systems, Inc. if the NRC has questions concerning any aspect of the submittal. His contact information is below.

Doshi  
NW

Sincerely,

A handwritten signature in black ink, appearing to read 'Y. Ogata', written in a cursive style.

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

Enclosures:

1. Affidavit of Katsumi Akagi
2. Affidavit of Yoshiki Ogata
3. CD 1: "MUAP-07017-P(R3) US-APWR Software Program Manual" and  
"JEXU-1012-1132-P(R2) MELTAC Platform Basic Software Program Manual"  
  
–Proprietary and SRI included version
4. CD 2: "MUAP-07017-NP(R3) US-APWR Software Program Manual" and  
"JEXU-1012-1132-NP(R2) MELTAC Platform Basic Software Program Manual"  
  
– Non-proprietary and SRI excluded version

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  
Mitsubishi Nuclear Energy Systems, Inc.  
300 Oxford Drive, Suite 301  
Monroeville, PA 15146  
E-mail: ckpaulson@mnes-us.com  
Telephone: (412) 373-6466

**MITSUBISHI ELECTRIC CORPORATION**

**AFFIDAVIT**

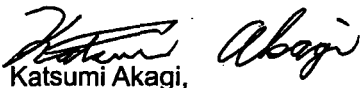
I, Katsumi Akagi, state as follows:

1. I am US-APWR Project Manager, Nuclear Power Department, of Mitsubishi Electric Corporation ("MELCO"), and have been delegated the function of reviewing MELCO'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 "MELTAC Platform Basic Software Program Manual Revision 2" dated January 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 MELCO 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 program manual of basic software for the digital platform "MELTAC", developed by MELCO and not used in the exact form by any of MELCO's competitors. This information was developed at significant cost to MELCO, since it required the performance of Research and Development and detailed design for its software 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, MELCO knows of no way the information could be lawfully acquired by organizations or individuals outside of MELCO.
7. Public disclosure of the referenced information would assist competitors of MELCO 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 MELCO in the U.S. nuclear plant market:

- A. Loss of competitive advantage due to the costs associated with development and testing of software for the MELTAC. Providing public access to such information permits competitors to duplicate or mimic the MELTAC 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 MELTAC.

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 31st day of January, 2011.



Katsumi Akagi,  
US-APWR Project Manager, Nuclear Power Department  
Mitsubishi Electric Corporation

**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 Software Program Manual Revision 3" dated January 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 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 31st day of January, 2011.



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

**ATTACHMENT 1**

**FILES CONTAINED IN CD 1**

**CD 1: "MUAP-07017-P(R3) US-APWR Software Program Manual" and  
"JEXU-1012-1132-P(R2) MELTAC Platform Basic Software Program Manual"  
– Proprietary and SRI included version**

**Contents of CD**

<u>File Name</u>	<u>Size</u>	<u>Sensitivity Level</u>
MUAP-07017-P(R3).pdf	1.7MB	Proprietary, SRI included
JEXU-1012-1132-P(R2).pdf	1.0MB	Proprietary, SRI included



**ATTACHMENT 2**

**FILES CONTAINED IN CD 2**

**CD 2: “MUAP-07017-NP(R3) US-APWR Software Program Manual” and  
“JEXU-1012-1132-NP(R2) MELTAC Platform Basic Software Program Manual”  
– Non-proprietary and SRI excluded version**

**Contents of CD**

<u>File Name</u>	<u>Size</u>	<u>Sensitivity Level</u>
MUAP-07017-NP(R3).pdf	0.8MB	Non-proprietary, SRI excluded
JEXU-1012-1132-NP(R2).pdf	0.6MB	Non-proprietary, SRI excluded