

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

March 2, 2007

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

Attention: Mr. David B. Matthews

Project No.0751  
MHI Ref: UAP-HF-07021

**Subject: Transmittal of the Topical Report entitled "Safety I&C System Description and Design Process".**

With this letter, Mitsubishi Heavy Industries, LTD. (MHI) transmits to the U.S. Nuclear Regulatory Commission (NRC) the topical report entitled "Safety I&C System Description and Design Process" for review and approval. MHI seeks NRC approval of this document for reference in the US-APWR design control document (DCD) and for reference in License Amendment Requests for operating plants.


Based on the discussion in the pre-submittal meeting between the MHI and NRC staff on November 28, 2006, MHI has developed this topical report and looks forward to the upcoming discussion of MHI's safety I&C system design with the NRC staff in 7th pre-application review meeting at the end of April, 2007. MHI hopes that the information enclosed herewith will be of value in NRC's review for the application of the US-APWR Design Certification.

As indicated in the enclosed materials, the Topical Report contains information that MHI considers proprietary, and therefore the entire Topical Report should be withheld from disclosure pursuant to 10 C.F.R. § 2.390 (a)(4) and 10 CFR § 9.17(a)(4) as trade secrets and commercial or financial information which is privileged or confidential. A non-proprietary version of the final Topical Report is also being submitted in this package (Enclosure 3). In the non-proprietary version, the proprietary information is bracketed and replaced by the rationale for non-disclosure.

In accordance with the NRC submittal procedures for Topical Reports, this letter includes a copy of the proprietary version (Enclosure 2) and the Affidavit of Masahiko Kaneda (Enclosure 1) which identifies the reasons MHI respectfully requests that all materials in Enclosure 2 be withheld from disclosure pursuant to 10 C.F.R. § 2.390 (a)(4) and 10 CFR § 9.17(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 submittals. His contact information is below.

Sincerely,

  
Masahiko Kaneda,  
General Manager- APWR Promoting Department  
Mitsubishi Heavy Industries, LTD.

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Add: Stephen Monarque

Enclosures:

Enclosure1 - Affidavit of Masahiko Kaneda (non-proprietary)

Enclosure2- Safety I&C System Description and Design Process-(proprietary)  
(MUAP-07004-P, Rev.0)

Enclosure3- Safety I&C System Description and Design Process-(non-proprietary)  
(MUAP-07004-NP, Rev.0)

CC: S. R. Monarque

L. J. Burkhart

C. K. Paulson

Contact Information

C. Keith Paulson, Senior Technical Manager

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**MITSUBISHI HEAVY INDUSTRIES, LTD.**

**AFFIDAVIT**

I, Masahiko Kaneda, 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 disclosure pursuant to 10 C.F.R. § 2.390 (a)(4) and 10 CFR § 9.17(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 topical report dated March 2, 2007, entitled "Safety I&C System Description and Design Process" and have determined that the entire report contains proprietary information that should be withheld from public disclosure. Accordingly, the first page of the topical report has been marked to indicate that the entire topical report should be withheld from public disclosure pursuant to 10 C.F.R. § 2.390 (a)(4).
3. The information contained in the enclosed topical report has in the past been, and will continue to be, held in confidence by MHI 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 topical report confidential is that it describes the unique design of the Safety I&C System, 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, detailed design for its software and hardware extending over several years.
5. The referenced topical report is being furnished to the Nuclear Regulatory Commission ("NRC") in confidence and solely for the purpose of supporting the NRC staff's review of the Topical Report.
6. The information contained in the referenced topical report is not available in public sources and could not be gathered readily from other publicly available information. MHI know of no way the information could be lawfully acquired by organizations or individuals outside of MHI.
7. Public disclosure of the information contained in the referenced topical report 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 topical report 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 2nd day of March 2007.

  
Masahiko Kaneda,  
General Manager- APWR Promoting Department  
Mitsubishi Heavy Industries, LTD.

Enclosure 2

MHI Topical Report: MUAP-07004-P, Rev.0

**Safety I&C System Description and Design Process,**

March 2007  
(Proprietary Version)

**[Important Notice]**

This topical report contains proprietary information of Mitsubishi Heavy Industries, LTD (MHI). MHI requests that the NRC withhold this information from public disclosure. Accordingly, the first page of the report indicates that the entire topical report should be withheld from public disclosure pursuant to 10 C.F.R. § 2.390 (a)(4).

## Enclosure 3

MHI Topical Report: MUAP-07004-NP, Rev.0

### **Safety I&C System Description and Design Process,**

March 2007  
(Non-Proprietary Version)

This is a non-proprietary version of MHI Topical Report, MUAP-07004-NP, Rev.0, with all proprietary information removed.

Portions of the report where proprietary information has been removed are identified by the designation “[ ]”.