

16-5, KONAN 2-CHOME, MINATO-KU TOKYO, JAPAN

May 14, 2009

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-09234

Subject: MHI's 2nd Part Response to the NRC's REQUEST FOR ADDITIONAL

INFORMATION MUAP-07010, -07011, -07013 FROM FEBRUARY 25-26, 2009

MEETINGS

Mitsubishi Heavy Industries, Ltd. ("MHI") transmits to the U.S. Nuclear Regulatory Commission ("NRC") the document entitled "MHI's 2nd Part Response to the NRC's REQUEST FOR ADDITIONAL INFORMATION MUAP-07010, -07011, -07013 FROM FEBRUARY 25-26, 2009 MEETINGS" The enclosed materials provide MHI's responses to the NRC's "REQUEST FOR ADDITIONAL INFORMATION MUAP-07010, -07011, -07013 FROM FEBRUARY 25-26, 2009 MEETINGS," dated April 3, 2009. The RAIs evolved from the face-to-face meetings between MHI and the NRC on February 25-26, 2009. The enclosed materials also include an Optical Storage Medium ("OSM") that contains electronic versions of the requested documents on "Initial Conditions for US-APWR LBLOCA Analysis Using WCOBRA/TRAC (M1.0)," 6AS-1E-UAP-090039(R0). The files contained in the OSM are listed on the associated enclosure cover sheet.

As indicated in the enclosed materials, the OSM 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.

This letter includes the non-proprietary RAI response (Enclosure 2), an OSM containing the requested electronic files (Enclosure 3), and the Affidavit of Yoshiki Ogata (Enclosure 1) which identifies the reasons MHI respectfully requests that all material designated as "Proprietary" in Enclosure 3 be withheld from 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 this submittal. His contact information is provided in the next page.

Sincerely,

Yoshiki Ogata

General Manager- APWR Promoting Department

Mitsubishi Heavy Industries, Ltd.

y. Oyata

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Enclosures:

- Affidavit of Yoshiki Ogata
- 2. MHI's 2nd Part Response to the NRC's REQUEST FOR ADDITIONAL INFORMATION MUAP-07010, MUAP-07011, and MUAP-07013 FROM FEBRUARY 25-26, 2009 MEETINGS
- 3. OSM: Initial Conditions for US-APWR LBLOCA Analysis Using WCOBRA/TRAC (M1.0) (Proprietary)

CC: J. A. Ciocco C. K. Paulson

Contact Information

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ENCLOSURE 1

Docket No. 52-021

MHI Ref: UAP-HF-09234

MITSUBISHI HEAVY INDUSTRIES, LTD. AFFIDAVIT

- I, Yoshiki Ogata, being duly sworn according to law, depose and state as follows:
- 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) 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 "MHI's 2nd Part Response to the NRC's REQUEST FOR ADDITIONAL INFORMATION MUAP-07010, -07011, -07013 FROM FEBRUARY 25-26, 2009 MEETINGS" and the enclosed Optical Storage Medium ("OSM") dated May 14, 2009, and have determined that the OSM contains proprietary information that should be withheld from public disclosure. The OSM also contains the documents of "Initial Conditions for US-APWR LBLOCA Analysis Using WCOBRA/TRAC (M1.0)," 6AS-1E-UAP-090039(R0). The labels on the OSM have been marked to indicate that the entire contents of the OSM should be withheld from public disclosure pursuant to 10 C.F.R. § 2.390 (a)(4).
- 3. The basis for holding the referenced information confidential is that it describes the unique design of the safety analysis, developed by MHI (the "MHI Information").
- 4. The MHI Information is 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. Therefore public disclosure of the materials would adversely affect MHI's competitive position.
- 5. The referenced information has in the past been, and will continue to be, held in confidence by MHI and is always subject to suitable measures to protect it from unauthorized use or disclosure.
- 6. The referenced information is not available in public sources and could not be gathered readily from other publicly available information.
- 7. 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.
- 8. 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 and testing of new systems and components. 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.

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 14th day of May, 2009.

y. Oguta

Yoshiki Ogata

Enclosure 2

UAP-HF-09234 Docket No. 52-021

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MHI's 2nd Part Response to the NRC's REQUEST FOR ADDITIONAL INFORMATION MUAP-07010, -07011, -07013 FROM FEBRUARY 25-26, 2009 MEETINGS

(Non-Proprietary)

UAP-HF-09234-NP (R0)

<u>RAI</u> 1

The notebook, UAP-KS-L0335 (R1), contains initial conditions for the steady-state for the MRELAP5 SBLOCA model. This information is needed to assure that the RELAP5 model to be used for confirmatory calculations has initial conditions that are as close as possible to those used by MHI.

Response

The requested information was already submitted by MHI letter UAP-HF-09174 (R0), dated April 30, 2009.

UAP-HF-09234-NP (R0)

RAI 2

The LBLOCA COBRA-TRACE model initial conditions for the base case and the limiting PCT case are requested so that the RELAP5/MOD3.3 model initial conditions and transient assumptions used for confirmatory calculations are consistent with the MHI model.

Response

The initial conditions for the reference case and the PCT-limiting case are provided in Enclosure 3. The file is designated as 6AS-1E-UAP-090039(R0) stored in the CD.

UAP-HF-09234-NP (R0)

RAI 3

The MARVEL model initial conditions and the assumptions used for the following non-LOCA cases are requested: (1) DNB-limiting MSLB case [hot zero power with offsite power available], (2) peak-pressure limiting loss-of-load case and (3) limiting SGTR offsite-dose evaluation case.

Response

This information was provided in the response to Question 4 of the RAIs from the February 10, 2009 meeting, which was submitted by MHI letter UAP-HF-09099 (R0), dated March 24, 2009.

UAP-HF-09234-NP (R0)

RAI 4

Input decks for all of the M-RELAP5 assessment cases listed in MUAP-07013P and additional M-RELAP5 assessment cases run in response to RAIs.

Response

The requested input decks and additional assessment cases were already submitted by MHI letter UAP-HF-09174 (R0), dated April 30, 2009.

Enclosure 3

UAP-HF-09234 Docket No. 52-021

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Contents of OSM: Initial Conditions for US-APWR LBLOCA Analysis Using WCOBRA/TRAC (M1.0) (Proprietary)

File Name	<u>Size</u>	Sensitivity Level
6AS-1E-UAP-090039(R0)-P.pdf	194KB	Proprietary