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

September 22, 2008

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-08197

Subject: MHI's Response to US-APWR DCD RAI No.47-839

References: 1) "Request for Additional Information No. 47-839 Revision 0, SRP Section: 05.04, Application Section: 5.4.10," dated August 11, 2008.

With this letter, Mitsubishi Heavy Industries, Ltd. ("MHI") transmits to the U.S. Nuclear Regulatory Commission ("NRC") a document entitled "Response to Request for Additional Information No.47-839 Revision 0."

Enclosed is the response to one RAI contained within Reference 1.

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,

Y. Ogata

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

Enclosure

1. Response to Request for Additional Information No.47-839 Revision 0

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: ck_paulson@mnes-us.com
Telephone: (412) 373-6466

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NRO

Docket No. 52-021
MHI Ref: UAP-HF-08197

Enclosure 1

UAP-HF-08197
Docket Number 52-021

Response to Request for Additional Information No.47-839 Revision 0

September, 2008

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

09/22/2008

US-APWR Design Certification

Mitsubishi Heavy Industries

Docket No. 52-021

RAI NO.:	**NO.47-839 REVISION 0**
SRP SECTION:	**05.04 - REACTOR COOLANT SYSTEM COMPONENT AND SUBSYSTEM DESIGN**
APPLICATION SECTION:	**5.4.10**
DATE OF RAI ISSUE:	**8/11/2008**

QUESTION NO. : 5.4.10-1

10 CFR 50.34(f)(2)(xiii), regarding TMI Action Item II.E.3.1, requires that the pressurizer heaters be provided with a sufficient power supply and associated motive and control power interfaces to establish and maintain natural circulation in hot standby conditions with only onsite power available. In Section 5.4.10.3.1 it states that the USAPWR design conforms to this requirement because the power supplied by the emergency power sources during a loss of offsite power is sufficient to establish and maintain natural circulation during hot standby conditions. Discuss the emergency power sources to be used to power the backup pressurizer heaters during a loss of offsite power. Also, state whether these emergency power sources are of a safety or non-safety grade design.

ANSWER:

The emergency power sources referenced in Section 5.4.10.3.1 are Class 1E power sources. As listed in Table 8.3.1-4 of the DCD Chapter 8, pressurizer heater backup groups A, B, C and D are respectively powered from their own train of Class 1E gas turbine generator power sources during a loss of offsite power. Electric power system is discussed in detail in Chapter 8.

Impact on DCD
There is no impact on the DCD.

Impact on COLA
There is no impact on the COLA.

Impact on PRA
There is no impact on the PRA.

This completes MHI's response to the NRC's question.