MITSUBISHI HEAVY INDUSTRIES, LTD.

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TOKYO, JAPAN

December 25, 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-08308

Subject: MHI's Response to US-APWR DCD RAI No. 108-1515

Reference: 1) "Request for Additional Information No. 108-1515 Revision 1, SRP Section: 13.03 - Emergency Planning Application Section: 13.3," dated December 1st, 2008.

With this letter, Mitsubishi Heavy Industries, Ltd. ("MHI") transmits to the U.S. Nuclear Regulatory Commission ("NRC") a document entitled "Responses to Request for Additional Information No. 108-1515 Revision 1."

Enclosed is the response to 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 submittal. His contact information is below.

Sincerely,

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

Enclosure:

1. Response to Request for Additional Information No. xx Revision 1

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

Docket No. 52-021 MHI Ref: UAP-HF-08308

Enclosure 1

UAP-HF-08308 Docket No. 52-021

Response to Request for Additional Information No. 108-1515

December 2008

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

12/25/2008

US-APWR Design Certification Mitsubishi Heavy Industries Docket No. 52-021

RAI NO.: NO. 108-1515 REVISION 1 SRP SECTION: 13.03 - EMERGENCY PLANNING

APPLICATION SECTION: 13.3

DATE OF RAI ISSUE: 12/01/2008

QUESTION NO. 13.03-2

DCD-1: Subject: Habitability [Basis: 10 CFR 50.47(b)(8), NUREG-0696 Section 2.6]

1) Please describe the capability of the MCR to accommodate the transfer of the TSC plant management function from the TSC, if the TSC becomes uninhabitable.

2) Please identify the impact on the MCR due to the TSC plant management function. Would the increased access and egress impact the assumed unfiltered air in leakage used in the design basis analysis? Has space been identified for this function to be set up and implemented? Are there sufficient materials (plant records, drawings, procedures, etc.) and communication established in the MCR for this purpose?

ANSWER:

In the unlikely event that the TSC becomes uninhabitable, the size and equipment available in the MCR will be sufficient to absorb the plant management function of the TSC.

To meet NRC requirements, the normal required complement of operations personnel in the MCR with actual controls responsibilities is expected to be four (4). Allowing for some transience of equipment operators in and out of the MCR, and also for clerical and other personnel, the total number of people in the MCR at any given time could reach ten (10) during a typical day-shift mode. The MCR has a total floor area of approximately 2250 square feet, and an adjacent support room of similar size that contains an operator area, shift supervisor's office, clerical space, kitchen, and restrooms.

Section 2.6 of NUREG-0696 states in part that, "*If the TSC becomes uninhabitable, the TSC plant management function shall be transferred to the control room.*" Consistent with this Section, MHI intends that, for the US-APWR, the plant management function would be transferred to the MCR should the TSC become uninhabitable. While the ultimate details of this contingency would be part of a licensee's emergency plan and are beyond the scope of a standard design, MHI estimates that, in terms of manpower, the "plant management function" would consist of three (3) senior licensee plant management personnel, and the five (5) NRC personnel. MHI would

anticipate that the additional seventeen (17) licensee personnel, representing the technical support function of the TSC, would be transferred to the Emergency Operations Facility (EOF) or possibly the plant simulator facility, at the discretion of the licensee and depending on the configuration and capabilities of a particular site.

MHI believes that the strategy described above would accomplish NRC's goal of avoiding over-crowding of the MCR, while at the same time preserving all of the required functions of the TSC. The proposed approach would not place an unreasonably large demand on work space, or on the design basis assumed for MCR habitability, as the addition of personnel is modest and almost certainly would be offset by the typical licensee's practice of eliminating non-essential personnel from the MRC under emergency conditions. With regard to communications, availability of safety data, and availability of reference materials, MHI believes that the strategy of transferring plant management to the MCR and technical support personnel to the EOF (or simulator) would achieve a prudent match between the equipment and information provided at those facilities, and the needs of the plant management and technical support personnel.

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.