

  
**MITSUBISHI HEAVY INDUSTRIES, LTD.**  
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TOKYO, JAPAN

March 14, 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-11064

**Subject: Amended MHI's Response to US-APWR DCD RAI No. 613-4912, Revision 1 (13.06.02)**

**Reference:** 1) "Request for Additional Information No. 613-4912 Revision 1, SRP Section: 13.06.02 –Physical Security," dated 8/6/2010  
2) "MHI's Response to US-APWR DCD RAI No. 613-4912", UAP-HF-10281, dated October 20, 2010.

With this letter, Mitsubishi Heavy Industries, Ltd. ("MHI") transmits to the U.S. Nuclear Regulatory Commission ("NRC") a document entitled "Amended Response to Request for Additional Information No. 613-4912 Revision 1."

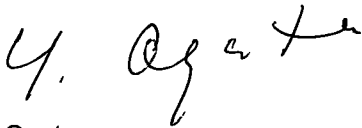
Enclosed is the amended response to the RAI Question 13.06.02-20 contained within Reference 1.

This response amends the previously transmitted responses submitted under MHI's Reference UAP-HF-10281 on October 20, 2010 (Reference 2) in order to incorporate the supplemental information requested by the NRC.

This response is being submitted in two versions. 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 C.F.R. § 2.390. The information that is SRI is identified by brackets. The second version omits the SRI and is suitable for public disclosure. In the public version, the SRI is replaced by the designation "[Security-Related Information - Withheld under 10 CFR 2.390]."

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,



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

*DO81*  
*NRG*

Enclosures:

1. Amended Response to Request for Additional Information No. 613-4912 Revision 1  
(SRI included version)
2. Amended Response to Request for Additional Information No. 613-4912 Revision 1  
(SRI excluded version)

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

Contact Information

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Enclosure 2

UAP-HF-11064  
Docket Number 52-021

Amended Response to Request for Additional Information  
No. 613-4912 Revision 1

March 2011

(SRI excluded version)

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## RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

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03/14/2011

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

**RAI NO.:** NO. 613-4912 REVISION 1  
**SRP SECTION:** 13.06.02 — Physical Security  
**APPLICATION SECTION:** 13.06  
**DATE OF RAI ISSUE:** 8/6/2010

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**QUESTION NO. RAI 13.06.02-20:**

(U) TR UAP-SGI-08001, Section 2.4. "Vital Equipment for the US-APWR Reference Plant Design:" Revise vital equipment list to provide a complete and accurate list of vital equipment as defined by 10 CFR 73.2. Specifically, identify vital equipment that addresses the portion of 10 CFR 73.2 that defines vital equipment as equipment or systems that would be required to function to protect public health and safety following a failure, destruction, or release. Include the following in the US-APWR vital equipment list:

- All SSCs providing safety functions that directly protect against the release of radioactivity that could endanger the public health and safety by exposure to radiation, as stated in 10 CFR 73.2.
- All SSCs providing safety functions to prevent release of radioactivity that would exceed the radiological exposure threshold, as explained in 10 CFR 100.11(a)(1).

U) Regulatory Basis: Subpart B of Title 10 CFR (10 CFR) 52, § 52.47, requires that information submitted for a design certification (DC) must include performance requirements and design information sufficiently detailed to permit the preparation of acceptance and inspection requirements by the NRC, and procurement specifications and construction and installation specifications by an applicant. Title 10 CFR 52.48 requires that applications filed will be reviewed for compliance with the standards set out in 10 CFR Part 73. Title 10 CFR 73.55(e)(9)(i) requires that "vital equipment must be located only within vital areas, which must be located within a protected area so that access to vital equipment requires passage through at least two physical barriers, except as otherwise approved by the Commission and identified in the security plans". 10 CFR 73.2 defines vital equipment.

RAI No. 282-1984, in Questions 13.06-64, 13.06-65, and 13.06-75 requested the applicant to provide a complete and accurate list of vital equipment for the US-APWR standard design. The revision to TR UAP-SGI-08001 incorporated RAI responses to these questions and revised assumptions. However, the applicant did not revise assumptions of the process that fully address vital equipment as defined by 10 CFR 73.2.

**(U) Note:** The information addressing specific details related to security features or providing security functions will be safeguards information (SGI) and should be marked and protected in accordance with 10 CFR 73.21. The applicant should portion mark text in the response to request for information (RAI) as appropriate to identify SGI (or security-related information) that reveals the specific details of security features incorporated in the US-APWR design. The RAI responses supplementing the DC Tier 1 document must be publicly available.

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**ANSWER:**

There is no site-specific (Reference Plant) safety-related equipment within the meaning of 10 CFR 73.2 that serves to mitigate and protect public health and safety against the release of radioactivity. TR UAP-SGI-08001, Section 2.4, "Vital Equipment for the US-APWR Reference Plant Design," is revised to state that all release mitigation vital equipment is part of the standard plant design.

Security Related Information-Withheld Under 10 CFR 2.390

**Impact on DCD**

DCD 13.6.5, Reference 13.6-6 will be revised to reflect the new revision of UAP-SGI-08001.

**Impact on COLA**

There is no impact on the COLA.

**Impact on HAE**

There is no impact on the HAE.

**Impact on Vital Equipment Report**

Technical Report UAP-SGI-08001 is revised as described in the Answer above.