

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

April 06, 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-11098

**Subject: MHI's Responses to US-APWR DCD RAI 713-5555 Revision 2 (09.04.04)**

**Reference:** 1) "REQUEST FOR ADDITIONAL INFORMATION 713-5555 REVISION 2, SRP Section: 09.04.04 – Turbine Area Ventilation System, Application Section: 9.4.4, dated March 8, 2011.  
2) "MHI's Response to US-APWR DCD RAI 586-4690 Revision 2", MHI Ref: UAP-HF-10165, dated June 10, 2010

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 713-5555 Revision 2."

Enclosed is the responses to a RAI contained within Reference 1 which requests amend response to Reference 2.

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.

Enclosure:

1. Responses to Request for Additional Information 713-5555 Revision 2



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

Contact Information

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Docket No. 52-021  
MHI Ref: UAP-HF-11098

Enclosure 1

UAP-HF-11098  
Docket No. 52-021

Responses to Request for Additional Information No. 713-5555  
Revision 2

April 2011

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**RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION**

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4/6/2011

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

**RAI NO.: NO. 713-5555 REVISION 2**  
**SRP SECTION: 09.04.04 TURBINE AREA VENTILATION SYSTEM**  
**APPLICATION SECTION: 9.4.4**  
**DATE OF RAI ISSUE: 3/8/2011**

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**QUESTION NO.: 09.04.04-7**

This is a follow-up question to RAI 586-4690 Question 09.04.04-6. This is also a follow-up to the conference call of July 7, 2010. Based on that conference call, the staff expected the applicant to amend its response to RAI 586-4690 Question 09.04.04-6. To date, that has yet to occur. In the "ANSWER" to Question 09.04.04-6 the applicant concluded that " ... *there are no important to safety SSCs located in the turbine building area.*"

In the conference call, the staff noted that a review of Appendix 3D "US-APWR Equipment Qualification List Safety and Important to Safety Electrical and Mechanical Equipment" Table 3D-2 leads to the conclusion that there are nineteen components within the Turbine Building that are designated as "non safety" but nonetheless "important to safety". For these nineteen Appendix 3D "important to safety" components in the Turbine Building, all are designated as non-seismic. Four of the components are located page 7 of 64 and are associated with a Reactor Trip function. Fifteen components are listed on pages 39 and 40 of 64 and are associated with an ESF function.

The staff again requests that the applicant amend its response to RAI 586-4690 Question 09.04.04-6 based on this Appendix 3D information.

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**ANSWER:**

This is the amended responses of MHI letter UAP-HF-10165 dated June 10, 2010 to US-APWR DCD RAI 586-4690 Revision 2.

The turbine building area ventilation system is neither important to safety nor safety-related. It has no safety design basis, nor does it perform a safety function.

There are some SSCs important to safety located in the turbine building area as discussed in a conference call between MHI and NRC personnel on July 7, 2010. The turbine building area ventilation system does not have any function for SSCs important to safety to withstand the effect of natural phenomena, such as earthquakes, described General Design Criterion (GDC) 2.

Design commitment description in DCD will be expanded to include SSCs important to safety as shown below.

### **Impact on DCD**

The content of the subsection 9.4.4.1.1 of US-APWR DCD rev.3 will be replaced as follows:

The turbine building area is not expected to include airborne radioactive contamination. Safety-related equipment is not located in this area. There are SSCs important to safety in this area as presented in Appendix 3D. Therefore, ~~t~~The turbine building area ventilation system does not serve any safety-related function for safety related nor SSCs important to safety, and thus, has no safety design bases.

### **Impact on R-COLA**

There is no impact on the R-COLA.

### **Impact on S-COLA**

There is no impact on the S-COLA.

### **Impact on PRA**

There is no impact on the PRA.