

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

September 25, 2008

Document Control Desk  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

Attention: Jeffrey A. Ciocco,

Docket No. 52-021  
MHI Ref: UAP-HF-08201

**Subject: MHI's Second Response to US-APWR DCD RAI No.40**

- References:**
- 1) "Request for Additional Information No. 40 Revision 0, SRP Section: 19 - Probabilistic Risk Assessment and Severe Accident Evaluation, Application Section: PRA," dated July 29, 2008.
  - 2) Letter MHI Ref: UAP-HF-08155 from Y. Ogata (MHI) to U.S. NRC, "MHI's Responses to US-APWR DCD RAI No.40," dated August 28, 2008.

With this letter, Mitsubishi Heavy Industries, Ltd. ("MHI") transmits to the U.S. Nuclear Regulatory Commission ("NRC") a document entitled "Second Response to Request for Additional Information No.40 Revision 0."

Enclosed is the second response to the RAI contained within Reference 1. In the initial responses submitted with Reference 2, MHI committed to submit response to RAI 19-90 within 60 days after RAI issue date.

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,



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

*DO81  
HRO*

Enclosure:

1. Second Response to Request for Additional Information No.40 Revision 0

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

Contact Information

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Docket No. 52-021  
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Enclosure 1

UAP-HF-08201  
Docket No. 52-021

Second Response to Request for Additional Information No.40  
Revision 0

September 2008

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**RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION**

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9/25/2008

**US-APWR Design Certification**

**Mitsubishi Heavy Industries**

**Docket No.52-021**

**RAI NO.:** NO.40-610 REVISION 0  
**SRP SECTION:** 19 – Probabilistic Risk Assessment and Severe Accident Evaluation  
**APPLICATION SECTION:** PRA  
**DATE OF RAI ISSUE:** 7/29/2008

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**QUESTION NO. : 19-90**

The event trees for internal events and power operation are reported in Figure 19.1-1 of the DCD (19 sheets). The staff notes that there is no description of the event tree top events and that the success criteria for each top event are not stated in the DCD. Although this information is provided in the PRA document, a summary must be included in the DCD per RG 1.206 (Appendix C.I.19-A) guidance. For example, a table could be added that includes a brief description and the success criteria for each top event identifier.

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**ANSWER:**

Description of the event tree top events and success criteria for each initiating events are summarized in Table 3.2.1.2-1 through 3.2.17.3-1 of the PRA technical report rev.1. On the basis of these tables, a summary for description of the event tree top events and success criteria for each top event will be included in the next revision of the DCD.

Impact on DCD

DCD will be revised to address the information discussed for this RAI.

Impact on COLA

This RAI and its response will impact the COLA, which refers the DCD.

Impact on PRA

There is no impact on PRA from this RAI and the response as this additional information does not cause any changes to the PRA.