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TOKYO, JAPAN

June 16, 2009

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

Attention: Mr. Jeffrey A. Ciocco

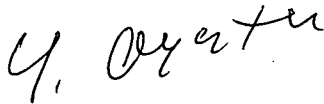
Docket No. 52-021
MHI Ref: UAP-HF-09300

Subject: MHI's Response to US-APWR DCD RAI No. 304-2330 Revision 1

Mitsubishi Heavy Industries, Ltd. ("MHI") transmits to the U.S. Nuclear Regulatory Commission ("NRC") the document entitled "MHI's Response to US-APWR DCD RAI No. 304-2330 Revision 1". The material in Enclosure 1 provides MHI's response to the NRC's "Request for Additional Information (RAI) 304-2330 Revision 1," dated April 2, 2009.

Please contact Dr. C. Keith Paulson, Senior Technical Manager, Mitsubishi Nuclear Energy Systems, Inc., if the NRC has questions concerning any aspect of this submittal. His contact information is provided below.

Sincerely,



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

Enclosures:

1. MHI's Response to US-APWR DCD RAI No. 304-2330 Revision 1 (non-proprietary)

CC: J. A. Ciocco
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ENCLOSURE 1

UAP-HF-09300
Docket No. 52-021

MHI's Response to US-APWR DCD RAI No. 304-2330 Revision 1

June 2009

(Non-Proprietary)

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

6/16/2009

US-APWR Design Certification

Mitsubishi Heavy Industries

Docket No. 52-021

RAI NO.: NO. 304-2330 REVISION 1
SRP SECTION: 15.02.06 – LOSS OF NON-EMERGENCY AC POWER TO THE STATION AUXILIARIES
APPLICATION SECTION: 15.2.6
DATE OF RAI ISSUE: 4/02/2009

QUESTION NO.: 15.2.6-1

Provide the transient curve for DNBR verses time in the Section 15.2.6 analysis.

ANSWER:

As described in DCD Subsection 15.2.6.3, the minimum DNBR for the loss of non-emergency AC power to the station auxiliaries in Subsection 15.2.6 is bounded by the minimum DNBR for the complete loss of flow event analyzed in Subsection 15.3.1.2. The reason why the complete loss of flow is more conservative for calculating the minimum DNBR is that the RCP coastdown begins 1.1 seconds before reactor trip, as shown in DCD Table 15.3.1.2-1, whereas for the loss of offsite power (LOOP) the reactor will trip at the same time as the RCP coastdown due to the low steam generator water level signal, as shown in DCD Table 15.2.6-1. The transient curve for DNBR versus time for the LOOP analysis in DCD Subsection 15.2.6 analysis is shown below in Figure 15.2.6-1.1.

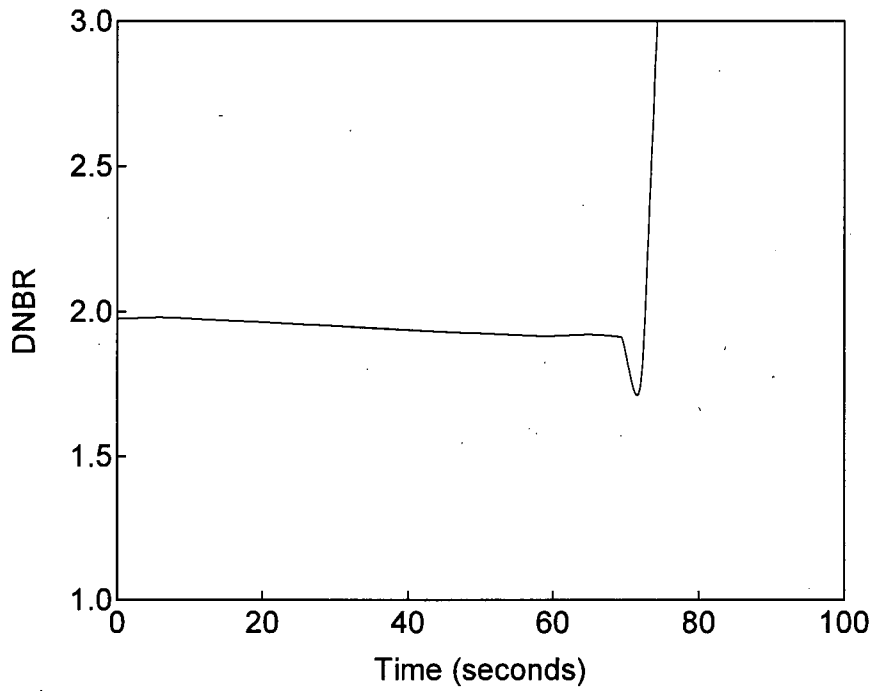


Figure 15.2.6-1.1 DNBR versus Time
Loss of Non-Emergency AC Power to the Station Auxiliaries

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.