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TOKYO, JAPAN

July 16, 2013

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-13181

Subject: MHI's Revised Response to Request for Additional Information No.862-6165 Revision 3 (SRP 10.04.08), Question 10.04.08-11

References: 1) "MHI's Responses to US-APWR DCD RAI No. 862-6165 Revision 3 (SRP 10.04.08)" dated December 12, 2011, ML11349A014.

With this letter, Mitsubishi Heavy Industries, Ltd. (MHI) transmits to the U.S. Nuclear Regulatory Commission (NRC) a document entitled "Revised Response to Request for Additional Information No. 862-6165 Revision 3 (SRP 10.04.08), Question 10.04.08-11."

Enclosed is MHI's revision to the response provided to RAI Question 10.04.08-11 contained within Reference 1.

This revised response to Question 10.4.8-11 is being submitted to show RG 1.143 and SRP 10.4.8 GDC 2 and 4 compliance of the SGBDS for piping upstream of containment isolation valves.

Please contact Mr. Joseph Tapia, General Manager of Licensing Department, 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,
Executive Vice President Mitsubishi Heavy Industries, LTD.
On behalf of Mitsubishi Heavy Industries, Ltd.

Enclosure:

1. Revised Response to Request for Additional Information No. 862-6165 Revision 3 (SRP 10.04.08), Question 10.04.08-11

D081
NRD

CC: J. A. Ciocco
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Enclosure 1

UAP-HF-13181
Docket No.52-021

Revised Response to Request for Additional Information
No. 862-6165 Revision3 (SRP 10.04.08), Question 10.04.08-11

July 2013

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

07/16/2013

US-APWR Design Certification

Mitsubishi Heavy Industries

Docket No. 52-021

RAI NO.:	**NO. 862-6165 REVISION 3**
SRP SECTION:	**10.04.08 – STEAM GENERATOR BLOWDOWN SYSTEM**
APPLICATION SECTION:	**DCD SECTIONS 10. 4.8**
DATE OF RAI ISSUE:	**11/7/2011**

QUESTION NO. : 10.04.08-11

The staff requests that the applicant address a possible discrepancy between the equipment classifications for the Steam Generator Blowdown System (SGBDS) listed in Tables 1.9.2-10 and 3.2-2. According to Table 1.9.2-10, the "potion [sic] of outer containment valve excluding itself is designed as class 4," but Table 3.2-2 states the portions of the system outside the first containment isolation valves are equipment class 3 or 6. Please clarify these equipment classifications and describe any plans for revising the DCD.

ANSWER:

The equipment class described in DCD Section 3.2 Table 3.2-2 is correct. DCD Table 1.9.2-10 will be revised. See Attachment-1.

Impact on DCD

There is an impact on DCD Table 1.9.2-10. See Attachment-1.

Impact on R-COLA

There is no impact on the R-COLA.

Impact on PRA

There is no impact on the PRA.

Impact on Technical/Topical Report

There is no impact on a technical/Topical Report.

Table 1.9.2-10 US-APWR Conformance with Standard Review Plan Chapter 10 Steam and Power Conversion System (Sheet 15 of 20)

SRP Section and Title	SRP Excerpt Indicating Acceptance Criteria for DCD	Status	Appears in DCD Chapter/Section
10.4.7 Condensate and Feedwater System (continued)	5. Inspection The requirements of GDC 45 are met by demonstrating that the design contains provisions to permit periodic inservice inspection of system components and equipment. 6. Testing The requirements of GDC 46 are met by demonstrating that the design contains provisions to permit appropriate functional testing of the system and components to ensure structural integrity and leak-tightness, operability and performance of active components, and capability of the integrated system to function as intended during normal, shutdown, and accident conditions. 7. Flow Accelerated Corrosion Piping system designs, including material standards and inspection programs, shall incorporate adequate considerations to avoid erosion and corrosion. Guidance for acceptable inspection programs is found in Generic Letter 89-08 and in EPRI NP-3944, "Erosion/Corrosion in Nuclear Plant Steam Piping: Causes and Inspection Guidelines." 8. Feedwater Nozzle Design For BWRs, feedwater nozzle design, inspection, and testing procedures, and CFS operating procedures are adequate to minimize nozzle cracking at low feedwater flow. The review criteria for this issue are stated in NUREG-0619 and in associated Generic Letters 80-95 and 81-11.		
10.4.8 Steam Generator Blowdown System	1. The requirements of GDC 1 and GDC 2 are met when the design of the SGBS includes the following: A. The design is seismic Category I and Quality Group B, from its connection to the steam generator inside primary containment up to and including the first isolation valve outside containment. B. The design is in accordance with the provisions of Regulatory Guide 1.143, Position C.1.1 downstream of the outer containment isolation valves.	Conformance with no exceptions identified. ~~Note: As for RG1.143 mentioned in SRP criterion 1.B, SGBDS is not designed as Radioactive waste management system. (The portion of outer containment valve excluding itself is designed as class 3 or 6.~~)	10.4.8

DCD_10.04.08-8 S01
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DCD_10.04.08-11
DCD_10.04.08-11

Attachment-1