

February 17, 2011

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

Attention: Mr. Jeffery A. Ciocco

Docket No. 52-021 MHI Ref: UAP-HF-11036

Subject:

MHI's Response to US-APWR DCD RAI No. 651-4748 Revision 2 (SRP

14.03.06)

Reference: 1)

"Request for Additional Information No. 651-4748 Revision 2, SRP Section:

14.03.06 – Electrical Systems – Inspections, Tests, Analyses, and Acceptance Criteria, Application Section: 14.3.6," dated 10/18/2010

With this letter, Mitsubishi Heavy Industries, Ltd. ("MHI") transmits to the U.S. Nuclear Regulatory Commission ("NRC") documents entitled "Response to Request for Additional Information No. 651-4748, Revision 2"

Enclosed is the response to 1 RAI contained within Reference 1.

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 provided below.

Sincerely,

Yoshiki Ogata,

General Manager- APWR Promoting Department

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Mitsubishi Heavy Industries, LTD.

Enclosures:

1. "Response to Request for Additional Information No. 651-4748, Revision 2"

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

Contact Information

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Enclosure 1

UAP-HF-11036 Docket No. 52-021

Response to Request for Additional Information No. 651-4748, Revision 2

February 2011

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

02/17/2011

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

RAI NO .:

NO. 651-4748 REVISION 2

SRP SECTION:

14.03.06 - Electrical Systems - Inspections, Tests, Analyses,

and Acceptance Criteria

APPLICATION SECTION:

14.3.6

DATE OF RAI ISSUE:

10/18/2010

QUESTION NO. RAI 14.03.06-19

Chapter 2, Tier 1 (specifically within Inspection, Tests, Analyses (ITA) columns of US-APWR ITAAC Tables) and Chapter 14, Tier 2 show several instances where the phrase "Type tests and/or analyses will be performed..." is employed as related to electrical equipment qualification in a harsh environment. The above statement could be interpreted as "analyses alone" is acceptable. This is contrary to the requirements in 10 CFR 50.49(f)(4) which identifies "analysis in combination with partial type test data that supports the analytical assumptions and conclusions," as a method to qualify electrical equipment. Revise all the instances in the DCD, specifically in Chapter 2, Tier 1, and Chapters 1, 3, and 14, Tier 2, where the phrase "Type tests and/or analyses will be performed..." to read "Type tests or a combination of type tests and analyses" in order to comply with the requirements of 10 CFR 50.49(f)(4).

ANSWER:

In response to RAI 650-5093, Question 03.11-40, MHI agreed to revise subject wording of the ITAAC table, center column ITA to read: "Type tests or a combination of type tests and analysis will be performed on Class 1E equipment located in a harsh environment". MHI will include this wording in the Tier 1 and Tier 2 documents in the future DCD submittal.

This wording will be used in Tier 1 related text and ITAAC tables for 1E equipment being qualified in a harsh environment in Sections 1.4, 2.4, 2.5, 2.6, 2.7, and 2.11, and in Tier 2 example ITAAC Table 14.3-2, item 6a.

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.

This completes MHI's response to the NRC's question.