


MITSUBISHI HEAVY INDUSTRIES, LTD.
16-5, KONAN 2-CHOME, MINATO-KU
TOKYO, JAPAN

October 8, 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-09484

Subject: Update of Chapter 6 of US-APWR DCD

Reference: 1) Letter MHI Ref: UAP-HF-08153 from Y. Ogata (MHI) to U.S. NRC, "Submittal of US-APWR Design Control Document Revision 1 in Support of Mitsubishi Heavy Industries, Ltd.'s Application for Design Certification of the US-APWR Standard Plant Design" dated on August 29, 2008.

MHI and Luminant have been working to resolve COLA Request for Additional Information (RAI). Currently, in CPNPP-3 and 4, COL RAI #44 was issued to request for sufficient detail for the NRC staff to obtain a reasonable assurance finding of the augmented ISI program. In this activity, MHI decided that more detail information for the augmented ISI program will be included in the Design Control Document because this is not site specific and this should be discussed in DC application.

With this letter, MHI transmits to the NRC Staff the proposed updates to be made to the DCD. These updates will be incorporated into future DCD revision.

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

Sincerely,

Y. Ogata

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

Enclosure:

1. Update of Chapter 6 of US-APWR DCD

DO81
NRO

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

Contact Information

C. Keith Paulson, Senior Technical Manager
Mitsubishi Nuclear Energy Systems, Inc.
300 Oxford Drive, Suite 301
Monroeville, PA 15146
E-mail: ckpaulson@mnes-us.com
Telephone: (412) 373-6466

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Enclosure 1

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6.6.8 Augmented ISI to Protect against Postulated Piping Failures

An augmented ISI program is required for high-energy fluid system piping between containment isolation valves or—where no isolation valve is used inside containment—between the first rigid pipe connection to the containment penetration or the first pipe whip restraint inside containment and the outside isolation valve. The ISI program contains information addressing areas subject to inspection, method of inspection, and extent and frequency of inspection in accordance with the requirements of Article IWC-2000 for Examination Category C–F welds. The inservice examination completed during each inspection interval is a 100 percent volumetric examination of circumferential and longitudinal pipe welds within the boundary of these portions of piping. The access provisions incorporated into the design of the US-APWR provide access for personnel and equipment to inspect the affected welds. The program covers the high-energy fluid systems described in Chapter 3, Subsections 3.6.1 and 3.6.2. An augmented ISI program is required to ensure structural integrity of cold-worked austenitic stainless steel components (Refer to Subsection 6.1.1.1).

~~The COL Applicant is responsible for identifying the implementation milestone for the augmented inservice inspection program responsible for preparing an augmented inservice inspection program for high-energy fluid system piping. The preservice inspection program addresses the equipment and examination techniques to be used.~~

As noted in Subsection 6.6.2, the design and installed arrangement of US-APWR Class 2 and 3 components provide clearance adequate to conduct Code-required examinations.

6.6.9 Combined License Information

Any utility that references the US-APWR design for construction and Licensed operation is responsible for the following COL items:

COL 6.6(1) The COL Applicant is responsible for the preparation of a preservice inspection program (non-destructive baseline examination) and an Inservice inspection program for ASME Code Section III Class 2 and 3 systems, components (pumps and valves), piping, and supports in accordance with 10 CFR 50.55a(g), including selection of specific examination techniques and preparing appropriate inspection procedures.

COL 6.6(2) The COL Applicant is responsible for identifying the implementation milestone for the augmented inservice inspection program.

6.6.10 References

- 6.6-1. Inservice Inspection Requirements, Title 10, code of Federal Regulations, 10 CFR 50.55a(g), January 2007.
- 6.6-2. Rules for Inservice Inspection of Nuclear Power Plant Components, ASME Boiler & Pressure Vessel Code, Division 1, Section XI, American Society of Mechanical Engineers, 2001 Edition with 2003 Addenda.