16-5, KONAN 2-CHOME, MINATO-KU TOKYO, JAPAN

May 7, 2010

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-10128

Subject: MHI's Response to US-APWR DCD RAI No. 575-4422 REVISION 2

"Request for Additional Information No. 575-4422 Revision 2, SRP Section: Reference: 1)

05.02.01.02 - Applicable Code Cases Application Section: 05.02.01.02 dated

April 20, 2010.

With this letter, Mitsubishi Heavy Industries, Ltd. ("MHI") transmits to the U.S. Nuclear Regulatory Commission ("NRC") a document entitled "Response to Request for Additional Information No. 575-4422 Revision 2."

Enclosed is the response to the 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 below.

Sincerely,

Yoshiki Oqata

General Manager- APWR Promoting Department

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Mitsubishi Heavy Industries, LTD.

### **Enclosures:**

Response to Request for Additional Information No. 575-4422 Revision 2

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

#### **Contact Information**

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# **ENCLOSURE 1**

UAP-HF-10128 Docket Number 52-021

Response to Request for Additional Information No. 575-4422 Revision 2

May 2010

#### RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

5/7/2010

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

RAI NO.:

NO.575-4422 REVISION 2

**SRP SECTION:** 

"5.2.1.2 - APPLICABLE CODE CASES"

**APPLICATION SECTION:** 

5.2.1.2

DATE OF RAI ISSUE:

4/20/2010

QUESTION NO.: 05.02.01.02-7

10 CFR 50.55a requires that the Code edition and addenda to be applied to ASME Class 1, 2 and 3 piping and components must be determined by the rules of the ASME Section III paragraph NCA-1140(2), which disallows use of Code Edition and Addenda in the Design Specifications that is (a) earlier than three years prior to the date the construction permit application is docketed or (b) earlier than the latest Edition and Addenda endorsed by the regulatory authority at the time the construction permit application is docketed. This requirement is not satisfied by the code of record for U.S. APWR. For instance, the code used for U.S. APWR DC is the 2001 Edition through the 2003 Addenda while COL application date for Comanche Peak 3 and 4 is September 19, 2008. This implies a violation of NCA-1140(2)(a).

To resolve the issue, ASME approved a Code Case N-782 in January 2009 which allows that the Code Edition and Addenda endorsed in a design certified or licensed by the regulatory authority may be used for systems and components as an alternative rule to NCA-1140(2)(a) and (2)(b). Also, section 10 CFR 50.55a (b)(4) conditionally allows the application of ASME Code cases listed in the NRC Regulatory Guide (RG) 1.84, Revision 34, without prior NRC approval. However, Code Case N-782 is not listed for acceptance in Revision 34 of RG 1.84.

In order to apply the alternative rule to requirements of NCA-1140, the applicant is requested to provide justification for inclusion of Code Case N-782 in U.S. APWR DCD in accordance with 10 CFR 50.55a(3)(i) and (ii).

#### ANSWER:

MHI agrees with this statement. Code Case N-782 will be added in the DCD 5.2.1.2 Table 5.2.1-2 to avoid the violation of NCA-1140(2)(a) and (2)(b).

# Impact on DCD

The DCD Section 5.2.1.2 Table 5.2.1-2 will be changed to include Code Case N-782 as the attached markup.

## 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.

# 5. REACTOR COOLANT AND CONNECTING SYSTEMS

# **US-APWR Design Control Document**

**ATTACHMENT** 

Table 5.2.1-2

ASME Code Cases (Sheet 2 of 2)

to RAI 575-4422

Code Case Number	Title	Applicable components
N-729-1	Alternative Examination Requirements for PWR Reactor Vessel Upper Heads With Nozzles Having Pressure-Retaining Partial-Penetration Welds Section XI, Division 1	RV
N-782	Use of Code Editions, Addenda, and Cases Section III, Division 1	RCPB Class 1 Components and Piping
OMN-13	Requirements for Extending Snubber Inservice Visual Examination Interval at LWR Power Plants	Piping Supports
2142-2	F-Number Grouping for Ni-Cr-Fe Filer Metals Section IX (Applicable to all Sections, including Section III, Division 1, and Section XI)	RV, SG, Pressurizer