


MITSUBISHI HEAVY INDUSTRIES, LTD.
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TOKYO, JAPAN

September 18, 2008

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-08185

Subject: MHI's Response to US-APWR DCD RAI No.58 Revision 0

Reference: 1) "Request for Additional Information No.58 Revision 0, SRP Section: 14.02 – Initial Plant Test Program – Design Certification and New License Applicants, Application Section: 14.2," dated August 26, 2008.

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.58 Revision 0."

Enclosed is the response to Question 14.02-86 that is 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,



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

Enclosure:

1. Response to Request for Additional Information No.58 Revision 0

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

Contact Information

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NRC

Docket No. 52-021
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Enclosure 1

UAP-HF-08185
Docket No. 52-021

Response to Request for Additional Information No.58 Revision 0

September, 2008

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

9/18/2008

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

RAI NO.: NO. 58 REVISION 0
SRP SECTION: 14.02 – Initial Plant Test Program – Design Certification and New License Applicants
APPLICATION SECTION: 14.2
DATE OF RAI ISSUE: 8/26/2008

QUESTION NO.: 14.02-86

DCD Section 14.2.12.1.52, "Thermal Expansion Test," verifies thermal movements of safety-related snubbers. However, the test abstract does not verify that actual piping thermal growth rates do not exceed snubber lock-up velocities.

DCD Subsection 3.9.3.4.2.7 commits to initial in-situ dynamic lock-up testing and thermal motion testing of snubbers.

SRP 3.9.3, Section II.3.B.(i), states that snubbers in areas of high piping thermal growth rates should be checked to verify that actual piping thermal growth rates do not exceed snubber lock-up velocities.

Please revise DCD Section 14.2.12.1.52 to verify that actual piping thermal growth rates do not exceed snubber lock-up velocities.

ANSWER:

MHI will revise DCD subsection 14.2.12.1.52 to include methods and acceptance criteria to verify that actual piping thermal growth rates do not exceed snubber lock-up velocities in systems or components that experience high thermal growth rates. In addition, MHI will revise DCD subsection 3.9.3.4.2.7 to delete the testing program of in-situ snubber dynamic lock-up testing

Impact on DCD

This revision impacts Revision 1 of the DCD in Subsection 14.2.12.1.52 on page 14.2-78 and Subsection 3.9.3.4.2.7 on page 3.9-48.

(1) Revise Subsection 14.2.12.1.52 as follows (only affected portions shown):

C. Test Method

2. Snubber thermal movements are verified by recording positions during initial system

heatup and cooldown. Local and/or remote displacement measurements are recorded to determine thermal growth rates for snubbers utilized in safety-related systems or components that experience high thermal growth rates.

D: Acceptance Criteria

4. For snubbers utilized in safety-related systems or components that experience high thermal growth rates, the overall thermal growth rates are verified not to exceed the snubber lock-up velocity.

Revise Subsection 3.9.3.4.2.7, third paragraph, consideration 2 as follows: :

2. Based on initial in-situ snubber ~~dynamic lock-up testing and~~ thermal motion testing, a comparison of test data and analysis data (~~force and/or displacement time histories due to earthquake and/or dynamic transients~~) assures that the piping or component stress analysis model and as-built snubber configuration performs within the analytical boundaries.

Impact on COLA

There is no impact on the COLA.

Impact on PRA

There is no impact on the PRA.