


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

March 01, 2011

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-11054

Subject: MHI's Response to US-APWR DCD RAI No. 678-5241 Revision 2 (SRP Section 14.02)

Reference: 1) "Request for Additional Information No. 678-5241 Revision 2, SRP Section: 14.02 – Initial Plant Test Program - Design Certification and New License Applicants – Application Section: 14.2" dated January 11, 2011.

With this letter, Mitsubishi Heavy Industries, Ltd. ("MHI") transmits to the U.S. Nuclear Regulatory Commission ("NRC") a document entitled "Responses to Request for Additional Information No. 678-5241 Revision 2".

Enclosed is the response to Question 14.02-123 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. 678-5241 Revision 2

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: ck_paulson@mnes-us.com
Telephone: (412) 373-6466



Docket No. 52-021
MHI Ref: UAP-HF-11054

Enclosure 1

UAP-HF-11054
Docket No. 52-021

Responses to Request for Additional Information No. 678-5241
Revision 2

March 2011

RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

3/1/2011

US-APWR Design Certification

Mitsubishi Heavy Industries

Docket No. 52-021

RAI NO.: NO. 678-5241 REVISION 2
SRP SECTION: 14.02 - INITIAL PLANT TEST PROGRAM - DESIGN
CERTIFICATION AND NEW LICENSE APPLICANTS
APPLICATION SECTION: 14.2
DATE OF RAI ISSUE: 1/11/2011

QUESTION NO.: 14.02-123

NRC RG 1.68, App. A, Sections 1.b(2), 1.d(5), 1.h(1), 4.q, 5.l, and 5.aa specify testing of reactivity control, ECCS, decay heat removal, and safe shutdown systems during the preoperational, low-power testing, and power-ascension testing phases. DCD Chapter 14.2, Section 14.2.12.1.54, Safety Injection System (SIS) Preoperational Test, and Section 14.2.12.1.57, Safety Injection Accumulator Test, do not appear to include a test abstract for the Emergency Letdown System (ELS). Please identify the test abstract that describes testing for the ELS or include a revision to either of the test abstracts identified above to address testing of the ELS.

ANSWER:

There is no specific preoperational test in the DCD. Therefore, DCD Subsection 14.2.12.1.54 Safety Injection System (SIS) Preoperational Test will be revised to include the Emergency Letdown System.

Impact on DCD

DCD Subsection 14.2.12.1.54 will be revised as follows:

14.2.12.1.54 Safety Injection System (SIS) Preoperational Test

A. Objectives

1. To verify the proper operation of the safety injection pumps and system valves and controls including the emergency letdown line.

C. Test Method

2. The safety injection pump injection line and minimum flows and pump operation and the emergency letdown line are verified.

D. Acceptance Criteria

3. Flowrates for safety injection test lines and the emergency letdown line are within design specifications.

Impact on COLA

There is no impact on the COLA.

Impact on PRA

There is no impact on the PRA.