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

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Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC20555-0001

Attention: Mr. Jeffrey A. Ciocco

Docket No. 52-021
MHI Ref: UAP-HF-13043

Subject: List of Risk Significant ASME Section III Piping Systems and Components Associated with Revised Design Completion Plan for US-APWR Piping Systems and Components

Reference:
1) Letter (ML12346A448) from Y. Ogata ("MHI") to U.S. NRC, "Revised Design Completion Plan for US-APWR Piping Systems and Components", UAP-HF-12322, dated December 7, 2012

2) Letter (ML12030A172) from Y. Ogata ("MHI") to U.S. NRC, "MHI's Response to US-APWR DCD RAI No. 822-5861 Revision 3", UAP-HF-12014, dated January 26, 2012

With this letter, Mitsubishi Heavy Industries, Ltd. ("MHI") provides a list of all risk significant ASME Section III Piping System and Components ("PSCs"), except valves and orifices, to the U.S. Nuclear Regulatory Commission ("NRC") in accordance with Section 4.2 of the "Revised Design Completion Plan for US-APWR Piping Systems and Components" (Reference 1). This specific list supplements MHI's response to RAI No. 822-5861 (Reference 2), and is consistent with US-APWR DCD Table 3.2-2 and Table 17.4-1.

The Design Specifications will be prepared for the PSCs contained in the list, and will be available for Design Specification audit in accordance with SRP Section 3.9.3.

Please contact Mr. Joseph Tapia, General Manager of Licensing Department, Mitsubishi Nuclear Energy Systems, Inc. if the NRC has questions concerning any aspect of this letter. His contact information is provided below.

Sincerely,

Y. Ogata

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

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NRO

Enclosures:

1. List of Risk Significant ASME Section III Piping Systems and Components

CC: J. A. Ciocco
J. Tapia

Contact Information
Joseph Tapia, General Manager of Licensing Department
Mitsubishi Nuclear Energy Systems, Inc.
1001 19th Street North, Suite 710
Arlington, VA22209
E-mail: joseph_tapia@mnes-us.com
Telephone:(703) 908-8055

Enclosure 1

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List of Risk Significant ASME Section III Piping Systems and Components

March 2013

List of Risk Significant ASME Section III PSCs

System and PSCs	Risk Significant
1. Reactor Systems	
Upper core support assembly	Table 17.4-1 #23-4
Lower core support assembly	
Control rod drive mechanism latch housing	Table 17.4-1 #23-3
Control rod drive mechanism rod travel housing	
Internal structure	Table 17.4-1 #23-4
2. Reactor Coolant System	
Reactor vessel	Table 17.4-1 #29-5
Reactor vessel head	Table 17.4-1 #29-5
Reactor coolant pump casing	Table 17.4-1 #29-4
Reactor coolant pump main flange	Table 17.4-1 #29-4
Reactor coolant pump thermal barrier heat exchanger	Table 17.4-1 #29-4
Reactor coolant pump #1 seal housing	Table 17.4-1 #29-4
Reactor coolant pump #2 seal housing	Table 17.4-1 #29-4
Reactor coolant pump pressure retaining bolting	Table 17.4-1 #29-4
Pressurizer	Table 17.4-1 #19-4
Pressurizer piping upstream of and including the pressurizer safety valves RCS-SRV-120,121,122,123, safety depressurization valves RCS-MOV- 117A,B, and depressurization valves RCS-MOV-119	Table 17.4-1 #19-5
Letdown line piping upstream of and including the letdown line stop valves RCS-VLV-021	Table 17.4-1 #29-2
Steam generator tube side	Table 17.4-1 #29-1
Steam generator shell side	
Reactor coolant piping	Table 17.4-1 #29-2
Pressurizer surge line piping	Table 17.4-1 #29-2
Pressurizer spray line piping	Table 17.4-1 #19-5
3. Chemical and Volume Control System	
Charging pumps	Table 17.4-1 #2-4
Regenerative heat exchanger	Table 17.4-1 #2-24
Reactor coolant pump seal water injection piping and valves downstream of including valves CVS-VLV-180A, B, C, D	Table 17.4-1 #2-42
Charging lines from and including valves CVS-VLV-158 and CVS-AOV-159 to their penetration into the reactor coolant system	Table 17.4-1 #2-42
Auxiliary spray line from and including valves CVS-AOV-155 to the penetration into the RCS	Table 17.4-1 #29-2
4. Safety Injection System	
Safety injection pumps	Table 17.4-1 #11-9
Safety injection piping and valves between the System penetration and including the second check valve SIS-VLV-012A, B, C, D upstream of the direct Vessel Injection penetration	Table 17.4-1 #11-12

System and PSCs	Risk Significant
Hot leg injection piping downstream of and including the motor operated valves SIS-MOV-014A, B, C, D	Table 17.4-1 #11-12 Table 17.4-1 #29-3
Accumulator	Table 17.4-1 #1-6
Accumulator piping and valves on the reactor coolant system side of and including the second check valves SIS-VLV-102A, B, C, D	Table 17.4-1 #1-5
Emergency letdown isolation valves SIS-MOV-031A, 031D, 032A, 032D and piping between valves	Table 17.4-1 #29-8
5. Residual Heat Removal System(RHRS)	
Containment Spray/Residual Heat Removal pumps	Table 17.4-1 #21-6
Containment spray/residual heat removal heat exchangers - tube side	Table 17.4-1 #21-8
Containment spray/residual heat removal heat exchangers - component cooling water side	Table 17.4-1 #21-8
Residual heat removal suction piping and valves on the reactor coolant system side between the hot legs, up to and including the second motor operated valves RHS-MOV-002A, B, C, D	Table 17.4-1 #21-13
Residual heat removal discharge piping and valves on the reactor coolant system side between the cold legs, up to and including the second check valves RHS-VLV-027A,B,C,D	Table 17.4-1 #21-13
6. Emergency Feedwater System (EFWS)	
Emergency feedwater pumps	Table 17.4-1 #6-3 Table 17.4-1 #6-4
8. Main Steam Supply System (MSS)	
Main steam piping and valves including branch pipe from steam generators up to and including the following valves:4 Nitrogen supply piping valves MSS-VLV-531A, B, C, D Main steam isolation valves MSS-SMV-515A, B, C, D Main steam bypass isolation valves MSS-HCV-565, 575,585, 595 Main steam relief valves MSS-PCV-515, 525, 535, 545 Main steam depressurization valves MSS-MOV-508A,B,C,D Main steam safety valves MSS-SRV-509A,B,C,D, 510A,B,C,D, 511A,B,C,D, 512A,B,C,D, 513A,B,C,D, 514A,B,C,D Main steam drain isolation valves MSS-MOV-701A,B,C,D	Table 17.4-1 #18-3
11. Component Cooling Water System (CCWS)	
Component cooling water pumps	Table 17.4-1 #3-2
Component cooling water surge tanks	Table 17.4-1 #3-44
Component cooling water heat exchangers	Table 17.4-1 #3-3
12. Spent Fuel Pit Cooling and Purification System (SPFCS)	
Spent fuel pit pumps	Table 17.4-1 #26-10
Spent fuel pit heat exchangers	Table 17.4-1 #26-9
13. Essential Service Water System (ESWS)	
Essential service water pumps	Table 17.4-1 #25-2
17. Refueling Water Storage System	
Refueling water recirculation pumps	Table 17.4-1 #22-7
30. Containment System	
Containment vessel	Table 17.4-1 #4-1
Equipment hatch	Table 17.4-1 #4-4
Personnel airlock	Table 17.4-1 #4-4

System and PSCs	Risk Significant
46. Essential Chilled Water System	
Essential chiller units Evaporator side Condenser side	 Table 17.4-1 #24-1 Table 17.4-1 #24-1
Essential chilled water pumps	Table 17.4-1 #24-2
Essential chilled water compression tanks	Table 17.4-1 #24-3

Note:
- This list provides all risk significant ASME Section III PSCs except valves and orifices.
- "Risk Significant" is identified in DCD Table 17.4-1.