


MITSUBISHI HEAVY INDUSTRIES, LTD.
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TOKYO, JAPAN

August 29, 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-08153

Subject: 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

- References:**
- 1) Letter MHI Ref: UAP-HF-07171 from M. Kaneda (MHI) to U.S. NRC, "Submittal of US-APWR Design Control Document in Support of Mitsubishi Heavy Industries, Ltd.'s Application for Design Certification of the US-APWR Standard Plant Design," dated December 31, 2007.
 - 2) Letter MHI Ref: UAP-HF-08080 from Y. Ogata (MHI) to U.S. NRC, "Additional Information for NRC Review Schedule for US-APWR Design Certification Application" dated April 16, 2008.
 - 3) Letter MHI Ref: UAP-HF-08123 from Y. Ogata (MHI) to U.S. NRC, "Additional Information for Design Completion Plan of US-APWR Piping Systems and Components" dated July 14, 2008.

Mitsubishi Heavy Industries, Ltd. ("MHI") is pleased to submit to the U.S. Nuclear Regulatory Commission ("NRC") its "Design Control Document Revision 1 for the US-APWR" ("DCD Rev.1"). As stated in Reference 1, the DCD constitutes the final safety analysis report ("FSAR") for the US-APWR standard plant design required by 10 C.F.R. § 52.47(a), which is an integral part of MHI's application for NRC certification of MHI's US-APWR standard plant design.

MHI had previously informed the NRC of this revision in Enclosure 4 of Reference 2 and provided additional information at the June 25, 2008 public meeting. The revisions are not significant and, therefore, are not expected to impact the NRC's review schedule of the DCD. The revision of the DCD mainly includes the following aspects:

- a) Incorporation of customer preference items appropriate for the DCD
- b) Additional detailed engineering design information
- c) Incorporation of NRC comments and responses to NRC questions, as appropriate
- d) Incorporation of recently submitted technical reports as appropriate.

The DCD Rev.1 is being submitted in two versions, each version on a separate compact disc. One version (on CD 1 at Enclosure 1) includes certain information, designated pursuant to Commission guidance as sensitive unclassified non-safeguards information and referred to as security-related information ("SRI"), that is to be withheld from public disclosure under 10 C.F.R. § 2.390. The information that is SRI is identified by brackets. The second version (on CD 2 at Enclosure 2) omits the SRI and is suitable for public disclosure. In the public

Doc 1
NRW

version on CD 2 (which contains only the public version of the DCD), the SRI is replaced by the designation “[Security-Related Information - Withheld under 10 CFR 2.390].”

A DCD Change List is provided with both versions of the DCD which identifies the locations in the DCD where changes have been made and provides a brief description of those changes. Revision bars are also provided in the relevant places in the DCD Rev. 1 to identify where changes to the DCD have been made. However, minor changes such as correcting typos, adding or removing punctuation marks, as appropriate, and capitalizations, are not listed in the DCD Change List and also are not identified by revision bars in the DCD Rev. 1.

Enclosure 3 lists the NRC’s Requests for Additional Information (“RAI”) which have already been issued as of July 31st. This list identifies whether MHI’s response to the RAIs impact the DCD and the extent to which the changes have been incorporated into this revision of the DCD.

Enclosure 4 lists the technical reports which have already been submitted or will be submitted in the future. This list identifies the section of the DCD Rev. 1 where the report is referenced and/or summarized.

At the June 25, 2008 public meeting concerning revising the US-APWR DCD, the NRC pointed out that the description of Inservice Testing (“IST”) for other new plant applications are insufficient to review the associated operational programs. The NRC suggested that the US-APWR DC Application be revised to provide general information on operational programs in order to allow flexibility by a COL Applicant in developing plant specific operational programs, or more specific information if a COL applicant plans to rely on the DCD to help fully describe these programs. MHI will incorporate such enhanced information into a future revision of the DCD after further discussion with the NRC.

Also in Reference 3, MHI formally transmitted to the NRC the information presented and commitments made by MHI at the June 25, 2008 public meeting concerning the stress analyses for US-APWR Piping Systems and Components (“PSC”) and provided as well further information in response to the NRC’s comments at the meeting. MHI has preliminarily incorporated this information into the proposed inspections, tests, analyses, and acceptance criteria (“ITAAC”) in Tier 1. MHI will appropriately revise these ITAAC in a future revision of the DCD following additional discussions with the NRC on this topic.

Finally, MHI explained at the US-APWR Design Centered Working Group Meeting with NRC on July 1, 2008, that five reports concerning the physical security of the US-APWR would be provided as follows:

- a) Physical Security Element Review, Rev. 1
- b) Cyber Security Program
- c) High Assurance Evaluation
- d) Mitigative Measures Evaluation
- e) Beyond DBT Aircraft Crash Assessment

The Cyber Security Program report is being submitted in conjunction with the DCD Rev. 1. The Physical Security Element Review Rev. 1, which identifies vital equipment in greater detail, and the High Assurance Evaluation will be submitted separately as Safeguards Information in September 2008. The Mitigative Measures Evaluation Report should be filed shortly thereafter, and the Beyond DBT Aircraft Crash Assessment will be submitted in the future.

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

Sincerely,



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

Enclosures:

1. DCD Rev.1 (SRI included version, August 2008) (CD 1)
2. DCD Rev.1 (SRI excluded version, August 2008) (CD 2)
3. RAI Response Incorporation List for US-APWR Design Control Document Revision 1
4. Technical Report Tracking List for US-APWR Design Control Document Revision 1

The files contained in each CD are listed in Attachments 1 and 2 hereto.

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

Contact Information

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ATTACHMENT 1

UAP-HF-08153

FILES CONTAINED IN CD 1 (SRI included version)
(CD TO BE WITHHELD FROM PUBLIC DISCLOSURE PURSUANT TO 10 C.F. R § 2.390)

File Name	Document No.	Title	Revision	Issue Date
Chapter01 R1_SRI.pdf	MUAP-DC001	Chapter 1 Introduction and General Description of the Plant	1	08/29/2008
Chapter02 R1.pdf	MUAP-DC002	Chapter 2 Site Characteristics	1	08/29/2008
Chapter03 R1_SRI.pdf	MUAP-DC003	Chapter 3 Design of Structures, Systems, Components and Equipment	1	08/29/2008
Chapter04 R1.pdf	MUAP-DC004	Chapter 4 Reactor	1	08/29/2008
Chapter05 R1_SRI.pdf	MUAP-DC005	Chapter 5 Reactor Coolant and Connecting Systems	1	08/29/2008
Chapter06 R1_SRI.pdf	MUAP-DC006	Chapter 6 Engineered Safety Features	1	08/29/2008
Chapter07 R1.pdf	MUAP-DC007	Chapter 7 Instrumentation and Controls	1	08/29/2008
Chapter08 R1_SRI.pdf	MUAP-DC008	Chapter 8 Electric Power	1	08/29/2008
Chapter09 R1_SRI.pdf	MUAP-DC009	Chapter 9 Auxiliary Systems	1	08/29/2008
Chapter10 R1.pdf	MUAP-DC010	Chapter 10 Steam and Power Conversion System	1	08/29/2008
Chapter11 R1_SRI.pdf	MUAP-DC011	Chapter 11 Radioactive Waste Management	1	08/29/2008
Chapter12 R1_SRI.pdf	MUAP-DC012	Chapter 12 Radiation Protection	1	08/29/2008
Chapter13 R1_SRI.pdf	MUAP-DC013	Chapter 13 Conduct of Operations	1	08/29/2008
Chapter14 R1.pdf	MUAP-DC014	Chapter 14 Verification Program	1	08/29/2008
Chapter15 R1.pdf	MUAP-DC015	Chapter 15 Transient and Accident Analyses	1	08/29/2008
Chapter16 R1.pdf	MUAP-DC016	Chapter 16 Technical Specifications	1	08/29/2008
Chapter17 R1.pdf	MUAP-DC017	Chapter 17 Quality Assurance and Reliability Assurance	1	08/29/2008
Chapter18 R1.pdf	MUAP-DC018	Chapter 18 Human Factors Engineering	1	08/29/2008
Chapter19 R1.pdf	MUAP-DC019	Chapter 19 Probabilistic Risk Assessment and Severe Accident Evaluation	1	08/29/2008
Tier1 R1_SRI.pdf	MUAP-DC020	Tier1	1	08/29/2008
Rev1_Change_List.pdf	MUAP-DC022	DCD Revision 1 Change List	0	08/29/2008

ATTACHMENT 2

UAP-HF-08153

FILES CONTAINED IN CD 2 (SRI redacted version)

File Name	Document No.	Title	Revision	Issue Date
Chapter01 R1.pdf	MUAP-DC001	Chapter 1 Introduction and General Description of the Plant	1	08/29/2008
Chapter02 R1.pdf	MUAP-DC002	Chapter 2 Site Characteristics	1	08/29/2008
Chapter03 R1.pdf	MUAP-DC003	Chapter 3 Design of Structures, Systems, Components and Equipment	1	08/29/2008
Chapter04 R1.pdf	MUAP-DC004	Chapter 4 Reactor	1	08/29/2008
Chapter05 R1.pdf	MUAP-DC005	Chapter 5 Reactor Coolant and Connecting Systems	1	08/29/2008
Chapter06 R1.pdf	MUAP-DC006	Chapter 6 Engineered Safety Features	1	08/29/2008
Chapter07 R1.pdf	MUAP-DC007	Chapter 7 Instrumentation and Controls	1	08/29/2008
Chapter08 R1.pdf	MUAP-DC008	Chapter 8 Electric Power	1	08/29/2008
Chapter09 R1.pdf	MUAP-DC009	Chapter 9 Auxiliary Systems	1	08/29/2008
Chapter10 R1.pdf	MUAP-DC0010	Chapter 10 Steam and Power Conversion System	1	08/29/2008
Chapter11 R1.pdf	MUAP-DC0011	Chapter 11 Radioactive Waste Management	1	08/29/2008
Chapter12 R1.pdf	MUAP-DC0012	Chapter 12 Radiation Protection	1	08/29/2008
Chapter13 R1.pdf	MUAP-DC0013	Chapter 13 Conduct of Operations	1	08/29/2008
Chapter14 R1.pdf	MUAP-DC0014	Chapter 14 Verification Program	1	08/29/2008
Chapter15 R1.pdf	MUAP-DC0015	Chapter 15 Transient and Accident Analyses	1	08/29/2008
Chapter16 R1.pdf	MUAP-DC0016	Chapter 16 Technical Specifications	1	08/29/2008
Chapter17 R1.pdf	MUAP-DC0017	Chapter 17 Quality Assurance and Reliability Assurance	1	08/29/2008
Chapter18 R1.pdf	MUAP-DC0018	Chapter 18 Human Factors Engineering	1	08/29/2008
Chapter19 R1.pdf	MUAP-DC0019	Chapter 19 Probabilistic Risk Assessment and Severe Accident Evaluation	1	08/29/2008
Tier1 R1.pdf	MUAP-DC0020	Tier1	1	08/29/2008
Rev1_Change_List.pdf	MUAP-DC022	DCD Revision 1 Change List	0	08/29/2008

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Enclosure 3

**UAP-HF-08153
Docket No. 52-021**

**RAI Response Incorporation List
for
US-APWR Design Control Document Revision 1**

August 2008

General description

This enclosure lists the NRC's Requests for Additional Information ("RAI") which have already been issued as of July 2008. The column named "Impact on DCD" shows whether the MHI's responses impact on the Design Control Document ("DCD") description. The column named "Incorporate into Rev.1" shows whether MHI's responses that impact the DCD have been incorporated into the DCD Revision 1. If the response due date is later than August 29, 2008, then the column named "Impact on DCD" shows "In progress."

RAI Response Incorporating List for the US-APWR DCD Revision 1 (1/8)

No.	RAI Issued Date	Response Submission Date	DCD Section	Question No.	Impact on DCD	Incorporate into Rev. 1
1	2008/4/17	2008/5/16	19.1	19-1	N	
				19-2	N	
				19-3	N	
				19-4	N	
				19-5	N	
				19-6	N	
				19-7	Y	Y
				19-8	N	
				19-9	N	
				19-10	N	
				19-11	N	
				19-12	N	
				19-13	N	
				19-14	N	
				19-15	N	
				19-16	N	
				19-17	N	
				19-18	N	(Editorial error pointed out by this RAI is fixed.)
				19-19	N	
				19-20	N	
				19-21	N	
				19-22	N	
				19-23	N	
				19-24	N	
				19-25	N	
				19-26	N	
				19-27	N	
2	2008/4/17	2008/5/16	19.2	01-1	N	
3	2008/4/30	2008/5/30	8.3.2	01-1	N	
4	2008/4/30	2008/5/30	8.2	08.02-1	Y	Y
				08.02-2	N	
				08.02-3	Y	Y
				08.02-4	Y	Y
				08.02-5	N	
				08.02-6	Y	Y
				08.02-7	Y	Y
				08.02-8	Y	Y
				08.02-9	N	
5	2008/5/7	2008/6/6	8.3.1	08.03.01-1	N	
				08.03.01-2	N	
				08.03.01-3	N	
				08.03.01-4	N	
				08.03.01-5	N	
				08.03.01-6	N	
6	2008/5/28	2008/6/27	6.2.1.2	06.02.01.02-	Y	N

RAI Response Incorporating List for the US-APWR DCD Revision 1 (2/8)

No.	RAI Issued Date	Response Submission Date	DCD Section	Question No.	Impact on DCD	Incorporate into Rev.1
7	2008/5/28	2008/6/27	14.2	14.02-1	Y	Y
8	2008/6/10	2008/7/10	8.3.2	08.03.02-2	N	
				08.03.02-3	Y	Y
				08.03.02-4	N	
				08.03.02-5	N	
				08.03.02-6	N	
				08.03.02-7	Y	Y
				08.03.02-8	N	
				08.03.02-9	Y	Y
				08.03.02-10	N	
				08.03.02-11	N	
				08.03.02-12	N	
				08.03.02-13	N	
				08.03.02-14	N	
9	2008/6/18	2008/7/18	11.1	11.01-1	N	
10	2008/6/18	2008/7/18	8.3.1	08.03.01-7	Y	N
				08.03.01-8	N	
				08.03.01-9	Y	N
				08.03.01-10	N	
				08.03.01-11	N	
				08.03.01-12	N	
				08.03.01-13	N	
				08.03.01-14	N	
				08.03.01-15	Y	N
				08.03.01-16	N	
				08.03.01-17	Y	N
				08.03.01-18	N	
				08.03.01-19	N	
				08.03.01-20	N	
				08.03.01-21	Y	N
				08.03.01-22	N	
11	2008/6/18	2008/7/18	8.4	08.04-1	N	
				08.04-2	N	
				08.04-3	N	
				08.04-4	N	
				08.04-5	N	
				08.04-6	N	
				08.04-7	N	
12	2008/6/18	2008/7/18	14.2	14.02-2	Y	Y
				14.02-3	Y	Y
				14.02-4	Y	Y
				14.02-5	Y	Y
				14.02-6	N	
				14.02-7	Y	Y
13	2008/6/23	2008/7/23	2.4	02.04-1	Y	Y

RAI Response Incorporating List for the US-APWR DCD Revision 1 (3/8)

No.	RAI Issued Date	Response Submission Date	DCD Section	Question No.	Impact on DCD	Incorporate into Rev.1
				02.04-2	Y	Y
14	2008/6/23	2008/7/23	2.4.1	02.04.01-1	N	
				02.04.01-2	N	
15	2008/6/23	2008/7/23	2.4.4	02.04.04-1	Y	Y
				02.04.04-2	Y	Y
16	2008/6/23	2008/7/23	2.4.5	02.04.05-1	Y	Y
17	2008/6/23	2008/7/23	2.4.6	02.04.06-1	N	
				02.04.06-2	N	
18	2008/6/23	2008/7/23	2.4.11	02.04.11-1	Y	Y
19	2008/6/23	2008/7/23	2.4.12	02.04.12-1	Y	N
20	2008/6/23	2008/7/23	2.4.13	02.04.13-1	Y	Y
21	2008/6/23	2008/7/23	2.3.3	02.03.03-1	Y	Y
				02.03.03-2	Y	Y
22	2008/6/23	2008/7/23	2.3.2	02.03.02-1	Y	Y
				02.03.02-2	Y	Y
23	2008/6/23	2008/7/23	2.3.1	02.03.01-1	Y	Y
				02.03.01-2	Y	Y
				02.03.01-3	Y	Y
				02.03.01-4	Y	Y
				02.03.01-5	Y	Y
				02.03.01-6	Y	Y
				02.03.01-7	Y	Y
				02.03.01-8	Y	Y
				02.03.01-9	Y	Y
				02.03.01-10	Y	Y
				02.03.01-11	Y	Y
				02.03.01-12	Y	Y
				02.03.01-13	N	
				02.03.01-14	N	
24	2008/6/23	2008/7/23	2.4.14	02.04.14-1	Y	Y
25	2008/6/25	2008/7/25	19	19-28	N	
				19-29	N	
				19-30	N	
				19-31	N	
				19-32	N	
				19-33	N	
				19-34	N	
				19-35	N	
				19-36	N	
				19-37	N	
				19-38	N	
				19-39	N	
				19-40	N	
				19-41	N	
				19-42	N	

RAI Response Incorporating List for the US-APWR DCD Revision 1 (4/8)

No.	RAI Issued Date	Response Submission Date	DCD Section	Question No.	Impact on DCD	Incorporate into Rev.1
				19-43	Y	N
26	2008/7/1	2008/7/31	6.4	06.04-1	N	
				06.04-2	N	
27	2008/7/1	2008/7/31	14.2	14.02-8	Y	N
				14.02-9	N	
28	2008/7/1	2008/7/31	14.2	14.02-10	Y	Y
				14.02-11	N	
				14.02-12	Y	Y
				14.02-13	Y	Y
				14.02-14	Y	Y
				14.02-15	Y	Y
				14.02-16	N	
				14.02-17	Y	Y
				14.02-18	Y	Y
				14.02-19	Y	N
				14.02-20	Y	Y
				14.02-21	N	
				14.02-22	Y	Y
29	2008/7/7	2008/8/6	11.1	11.01-2	N	
30	2008/7/22	2008/9/5	9.5.1	09.05.01-1	In progress	
				09.05.01-2	In progress	
				09.05.01-3	In progress	
				09.05.01-4	In progress	
				09.05.01-5	In progress	
				09.05.01-6	In progress	
				09.05.01-7	In progress	
				09.05.01-8	In progress	
				09.05.01-9	In progress	
				09.05.01-10	In progress	
				09.05.01-11	In progress	
				09.05.01-12	In progress	
				09.05.01-13	In progress	
31	2008/7/28	2008/9/11	14.2	14.02-23	In progress	
				14.02-24	In progress	
32	2008/7/17	2008/9/4	14.3	14.03-1	In progress	
				14.03-2	In progress	
				14.03-3	In progress	
				14.03-4	In progress	
				14.03-5	In progress	
33	2008/7/21	2008/9/4	14.2	14.02-25	In progress	
				14.02-26	In progress	
				14.02-27	In progress	
				14.02-28	In progress	
				14.02-29	In progress	
				14.02-30	In progress	

RAI Response Incorporating List for the US-APWR DCD Revision 1 (5/8)

No.	RAI Issued Date	Response Submission Date	DCD Section	Question No.	Impact on DCD	Incorporate into Rev.1
				14.02-31	In progress	
				14.02-32	In progress	
				14.02-33	In progress	
				14.02-34	In progress	
				14.02-35	In progress	
				14.02-36	In progress	
				14.02-37	In progress	
				14.02-38	In progress	
				14.02-39	In progress	
				14.02-40	In progress	
				14.02-41	In progress	
				14.02-42	In progress	
				14.02-43	In progress	
				14.02-44	In progress	
				14.02-45	In progress	
				14.02-46	In progress	
				14.02-47	In progress	
				14.02-48	In progress	
				14.02-49	In progress	
				14.02-50	In progress	
				14.02-51	In progress	
				14.02-52	In progress	
				14.02-53	In progress	
				14.02-54	In progress	
				14.02-55	In progress	
				14.02-56	In progress	
				14.02-57	In progress	
				14.02-58	In progress	
				14.02-59	In progress	
				14.02-60	In progress	
				14.02-61	In progress	
				14.02-62	In progress	
				14.02-63	In progress	
				14.02-64	In progress	
				14.02-65	In progress	
				14.02-66	In progress	
				14.02-67	In progress	
				14.02-68	In progress	
				14.02-69	In progress	
				14.02-70	In progress	
				14.02-71	In progress	
				14.02-72	In progress	
				14.02-73	In progress	
				14.02-74	In progress	
				14.02-75	In progress	

RAI Response Incorporating List for the US-APWR DCD Revision 1 (6/8)

No.	RAI Issued Date	Response Submission Date	DCD Section	Question No.	Impact on DCD	Incorporate into Rev.1
				14.02-76	In progress	
				14.02-77	In progress	
				14.02-78	In progress	
				14.02-79	In progress	
				14.02-80	In progress	
				14.02-81	In progress	
				14.02-82	In progress	
				14.02-83	In progress	
				14.02-84	In progress	
				14.02-85	In progress	
34	2008/7/24	2008/9/7	9.5.3			
35	2008/7/24	2008/8/22	19	19-79	N	
				19-80	N	
				19-81	N	
				19-82	N	
				19-83	N	
				19-84	N	
				19-85	N	
36	2008/7/24	2008/8/22	16		Y	Y
37	2008/7/24	2008/9/7	6.5.3	06.05.03-1	In progress	
38	2008/7/24	2008/8/22	15.0.3	15.0.3-1	N	
				15.0.3-2	N	
				15.0.3-3	N	
				15.0.3-4	N	
				15.0.3-5	N	
				15.0.3-6	N	
				15.0.3-7	N	
				15.0.3-8	N	
				15.0.3-9	Y	N
				15.0.3-10	N	
				15.0.3-11	Y	N
				15.0.3-12	N	
				15.0.3-13	Y	N
				15.0.3-14	Y	Y
				15.0.3-15	N	
				15.0.3-16	Y	N
				15.0.3-17	N	
				15.0.3-18	N	
				15.0.3-19	N	
				15.0.3-20	N	
				15.0.3-21	N	
				15.0.3-22	Y	N
				15.0.3-23	N	
39	2008/7/29	2008/9/27	19	19-44	In progress	
				19-45	In progress	

RAI Response Incorporating List for the US-APWR DCD Revision 1 (7/8)

No.	RAI Issued Date	Response Submission Date	DCD Section	Question No.	Impact on DCD	Incorporate into Rev.1
				19-46	N	
				19-47	N	
				19-48	N	
				19-49	N	
				19-50	N	
				19-51	N	
				19-52	Y	N
				19-53	Y	N
				19-54	N	
				19-55	In progress	
				19-56	N	
				19-57	N	
				19-58	Y	N
				19-59	Y	N
				19-60	N	
				19-61	Y	N
				19-62	N	
				19-63	N	
				19-64	In progress	
				19-65	In progress	
				19-66	N	
				19-67	In progress	
				19-68	In progress	
				19-69	In progress	
				19-70	N	
				19-71	In progress	
				19-72	Y	N
				19-73	N	
				19-74	N	
				19-75	N	
				19-76	In progress	
				19-77	Y	N
40	2008/7/29	2008/8/28	19	19-78	N	
				19-86	Y	N
				19-87	N	
				19-88	N	
				19-89	Y	N
				19-90	In progress	
				19-91	N	
				19-92	N	
				19-93	Y	N
				19-94	Y	N
				19-95	N	
				19-96	N	
				19-97	Y	N

RAI Response Incorporating List for the US-APWR DCD Revision 1 (8/8)

No.	RAI Issued Date	Response Submission Date	DCD Section	Question No.	Impact on DCD	Incorporate into Rev.1
				19-98	Y	N
				19-99	N	
				19-100	N	
41	2008/7/30	2008/9/13	2.3.1	02.03.01-15	In progress	
42	2008/7/30	2008/9/13	2.3.4	02.03.04-1	In progress	
				02.03.04-2	In progress	
				02.03.04-3	In progress	
				02.03.04-4	In progress	
				02.03.04-5	In progress	
43	2008/7/30	2008/9/13	2.3.5	02.03.05-1	In progress	
44	2008/7/30	2008/9/13	2.3.5		In progress	
45	2008/7/31	2008/8/30	6.2.2	06.02.02-1	In progress	
				06.02.02-2	In progress	
				06.02.02-3	In progress	
				06.02.02-4	In progress	
46	2008/7/31	2008/8/30	13.3	13.3-1	In progress	
				13.3-2	In progress	
				13.3-3	In progress	

Docket No. 52-021
MHI Ref: UAP-HF-08153

Enclosure 4

UAP-HF-08153
Docket No. 52-021

Technical Report Tracking List
for
US-APWR Design Control Document Revision 1

August 2008

General description

This enclosure lists the technical reports which have already been submitted or will be submitted in the future. The column named "Referenced in DCD" shows whether the report is referenced in the related Design Control Document ("DCD") section. The column named "Summarized in DCD" shows whether the report is summarized in the related DCD section.

Technical Report Tracking List for the US-APWR DCD Revision 1 (1 of 2)

Report No	Report Name	Supports DCD Section	Rev	Submittal Dates	Referenced in DCD	Summarized in DCD
MUAP-07022-P&NP	US-APWR Reactor Vessel Lower Plenum 1/7 Scale Model Flow Test	1.5.2.1.2	0	06/30/08	Y	Y
MUAP-07023-P&NP	APWR Reactor Internals 1/5 Scale Model Flow Test Report	1.5.2.1.1 3.9.2.3.3	0	12/31/07	Y	Y
TBD	Summary of Stress Analysis Results for Components and Piping	3.9.3 5	0	03/2009	Y	N
TBD	US-APWR Equipment Environmental Qualification Program	3.10.4.1 3.11	0	12/2008	Y	Y
MUAP-08005-P&NP	Dynamic Analysis of the Coupled RCL-R/B-PCCV-CIS Lumped Mass Stick Model	3.7.1 3.7.2 3.7.3	0	04/25/08	Y	Y
MUAP-08002	Enhanced Information for PS/B Design	3.7.2.8.6	0	02/27/08	Y	Y
TBD	Summary of Seismic and Accident Load Conditions for Primary Components and Piping Design	3.9.3	0	01/2009	Y	N
TBD	Summary of Design Transient	3.9.1.1	0	01/2009	Y	N
MUAP-07027-P&NP	Comprehensive Vibration Assessment Program for US-APWR Reactor Internals	3.9.2.3	0	12/31/07	Y	Y
MUAP-07016-P&NP	US-APWR Fuel System Design Evaluation	4.2.1 4.2.2 4.2.3	0	02/27/08	Y	Y
MUAP-07018-P&NP	US-APWR Fuel System Design Parameters List	4.2.2	0	12/31/07	Y	Y
MUAP-08007-P&NP	Evaluation Results of Structural Response Analysis of US-APWR Fuel System under Seismic and LOCA	4.2.3.5.2	0	03/2009	Y	Y
MUAP-07021-P&NP	US-APWR Incore Power Distribution Evaluation Methodology	4.3.2	0	12/31/07	Y	Y
MUAP-07019-P&NP	Qualification of Nuclear Design Methodology using PARAGON/ANC	4.3.2 4.3.3	0	12/31/07	Y	Y
MUAP-07020	Validation of Criticality Safety	4.3.3	0	12/31/07	Y	Y
MUAP-07015	US-APWR Technical Report FMEA of Control Rod Drive Mechanism Control System	4.6.2	0	12/31/07	Y	Y
MUAP-07035	Structural Analysis for US-APWR Coolant Pump Motor Flywheel	5.4.1.1	0	12/31/07	Y	Y
MUAP-08001	US-APWR Sump Strainer Performance	5.2 6.2	1	09/2008	Y	Y
MUAP-08006-P&NP	US-APWR Sump Debris Chemical Effects Test Plan	6	0	06/30/08	N	N
TBD	US-APWR Sump Strainer Stress Report	6	0	11/2008	Y	N
TBD	Sump Strainer: Structural Analysis, Structural Analysis Results (including Stress Results) and Detail Drawings	6	0	11/2008	Y	N
TBD	Sump Strainer: Chemical Effects, Confirmatory Test Results for the Chemical Effects, including the Assessment of Debris Characteristics	6	0	11/2008	Y	N
TBD	Sump Strainer: Downstream Effects, Supplemented with Additional Details in Ex-vessel and In-vessel Issues	6	0	12/2008	Y	N
MUAP-07031-P&NP	Subcompartment Analyses for US-APWR Design Confirmation	6.2.1.2	0	02/27/08	Y	Y
MUAP-07017	US-APWR Technical Report Software Program Manual	7.1 7.9	0	12/31/07	Y	Y
MUAP-07014	US-APWR Defense in Depth and Diversity Coping Analysis	7.8	1	06/20/08	Y	Y
MUAP-08003	US-APWR Cyber Security Program	7.9	0	08/29/08	Y	Y
MUAP-07024-P&NP	Qualification & Test Plan of Class 1E Gas Turbine Generator System	1.5 8.3.1 9.5.4 19.1	0	12/05/07	Y	Y

Technical Report Tracking List for the US-APWR DCD Revision 1 (2 of 2)

Report No	Report Name	Supports DCD Section	Rev	Submittal Dates	Referenced in DCD	Summarized in DCD
MUAP-07033	Mechanical Analyses for US-APWR New and Spent Fuel Racks	9.1	0	03/2009	Y	N
MUAP-07032-P&NP	Criticality Analysis for US-APWR New and Spent Fuel Storage Racks	9.1	0	2/28/08	Y	N
MUAP-07028-P&NP	Probability of Missile Generation from Low Pressure Turbine	3.5.1.3.2 10.2.3.5	0	12/31/07	Y	Y
MUAP-07029-P&NP	Probabilistic Evaluation of Turbine Valve Test Frequency	10.2.3.5	0	12/31/07	Y	Y
SGI	Security Assessment Report - High Assurance Evaluation	13.6	0	09/2008	Y	N
SGI	Security Assessment Report - Mitigative Measures Evaluation	13.6	0	09 or 10 /2008	N	N
SGI	Physical Security Element Review	13.6	1	09/2008	Y	N
MUAP-07025-P&NP	Small Break LOCA Sensitivity Analyses for US-APWR	15.0 15.6.5.3	0	12/31/07	Y	Y
MUAP-07026-P&NP	Mitsubishi Reload Evaluation Methodology	16 (5.6.3, B3.1.3, B3.1.8, B3.1.9)	0	12/31/07	Y	Y
MUAP-07036	Justification for Deviations Between NUREG-1431 Rev 3.1 and US-APWR Technical Specifications	16	1	08/29/08	N	N
TBD	HSI Design Technical Report	18.3 18.4 18.6 18.7	0	06/2009	Y	N
TBD	U.S. Operator V&V Technical Report	18.2	0	12/2008	Y	N
MUAP-07030-P	US-APWR Probabilistic Risk Assessment MUAP-07030 (Level 1/2)	7.1 19.0 19.2	1	09/30/08	Y	Y
MUAP-08004	US-APWR Probabilistic Risk Assessment (Level 3)	19.2.6.1 Environmental Report	1	09/30/08	Y	Y
SGI	Beyond DBT Aircraft Impact Assessment	19	0	late 2008 /early 2009	N	N