



**MITSUBISHI HEAVY INDUSTRIES, LTD.**  
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TOKYO, JAPAN

January 31, 2013

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-13020

**Subject: DCD Markups Associated with Updated Seismic Closure Plan for US-APWR  
Seismic and Structural Analyses**

- Reference:**
- 1) Letter MHI Ref. UAP-HF-12280 from Y. Ogata ("MHI") to U.S. NRC, "Updated Closure Plan for US-APWR Seismic and Structural Analyses - Schedule Improvement", dated October 12, 2012
  - 2) Letter MHI Ref. UAP-HF-12310 from Y. Ogata ("MHI") to U.S. NRC, "Transmittal of Technical Report Soil-Structure Interaction Structural Analyses and Result for the US-APWR Standard Plant (MUAP-10006, Revision3)", dated November 30, 2012
  - 3) Letter MHI Ref. UAP-HF-12311 from Y. Ogata ("MHI") to U.S. NRC, "Transmittal of Technical Report Ground Water Effects on SSI for the US-APWR Standard Plant (MUAP-11007, Revision 2)", dated November 30, 2012

With this letter, Mitsubishi Heavy Industries, Ltd. ("MHI") transmits to the U.S. Nuclear Regulatory Commission ("NRC") the DCD markups scheduled for submittal in January 2013 in Table 3 of the "Updated Seismic Closure Plan" (Reference 1). The applicable DCD Sections are identified in Attachment 1 which includes the reason for the change. The subject markups are associated with US-APWR layout changes and the following two Technical Reports submitted on November 30, 2012:


- MUAP-10006 Revision 3, "Soil-Structure Interaction Analyses and Results for the US-APWR Standard Plant" (Reference 2)
- MUAP-11007 Revision 2, "Ground Water Effect on SSI for the US-APWR Standard Plant" (Reference 3)

One version of the mark-ups include certain information, designated pursuant to the Commission guidance as sensitive unclassified non-safeguards information, referred to as security-related information ("SRI"), that is to be withheld from public disclosure under 10 CFR § 2.390. The information that is SRI is identified by braces "[ ]". Another version omits the SRI and is suitable for public disclosure. In the public version of the DCD, the SRI is replaced by designation "Security Related Information – Withheld under 10 CFR 2.390".

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.

DD81  
NRD

Sincerely,

A handwritten signature in black ink, appearing to read 'Y. Ogata'.

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

Enclosures :

- CD 1: "DCD Markups on January 2013 Associated with Updated Seismic Closure Plan for US-APWR Seismic and Structural Analyses" (SRI included version)
- CD 2: "DCD Markups on January 2013 Associated with Updated Seismic Closure Plan for US-APWR Seismic and Structural Analyses" (SRI excluded version)

The change list is in Attachment 1.

The files contained in each CD are listed in Attachment 2.

CC: J. A. Ciocco  
J. Tapia

Contact Information

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**ATTACHMENT – 1**

**Change list**

Change ID No.	Section	Page	Reason for change	Change Summary
MIC-03-06-00073	Tier1 2.2.1.2	[2.2-1]	Updated Seismic Closure Plan (Transmittal Letter UAP-HF-12208 Dated Oct 12, 2012)	Update the description related to the seismic and structure.
MIC-03-09-00012	Tier1 Figure 2.7.3.1-1	[2.7-109]	Updated Seismic Closure Plan (Transmittal Letter UAP-HF-12208 Dated Oct 12, 2012)	Update the description related to the seismic and structure.
MIC-03-01-00015	Tier 2 ACRONYMS 1.2.1.7 1.2.1.7.1 1.2.1.7.2.1 1.2.1.7.2.2 1.2.1.7.2.4 1.2.1.7.2.5  Figures: 1.2-1 – 1.2-39 1.2-51  Table: 1.8-1	[1-xvi] [1.2-46] [1.2-47] [1.2-49] [1.2-50] [1.2-50] [1.2-50]  [1.2-51] -[1.2-89] [1.2-101]  [1.8-3] -[1.8-4]	Updated Seismic Closure Plan (Transmittal Letter UAP-HF-12208 Dated Oct 12, 2012)	Update the description related to the seismic and structure.
MIC-03-01-00020	Figures: 1.2-40 – 1.2-48	[1.2-90] -[1.2-98]	Updated Seismic Closure Plan (Transmittal Letter UAP-HF-12208 Dated Oct 12, 2012)	Update the description related to the seismic and structure.
MIC-03-01-00022	Tier 2 Table: 1.6-2	[1.6-4] [1.6-6] [1.6-7]	Updated Seismic Closure Plan (Transmittal Letter UAP-HF-12208 Dated Oct 12,	Update the description related to the seismic and

Change ID No.	Section	Page	Reason for change	Change Summary
			2012)	structure.
MIC-03-03-00054	Tier 2 Table: 1.8-2	[1.8-12] [1.8-13] [1.8-14]	Technical Reports MUAP-10006 R3 (Transmittal letter UAP-HF-12310 Dated Nov 30, 2012) based on Updated Seismic Closure Plan (Transmittal Letter UAP-HF-12208 Dated Oct 12, 2012).	Update COL items to match changes in Section 3.7.
MIC-03-02-00004	Tier 2 ACRONYMS Tables: 2.3-2 2.3-3 2.3.4-1  2.3.4-2  2.3.4-3  2.3.4-4 2.3.4-5  2.3.4-6  2.3.4-7  Figure: 2.3-2	[2-vi]  [2.3-6] [2.3-7] [2.3-8] [2.3-9] [2.3-13] [2.3-15] -[2.3-17] [2.3-23] [2.3-25] [2.3-28] [2.3-29] [2.3-33] [2.3-35] [2.3-40] [2.3-44] [2.3-46] [2.3-49] [2.3-50] [2.3-52] [2.3-53]  [2.3-57]	Updated Seismic Closure Plan (Transmittal Letter UAP-HF-12208 Dated Oct 12, 2012)	Update the description related to the seismic and structure.
MIC-03-03-00054	Tier 2 3.7 3.7.1.1  3.7.1.2  3.7.1.3	[3.7-1] [3.7-1] -[3.7-11]  [3.7-11] -[3.7-14]  [3.7-15] -[3.7-18]	Technical Reports MUAP-10006 R3 (Transmittal letter UAP-HF-12310 dated Nov 30, 2012) and MUAP-11007 R2 (Transmittal letter UAP-HF-12311 dated Nov 30,	Update the Seismic analysis to incorporate the change to the structure, the change to the time histories,

Change ID No.	Section	Page	Reason for change	Change Summary
	3.7.2	[3.7-18] -[3.7-19] [3.7-21] -[3.7-23]	2012) based on Updated Seismic Closure Plan (Transmittal Letter UAP-HF-12208 Dated Oct 12, 2012).	and the revision of the soil properties.
	3.7.2.1	[3.7-23] -[3.7-25]		
	3.7.2.2	[3.7-25] -[3.7-26]		
	3.7.2.3.1	[3.7-26] -[3.7-31]		
	3.7.2.3.2	[3.7-31] -[3.7-36]		
	3.7.2.3.3	[3.7-36] -[3.7-37]		
	3.7.2.3.4	[3.7-38]		
	3.7.2.3.5	[3.7-38] -[3.7-41]		
	3.7.2.3.6	[3.7-41] -[3.7-42]		
	3.7.2.3.7	[3.7-43]		
	3.7.2.3.8	[3.7-45] -[3.7-50]		
	3.7.2.3.9.1	[3.7-51]		
	3.7.2.3.9.2	[3.7-51]		
	3.7.2.3.10	[3.7-52] -[3.7-55]		
	3.7.2.3.10.1	[3.7-56] -[3.7-57]		
	3.7.2.3.10.2	[3.7-58]		
	3.7.2.3.10.3	[3.7-59]		
	3.7.2.3.10.4	[3.7-60]		

Change ID No.	Section	Page	Reason for change	Change Summary
	3.7.2.3.10.5	[3.7-61]		
	3.7.2.3.11	[3.7-62]		
	3.7.2.4	[3.7-62] -[3.7-69]		
	3.7.2.4.1	[3.7-69]		
	3.7.2.4.2	[3.7-69]		
	3.7.2.4.3	[3.7-70] -[3.7-71]		
	3.7.2.4.4	[3.7-71] -[3.7-72]		
	3.7.2.4.5	[3.7-72] -[3.7-74]		
	3.7.2.5	[3.7-75] -[3.7-77]		
	3.7.2.6	[3.7-78]		
	3.7.2.8	[3.7-81] -[3.7-82]		
	3.7.2.8.1	[3.7-82] -[3.7-83]		
	3.7.2.8.2	[3.7-83] -[3.7-84]		
	3.7.2.8.3	[3.7-84] -[3.7-85]		
	3.7.2.8.4	[3.7-85] -[3.7-86]		
	3.7.2.9	[3.7-86]		
	3.7.2.12	[3.7-88]		
	3.7.2.14	[3.7-88]		
	3.7.3.7	[3.7-98]		
	3.7.5	[3.7-105] -[3.7-107]		

Change ID No.	Section	Page	Reason for change	Change Summary
	3.7.6  Tables: 3.7.1-1 -3.7.1-7  3.7.2-1 -3.7.2-3  Figures: 3.7.1-1 - 3.7.1-16  3.7.2-1 - 3.7.2-17  Appendix 3H   Appendix 3I 3I.1 3I.2	[3.7-109] [3.7-111] -[3.7-112]  [3.7-113] -[3.7-121]  [3.7-122] -[3.7-126]  [3.7-129] -[3.7-142]  [3.7-143] -[3.7-158]  [3H-ii] -[3H-iv] [3H-1] -[3H-26]  [3I-1] [3I-1]		
MIC-03-03-00055	Tier 2: Appendix 3D: Table 3D-2	[3D-31] -[3D-33] [3D-37] [3D-42]	Updated Seismic Closure Plan (Transmittal Letter UAP-HF-12208 Dated Oct 12, 2012)	Update the description related to the seismic and structure.
MIC-03-03-00042	Tier 2: Appendix 3J ACRONYMS 3J 3J.1  Figures: 3J-1  3J-3  3J-4	3J-iii [3J-1] [3J-1]  [3J-2] -[3J-15]  [3J-26] -[3J-28]  [3J-29] -[3J-31]  [3J-32]	Updated Seismic Closure Plan (Transmittal Letter UAP-HF-12208 Dated Oct 12, 2012)	Update the description related to the seismic and structure.

Change ID No.	Section	Page	Reason for change	Change Summary
	3J-5	-[3J-34]		
MIC-03-06-00073	Tier2 3.8.1.6 Compressive Strength  3.8.4.6.1.1  Tables: 3.7.2-2  3.8.1-1  3.8.5-2	[3.8-26]  [3.8-75]  [3.7-123]  [3.8-99]  [3.8-126]	Updated Seismic Closure Plan (Transmittal Letter UAP-HF-12208 Dated Oct 12, 2012)	Update the description related to the seismic and structure.
MIC-03-06-00073	Tier 2 Tables: 6.2.1-2	[6.2-86]	Updated Seismic Closure Plan (Transmittal Letter UAP-HF-12208 Dated Oct 12, 2012)	Update the description related to the seismic and structure.
MIC-03-06-00072	Tier 2 Figures: 6.2.1-5 - 6.2.1-7	[6.2-233] -[6.2-235]	Updated Seismic Closure Plan (Transmittal Letter UAP-HF-12208 Dated Oct 12, 2012)	Update the description related to the seismic and structure.
MIC-03-06-00069	Tier 2 Figures: 6.2.2-9  6.2.5-2  6.4-1  6.4-5  6.4-6  6.5-2 - 6.5-9	[6.2-325]  [6.2-380]  [6.4-18]  [6.4-22]  [6.4-23]  [6.5-22] -[6.5-29]	Updated Seismic Closure Plan (Transmittal Letter UAP-HF-12208 Dated Oct 12, 2012)	Update the description related to the seismic and structure.
MIC-03-08-00001	Tier 2 Tables: 8.3.1-9  Figures: 8.2-1	[8.3-81] -[8.3-83]  [8.2-13]	Updated Seismic Closure Plan (Transmittal Letter UAP-HF-12208 Dated Oct 12, 2012)	Update the description related to the seismic and structure.



Change ID No.	Section	Page	Reason for change	Change Summary
	8.3.1-4	[8.3-133] -[8.3-137]		
MIC-03-09-00010	Tier 2 ACRONYMS 9.2.1.2.1  9.2.1.3  Figures: 9.1.2-3  9.1.4-1  9.1.5-1 - 9.1.5-3	9-xiv [9.2-4]  [9.2-20]  [9.1-64]  [9.1-68]  [9.1-72] -[9.1-74]	Updated Seismic Closure Plan (Transmittal Letter UAP-HF-12208 Dated Oct 12, 2012)	Update the description related to the seismic and structure.
MIC-03-09-00012	Tier2 9.2.1.2.2.5  Tables: 9.2.7-1  9.2.7-2  9.4-1  9.4.3-1  9.4.5-1  Figure: 9.2.1-1	[9.2-12]  [9.2-120]  [9.2-121] -[9.2-122]  [9.4-55]  [9.4-63]  [9.4-67] -[9.4-68]  [9.2-126]	Updated Seismic Closure Plan (Transmittal Letter UAP-HF-12208 Dated Oct 12, 2012)	Update the description related to the seismic and structure.
MIC-03-09-00014	Tier2 9.4.8	[9.4-54]	Updated Seismic Closure Plan (Transmittal Letter UAP-HF-12208 Dated Oct 12, 2012)	Update the description related to the seismic and structure.
MIC-03-11-00004	Tier 2 Figures: 11.5-2a - 11.5-2k	[11.5-35] -[11.5-45]	Updated Seismic Closure Plan (Transmittal Letter UAP-HF-12208 Dated Oct 12, 2012)	Update the description related to the seismic and structure.
MIC-03-12-00005	Tier 2 Table: 12.3-1	[12.3-40] -[12.3-43]	Updated Seismic Closure Plan (Transmittal Letter UAP-HF-12208 Dated Oct 12,	Update the description related to the seismic and

Change ID No.	Section	Page	Reason for change	Change Summary
	12.3-3  12.3-10 Figures: 12.3-1  12.3-2  12.3-3  12.3-4  12.3-5 12.3-6  12.3-7  12.3-9  12.3-11  12.3-12	[12.3-46] -[12.3-48]  [12.3-130] -[12.3-131]  [12.3-132] -[12.3-165]  [12.3-166] -[12.3-175]  [12.3-176] -[12.3-185]  [12.3-186] -[12.3-195]  [12.3-196] -[12.3-205] [12.3-206] -[12.3-215]  [12.3-216]  [12.3-218]  [12.3-220] -[12.3-229]  [12.3-230 ]	2012)	structure.
MIC-03-06-00073	Tier2 Table: 14.3-1a	[14.3-31]	Updated Seismic Closure Plan (Transmittal Letter UAP-HF-12208 Dated Oct 12, 2012)	Update the description related to the seismic and structure.
MIC-03-15-00002	Tier 2 Figure: 15A-1	15A-41	Updated Seismic Closure Plan (Transmittal Letter UAP-HF-12208 Dated Oct 12, 2012)	Update the description related to the seismic and structure.

**ATTACHMENT – 2**

**FILES CONTAINED IN CDs**

**CD 1: DCD Markups on January 2013 Associated with Updated Seismic Closure Plan for US-APWR Seismic and Structural Analyses (SRI included version)**

Contents of CD1

<u>File Name</u>	<u>Size</u>	<u>Sensitivity Level</u>
Tier1.pdf	0.09MB	SRI-Included
Ch01_NonPub.pdf	1.94MB	SRI-Included
Ch02.pdf	0.18MB	SRI-Included
Ch03_NonPub.pdf	12.08MB	SRI-Included
Ch06_NonPub.pdf	1.21MB	SRI-Included
Ch08_NonPub.pdf	0.33MB	SRI-Included
Ch09_NonPub.pdf	0.36MB	SRI-Included
Ch11_NonPub.pdf	0.77MB	SRI-Included
Ch12_NonPub.pdf	11.36MB	SRI-Included
Ch14.pdf	0.07MB	SRI-Included
Ch15.pdf	0.05MB	SRI-Included

**CD 2: DCD Markups on January 2013 Associated with Updated Seismic Closure Plan for US-APWR Seismic and Structural Analyses (SRI excluded version)**

Contents of CD2

<u>File Name</u>	<u>Size</u>	<u>Sensitivity Level</u>
Tier1.pdf	0.09MB	SRI-Excluded
Ch01_Pub.pdf	0.33MB	SRI-Excluded
Ch02.pdf	0.18MB	SRI-Excluded
Ch03_Pub.pdf	9.08MB	SRI-Excluded
Ch06_Pub.pdf	0.76MB	SRI-Excluded
Ch08_Pub.pdf	0.10MB	SRI-Excluded
Ch09_Pub.pdf	0.23MB	SRI-Excluded
Ch11_Pub.pdf	0.07MB	SRI-Excluded
Ch12_Pub.pdf	0.36MB	SRI-Excluded
Ch14.pdf	0.07MB	SRI-Excluded
Ch15.pdf	0.05MB	SRI-Excluded