

- Revision 19, 9/6/2011
- Revision 20, 9/13/2011
- Revision 21, 9/20/2011
- Revision 22, 9/27/2011
- Revision 23, 10/11/2011
- Revision 24, 10/25/2011
- Revision 25, 11/8/2011

Action Items List to resolve overall I&C Issues

Related Documents

- (1) DCD Chapter 7 (Mark-up of DCD Chapter 7 rev.3)
- (2) DCD Tier 1 Section 2.5 (Mark-up of DCD Tier 1 Section 2.5 rev.3)
- (3) Safety I&C System Description and Design Process (MUAP-07004)
- (4) Safety System Digital Platform – MELTAC (MUAP-07005)
- (5) Software Program Manual (MUAP-07017)
- (6) MELTAC Platform Basic Software Program Manual (JEXU-1012-1132)
- (7) Functional Assignment Analysis for Safety Logic System (MUAP-09020)
- (8) Response Time of Safety I&C System (MUAP-09021)
- (9) Instrument Setpoint Methodology (MUAP-09022)
- (10) MELTAC Platform ISG-04 Conformance Analysis MELTAC Platform Basic Software Safety Report (JEXU-1015-1009)
- (11) US-APWR Defense-in-Depth and Diversity Coping Analysis (MUAP-07014)

Note)

Black : Finished action items

Blue : On going action items

Red : Added or revised action items at this revision

No	Action Items	Submittal Date
1	Closed	-
27		
28	The next teleconference will be held on Oct. 27th and Nov. 10 th . The teleconferences will be continued through October which will focus on the inspection and audit preparation issues to relate AIL #30 and #31.	-
29	Closed	-
30	The NRC inspection of MELTAC, including MRP and Basic SPM, etc., will be performed in September October-time frame the 5 th week of December, 2011. Periodically conference call will be planned to discuss on the inspection. MHI (MELCO) will provide planned English documents list for the inspection. The NRC will provide a previous inspection report from other vendor to MHI for better understanding of the scope and process of the inspection.	-

No	Action Items	Submittal Date
31	<p>The NRC audit for technical topics for the digital I&C design, including draft ERG and secure development environment of MELTAC, etc. will be performed in the 12th week of December, 2011 at MHI/MELCO Kobe. MHI will arrange a tour to NPP which used the safety-related MELTAC system at December 12th (Monday) at the same week.</p> <p>The additional audit will perform at MNES Arlington after the NRC above audit in Kobe (may be beginning of 2012). The NRC is trying to determine what is most important to see in Japan vs. what can be seen in the US. The NRC will provide audit plans to MHI by the end of October in November. MHI provided the proposal audit day-by-day schedules at the end of October.</p>	-
32 41	Closed	-
42	<p>RAI response for the following new RAI (non-safety automatic control signals from the PCMS to the PSMS). <u>Question No.</u> 07.09-24 (RAI 778-5866)</p>	<p>Draft Submitted at July 15th Formally Submitted at August 1st Note) This RAI is assigned as the Open Item in the draft SER and MHI is waiting feedbacks from the NRC.</p>
43 48	Closed	-
49	<p>Provide responses to the new RAI which were submitted from the NRC to relate the following HFE related new questions from the NRC.</p> <ul style="list-style-type: none"> • Are there manual actions associated with the feedwater line breaks? • Clarify whether DAS manual actions associated with the controls are credited or just available. If containment isolation and/or operation of the safety depressurization valve actions are credited, please include these manual actions in the analysis descriptions in Section 5. • Confirm MUAP-07014 statement that, "any operator actions credited in the D3 coping analysis are justified on HFE evaluation. • Is reference to MUAP-07006 appropriate? • Why is there such a big difference (4.91 hrs vs. 24 hrs) in the time required for operator action between these two documents? <p>Question No. 07-08 BTP-1/2/3/4/5 (RAI 830-6056)</p>	<p>Draft Submit by Sept. 9th Draft Submitted at Sept. 9th Draft Re-Submit by October 14th Draft Re-Submitted at October 14th Formally Submit by November 14th Responses for the new RAI which was submitted from the NRC at September 21st based on the questions to relate the left column issues. Note) MHI is waiting to receive feedbacks from the NRC for the re-submitted draft responses.</p>

No	Action Items	Submittal Date
50 51	Closed	
52	<p>Provide response to the new RAI which were submitted to relate the following question and comments from the NRC at the teleconference on September 8th.</p> <ul style="list-style-type: none"> DCD Chapter 7.8, Table 7.8-2, shows the variables monitored by the DAS, but these variables don't specifically address how the DAS monitors the containment isolation function. The staff is asking for clarification on how the DAS specifically monitors the containment isolation function on the DHP? <p>Question No. 07.08-25 (RA829-6059)</p>	<p><u>Draft Submitted at Sept. 26th</u> <u>Draft Re-Submit by October 18th</u> <u>Draft Re-Submitted at October 18th</u> <u>Formally Submit by November 14th</u></p> <p>Responses for the new RAI which was submitted from the NRC based on the discussion to relate left column issues at the teleconference on September 8th.</p> <p>Note.1) MHI is waiting to receive was received feedback (un-acceptable) from the NRC for the draft responses at the teleconference on October 6th and draft responses will be re-submitted.</p> <p>Note.2) MHI is waiting to receive feedbacks from the NRC for the re-submitted draft responses.</p>
53	Closed	
54	<p>Provide response to the following EQ requirements and MCR HVAC humidifier classification related new question from the NRC at the teleconference on September 22th.</p> <ul style="list-style-type: none"> It is not safety-related per Section 15.6.5.5.1.2, but, safety-related per MUAP-07004, Rev.7, Section 4.5.3. Chapter 7 describes humidity between b/w 30-60% to ESD test qualification, whereas Table 9.4-1 gives a range of 25-60%. MHI will check all sections related to HVAC, and will resolve difference and keep consistency between Chapter 7, 9 and 15. 	<p><u>Draft Submit by October 4th</u> <u>Draft Submitted at October 4th</u> <u>Formally Submit by November 1st</u> <u>Formally Submitted at November 1st</u></p> <p>Note) MHI is waiting to receive feedbacks from the NRC for the draft responses.</p>
55	<p>RAI responses for the following new RAIs to relate the SPM issues and the additional questions to relate the licensee's responsibility issue from the NRC at the teleconference on October 20th.</p> <p>Question No. 07-14 BTP-45/46/47/48/49/50/51/52/53/54/55 (RAI 833-6058)</p>	<p><u>Draft Submit by October 31st</u> <u>Draft Submitted at October 31st</u> <u>Formally Submit by November 14th</u></p>

No	Action Items	Submittal Date
56	<p>RAI responses for the following new RAI to relate the checksum, the CRC and the memory integrity check issue.</p> <p><u>Question No.</u> 07.01-44 (RAI 837-5945)</p>	<p>Draft Submit by October 31st Draft Submitted at October 31st Formally Submit by November 14th</p>
57	<p>Provide response to the following new question from the NRC at the teleconference on October 20th.</p> <ul style="list-style-type: none"> RAI 399-2992, Question 16-298 response's impact on DCD Chapter 7 (deletion of credited manual action due to high pressurizer water level). MHI will check all related sections including DCD Chapter 18, and will revise all related description as appropriate. 	<p>Draft Submit by November 7th Draft Submitted at November 7th Formally Submit by November 14th</p>
58	<p>Provide response to the following new comment from the NRC.</p> <ul style="list-style-type: none"> The NRC found a problem with our response to the following RAI and our response does not show the change in the number of cabinets in Tier 1. MHI will check all related sections, and will revise related description. <p><u>Question No.</u> 07.08-23/24 (RAI 775-5836)</p> <p>Provide response to the following new additional question to relate this issue from the NRC at the teleconference on October 27th.</p> <ul style="list-style-type: none"> RAI 775-5836 contains Question 7.8-23 and 24 Attachment DCD 7.8-7 under future licensing submittals Item 11-4. There is still says the UPS is N11 (non-Class 1E), but the DAAC power supply is now Class 1E. There appears to be a discrepancy, and this table needs to be updated. 	<p>Draft Submit by November 7th Draft Submitted at November 7th Formally Submit by November 14th (Note) MHI will provide responses to include the responses to the left column additional question.</p>
59	<p>RAI responses for the following RAIs to relate the SPM issue.</p> <p><u>Question No.</u> 07.01-37/38/39</p>	<p>Formally Submitted at October 4th (Note) These RAIs are assigned as the Open Items in the draft SER and MHI is waiting feedbacks from the NRC.</p>
60	<p>RAI responses for the following RAIs to relate the PAM issue.</p> <p><u>Question No.</u> 07.05-18</p>	<p>Formally Submitted at October 4th (Note.1) This RAI is assigned as the Open Item in the draft SER and MHI is waiting feedbacks from the NRC. (Note.2) MHI will explain the bases for bounding and complete PAM list to the NRC at the audit on the 12th</p>

No	Action Items	week of December.
	Action Items	Submittal Date
61	RAI responses for the following RAIs to relate the Augmented Quality issue. <u>Question No.</u> 07.07-32	Formally Submitted at October 11th Note) This RAI is assigned as the Open Item in the draft SER and MHI is waiting feedbacks from the NRC.
62	RAI responses for the following RAIs to relate the DAS Cooping Analysis. <u>Question No.</u> 07.08-17/18/19/20/21/22	Formally Submitted at Sept. 30th Note) These RAIs are assigned as the Open Items in the draft SER and MHI is waiting to feedbacks from the NRC.