

US-APWR

GSI-191 Closure Plan

May 25, 2011
Mitsubishi Heavy Industries, Ltd.

Contents



NRC Review Status

Closure Actions

Key Schedule

➤ **RAI Interactions (as of May 25, 2011)**

- 103 RAI questions issued by the NRC
- 98 responses submitted by MHI

➤ **NRC Audits**

- Basis of NPSH calculation and CAP (April 7, 2011)
- Basis of Acceptance Criteria for Core Blockage Test (April 21, 2011)

➤ **Follow-up RAIs (5 questions, not yet responded)**

- RAI 736-5644 (Apr-20, 2011)
 - 06.02.02-63 Control the use of Aluminum in containment
- RAI 737-5705 (Apr-20, 2011)
 - 06.03-100 Water level used for NPSH calculation
 - 06.03-101 Editorial correction
- RAI 740-5719 (Apr-26, 2011)
 - 06.02.02-64 Basis of ineffective pool volume calculations
- RAI 746-5721 (Apr-27, 2011)
 - 06.02.02-65 PRA associated with NPSH/CAP

NRC Review Status (Cont'd)



➤ **RAIs no longer applicable for staff review due to testing and updated submittals**

- RAI 06.02.02-18
- RAI 06.02.02-21/22/23
- RAI 06.02.02-28/30
- RAI 06.02.02-52
- RAI 06.02.02-53
- RAI 04.04-36(d)
- RAI 04.04-37(a)
- RAI 06.02.02-58/60
- RAI 06.02.02-61 Q4&Q5
- RAI 06.03-99

➤ **Current RAI status summary**

- Of the 98 questions, 11 questions and 4 sub-questions are no longer applicable for review
- 41 “resolved/closed”
- 4 “confirmatory items”
- 23 “question closed/issue unresolved”
- Remaining 19 are “responded”.

Closure Actions



➤ **NRC is requested to confirm the following status:**

- RAI 04.04-8 to -18 Downstream Evaluation (Ex-vessel)
- RAI 04.04-19 to -39 Downstream Evaluation (In-vessel)
- RAI 06.02.02-62 and NPSH and CAP credit
06.03-84/85/86/87/98

➤ **MHI will update following information:**

- RAI 14.03.11-38,39 Provide DCD markup to update ITAAC associated with strainer design
- RAI 06.02.02-24 Update MUAP-08001 Figure 3-8 as responded
- RAI 06.02.02-44 Provide DCD markup for debris source term
- RAI 06.02.02-54 Update MUAP-08001 to include assessment of void fraction impacts on NPSH, and use of terminology discussed in RG 18.2R4 draft.
- RAI 06.02.02-55 Provide DCD markup for strainer information
- RAI 4.04-40 Update MUAP-08001 Table 3-10 as responded
- RAI 06.02.02-61 Update MUAP-08001 to include new design basis debris information and HL tests repeatability
- RAI 06.03-98 Issue Half-gap CIB Test Report

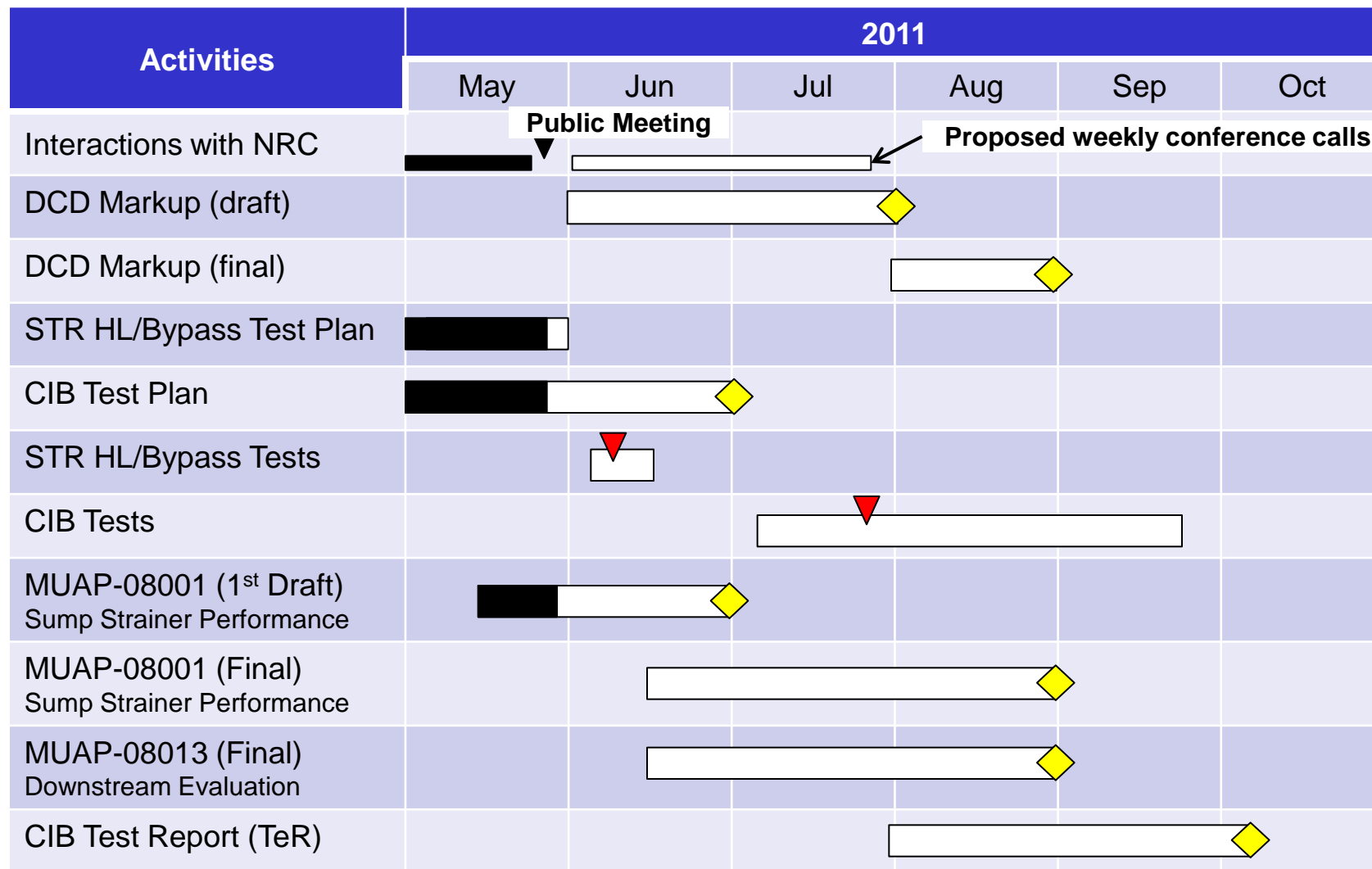
Closure Actions (Cont'd)



➤ **Proposed actions taken to support NRC review:**

- MHI proposes to the NRC to continue weekly conference calls after the public meeting in order to provide status, resolve any questions, and to accelerate closing of all RAIs.
- Additional strainer head loss tests and bypass fiber only tests are scheduled to start from June 6, 2011. NRC witness is anticipated for supporting staff review.
- Additional CIB tests using half-gap configuration is scheduled to start from July 4, 2011. NRC witness is anticipated for supporting staff review.
- Amended Technical Reports (TeRs) and supporting documents associated with GSI-191 will be submitted to the NRC as detailed in later closed sessions.
- RAI responses and DCD Markup(s) will be submitted to the NRC.

Key Schedule



MHI Action



Available for NRC review



NRC Audit