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TOKYO, JAPAN

March 20, 2008

Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Attention: Mr. Jeffrey A. Ciocco,

Project No.0751
MHI Ref: UAP-HF-08058

Subject: Responses to the NRC's Questions, concerning the "US-APWR Sump Strainer"

References:
1) Letter MHI Ref. UAP-HF-08037 from M. Kaneda (MHI) to U.S. NRC, "Responses to NRC's Questions for NRC's Acceptance Review of the US-APWR Design Certification Application" dated on February 8, 2008
2) Letter MHI Ref. UAP-HF-08044 from M. Kaneda (MHI) to U.S. NRC, "Transmittal of the Technical Report, US-APWR Sump Strainer Performance (MUAP-08001)" dated on February 27, 2008

With this letter, Mitsubishi Heavy Industries, Ltd. ("MHI") transmits to the U.S. Nuclear Regulatory Commission ("NRC") "MHI's Submittal Plan of Additional Information for the US-APWR Sump Strainer Design and Evaluation" and "Timeline for the Completion of the MHI US-APWR Sump Strainer Design and Evaluation." The enclosed Plan and Timeline provide an updated plan and schedule for the submittal of technical reports and the performance of confirmatory tests for the design and evaluation of the US-APWR sump strainer. The Plan and Timeline supplement and replace commitments made by MHI in References 1 and 2 to submit additional information to the NRC at a later date to support the NRC's review of the US-APWR Design Certification Application.

Please contact Dr. C. Keith Paulson, Senior Technical Manager, Mitsubishi Nuclear Energy Systems, Inc. for any questions that the NRC may have concerning any aspects of this submittal. His contact information is below.

Sincerely,

M. Kaneda

Masahiko Kaneda,
General Manager- APWR Promoting Department
Mitsubishi Heavy Industries, LTD.

Enclosures:
Enclosure1 – Submittal Plan for Additional Information to the US-APWR Sump Strainer Design and Evaluation
Enclosure 2 –Timeline for the Completion of the MHI US-APWR Sump Strainer Design and Evaluation

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NRO

CC: L. J. Burkhart
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Enclosure 1

US-APWR

Submittal Plan for Additional Information to the US-APWR Sump Strainer Design and Evaluation

March 2008

Submittal Plan for Additional Information to the US-APWR Sump Strainer Design and Evaluation

Evaluation Area	Technical Information Submittal Plan (via Technical Reports and Audits)		
	Technical Report submitted MUAP-08001 (Feb 27, '08)	Additional Design Information	Design Confirmation Tests
1. Description of Strainer - Design features - Specifications	Design information included	Sept-2008: Additional detail design information for the disk layer type strainer including drawings	NA
2. Break Selection - Break Size and location - Break Selection Criteria	Design information included	NA	NA
3. Debris Generation - Zone of influence - Quantity of debris	Design information included	NA	NA
4. Debris Characteristics - Insulation, coating, latent debris - Size, physical properties - Debris transport	Design information included	NA	NA
5. Debris Head Loss - Debris head loss evaluation - Thin bed effect	Design information included	Sept-2008: Technical Report of the additional evaluation results to complete the final design (existing vendor data for the debris head loss, etc. may be used to supplement the design information) The design information will be validated by the confirmatory tests.	Jan-2009: Technical Report of the confirmatory test (i.e. hydraulic test) plan and procedure for the debris head loss Mar-2009: Audit/Observation of the test available Jun-2009: Technical Report of the confirmatory test results for the debris head loss, taking into account the chemical effect (i.e. the hydraulic test results)
6. Net Positive Suction Head - Submerged level water head - Specifications of Safety-related Pumps - Head loss of piping and valves - NPSH margin	Design information included	NA	NA
7. Downstream Effects - Description of downstream components	Design information included	NA	NA
8. Upstream Effects - Flow paths upstream of the Strainer - Effective Water Volume - Submerged water level	Design information included	NA	NA
9. Chemical Effects - Identify chemical precipitates - Influence debris head loss	Design information included Plan for the confirmatory testing which takes into account the chemical effects	Sept-2008: This Technical Report will provide a further assessment of the chemical effects on pump head loss necessary to validate the final design. This validation will come as part of the April 2009 Technical Report. .	Jun-2008: Technical Report of the confirmatory test plan and procedure for the chemical effects Nov-2008: Audit/Observation of the test available Apr-2009: Technical Report of the confirmatory test results for the chemical effects, including the assessment of debris characteristics
10. Structural Analysis - Structural analysis results	Structural assessment not included	Nov-2008: Technical Report of the structural analysis results (including stress results) and detail drawings	NA

Enclosure 2

US-APWR

Timeline for the Completion of the MHI US-APWR Sump Strainer Design and Evaluation

March 2008

Timeline for the Completion of the MHI US-APWR Sump Strainer Design and Evaluation