MITSUBISHI HEAVY INDUSTRIES, LTD.

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TOKYO, JAPAN

July 8, 2011

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-11211

Subject: Submittal Plan of Supplemental Technical Reports for the US-APWR Containment Internal Structure (CIS)

Reference: (1) Letter (MHI Ref: UAP-HF-11196), from Y. Ogata (MHI) to U.S. NRC, "Transmittal of the Technical Reports "Lumped Mass Stick Model of US-APWR Reactor Building Complex" (MUAP-11006), "Results of Evaluation using LMSM for R/B Complex" (MUAP-11007), "Structure-Soil-Structure Interaction Analyses and Results for the PS/B, R/B Complex and A/B Analyses" (MUAP-11011), and "Containment Internal Structure Design and Validation Methodology" (MUAP-11013)", dated June 29, 2011

(2) Letter (ML11136A235) from Y. Ogata (MHI) to U.S. NRC, "Revised Completion Plan for US-APWR Seismic and Structural Analyses" dated May 12, 2011

In Reference 1, Mitsubishi Heavy Industries, Ltd. (MHI) describes technical report MUAP-11013 as containing the comprehensive and integrated design and validation methodology. Table 1 in Section 8.0 of this technical report provides a matrix of supplemental reports for the CIS design and validation. The first three report titles in Table 1 will contain enhanced detailed design criteria for submittal to the NRC, as described in Reference 1. The remaining five report titles in Table 1 are the previously unidentified calculation reports which will provide confirmatory information to validate the design criteria, and will be available for audit later this year. More precise dates for the availability of the reports will be provided later.

This letter provides the NRC with the schedule for the three enhanced detailed design criteria reports as committed by Reference 1. The following matrix provides the titles, content, and submittal date to NRC for these reports:

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Document No.	Title	MUAP-11013 Tasks	Contents	Date to NRC
#1 (MUAP-110118)	CIS: Stiffness and Damping for Analysis	1-A	• Applied stiffness and damping for each part of CIS	Mid-August 2011
#2 (MUAP-110119)	CIS: SC Wall Design Criteria (For In-Plane and Out-of-Plane Behavior)	2-A	• Design criteria for in-plane behavior • Design criteria for out-of-plane behavior • Design criteria for interaction equation	First Half of September 2011
#3 (MUAP-110120)	CIS: Anchorage, Connection, and Section Design and Detailing	2-C, 2-D (excluding design adequacy check)	• Design criteria for anchorage • Design criteria for connections • Design criteria for section design and detailing	Last Half of September 2011

The objective as stated in Section 1.2 of MUAP-11013 is to give an overall outline of the comprehensive and integrated design and validation approach that will be used to (i) perform analysis and design of the CIS and (ii) demonstrate the adequacy and safety of the design. The implementation of this approach is accomplished through both the establishment of enhanced design criteria, including for steel-concrete (SC) walls, and a check of the adequacy of the CIS design against the enhanced detailed design criteria. The three reports above complete the noted tasks associated with the creation of appropriate enhanced detailed design criteria reports. The check of the design adequacy against the enhanced detailed design criteria, including design check of critical sections, is integrated with other ongoing R/B complex basic design reconciliation for all seismic issues. The completion of the CIS design adequacy check is anticipated to coincide with the issuance of the revised CIS Basic Design Report, currently scheduled for January 2012 as stated in Reference 2, Attachment 2.

Also as noted in Reference 1, MHI's present approach for the SC module design is based on the existing testing data supplemented by mechanics-based models. The need for additional testing will be evaluated and the conclusions reported to the NRC by July 31, 2011. If additional testing is required, the outline of the testing will also be reported at that time.

MHI is providing the best schedule available to the NRC for the CIS qualification activities and products. Many of the activities could be impacted by predecessor activities and thus impact submittal or availability dates. For example, the current date for the CIS Basic Design Report could be impacted by validations defined in MUAP-11013 or the incorporation of NRC feedback. MHI will inform the NRC if and when the schedules are revised.

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

Sincerely,

Yoshiki Ogata,
General Manager – APWR Promoting Department
Mitsubishi Heavy Industries, LTD.

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

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