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**RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION**

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03/29/2013

**US-APWR Design Certification**

**Mitsubishi Heavy Industries**

**Docket No. 52-021**

**RAI NO.:** NO. 858-6126 REVISION 3

**SRP SECTION:** 03.08.03 – Concrete and Steel Internal Structures of Steel or Concrete Containments

**APPLICATION SECTION:** 3.8.3

**DATE OF RAI ISSUE:** 10/25/2011

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**QUESTION NO. 03.08.03-37:**

The statements in the Abstract, Section 4.1, and other sections, of MHI TR MUAP-11013-P (R1), indicate that “the code requirements will be supplemented using conservative engineering approaches, available test data, and research results.” The phrase “available test data” should be clarified. Because of the limited experience with the use of SC type structures in general and even more limited experience in its use in nuclear power plants, technical justification for the SC design methods is expected to include test data for the various aspects of design. Where existing test data may not be available or the data exist but the test configuration and/or loading is not adequate, additional testing may be needed, and justification of the approach should not necessarily be limited to only available test data.

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**ANSWER:**

This answer revises and replaces the previous MHI answer that was transmitted by letter UAP-HF-12051 (ML12075A108).

Appendices A through D of Technical Report, MUAP-11005, Rev. 1, have been added to summarize the historical test data that supports the various aspects of steel concrete (SC) wall design, including out-of-plane shear, in-plane shear, axial compression, and thermal loading.

Appendices A and B of Technical Report MUAP-11013, Rev. 2, have been added to summarize the additional confirmatory analysis and physical testing that have been performed specifically to confirm the conservatism of the US-APWR design methods.

**Impact on DCD**

There is no impact on the DCD.

**Impact on R-COLA**

There is no impact on the R-COLA.

**Impact on S-COLA**

There is no impact on the S-COLA.

**Impact on PRA**

There is no impact on the PRA.

**Impact on Technical/Topical Report**

There is no impact on the Technical/Topical Report.

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This completes MHI's response to the NRC's question.