

## US-APWRRRAIsPEm Resource

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**From:** Ciocco, Jeff  
**Sent:** Monday, April 22, 2013 1:58 PM  
**To:** us-apwr-rai@mhi.co.jp; US-APWRRRAIsPEm Resource  
**Cc:** Chen, Pei-Ying; Colaccino, Joseph; Galvin, Dennis  
**Subject:** US-APWR Design Certification Application RAI 1019-7043 (3.10)  
**Attachments:** US-APWR DC RAI 1019 EMB 7043.pdf

MHI,

The attachment contains the subject request for additional information (RAI). This RAI was sent to you in draft form. Your licensing review schedule assumes technically correct and complete responses within 30 days of receipt of RAIs.

Please submit your RAI response to the NRC Document Control Desk.

Thank you,

Jeff Ciocco  
US-APWR Projects  
New Nuclear Reactor Licensing  
301.415.6391  
[jeff.ciocco@nrc.gov](mailto:jeff.ciocco@nrc.gov)



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**From:** Ciocco, Jeff

**Created By:** Jeff.Ciocco@nrc.gov

**Recipients:**

"Chen, Pei-Ying" <Pei-Ying.Chen@nrc.gov>  
Tracking Status: None  
"Colaccino, Joseph" <Joseph.Colaccino@nrc.gov>  
Tracking Status: None  
"Galvin, Dennis" <Dennis.Galvin@nrc.gov>  
Tracking Status: None  
"us-apwr-rai@mhi.co.jp" <us-apwr-rai@mhi.co.jp>  
Tracking Status: None  
"US-APWRRRAIsPEm Resource" <US-APWRRRAIsPEm.Resource@nrc.gov>  
Tracking Status: None

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# REQUEST FOR ADDITIONAL INFORMATION 1019-7043

Issue Date: 4/22/2013

Application Title: US-APWR Design Certification - Docket Number 52-021

Operating Company: Mitsubishi Heavy Industries

Docket No. 52-021

Review Section: 03.10 - Seismic and Dynamic Qualification of Mechanical and Electrical Equipment

Application Section: 03.10

## QUESTIONS

### 03.10-19

The staff considers that MHI's response to RAI 951-6587, Question 03.10-18 Part 2 is not acceptable because the response with "previous responses are still materially accurate" is not clear. Similar to the concern of RAI 951-6587, Question 03.10-18 Part 2, as a result of the seismic reanalysis and its impact on the seismic qualification of mechanical and electrical equipment, the staff cannot make a conclusion on the acceptability of the seismic and dynamic qualification of mechanical and electrical equipment for the US-APWR. Therefore, the staff requests the applicant to provide, an assessment of the impact of the changes from the seismic reanalysis to RAI responses previously provided to the staff, particularly where the revised ISRS exceeds the original ISRS and the additional qualification is required to conform to the regulatory guidance.

### 03.10-20

The applicant's response to RAI 486-3861, Question 03.10-10, Part (a), dated December 9, 2009, is not acceptable because of the inconsistency in the determination of OBE. The first paragraph of Section B.7, Attachment B of Technical Report MUAP-08015, indicated that the OBE will be set on a site-specific basis by the COL applicant for each individual US-APWR project and it must be enveloped by 1/3 of the standard plant certified seismic design response spectra (CSDRS). Given that CSDRS-based OBE ISRS are developed based on CSDRS-based safe shutdown earthquake (SSE) ISRS, the applicant is requested to clarify the last sentence of the 4th paragraph, "When considering OBE ISRS for purpose of fatigue during seismic qualification testing of US-APWR standard plant equipment, it is acceptable to obtain OBE spectra by scaling directly from the CSDRS SSE ISRS", which is contrary to the above statement. To ensure the standard plant equipment is qualified for the site, the applicant is requested to revise MUAP-08015 on the determination of OBE by adding that "If the site-specific SSE ISRS exceeds the standard plant SSE ISRS, the OBE should be scaled from the site-specific SSE ISRS." The applicant is also requested to identify and clarify any similar statements regarding the seismic qualification of standard plant equipment in the DCD and MUAP-08015.

