**REQUEST FOR ADDITIONAL INFORMATION 767-5821 REVISION 3**

6/9/2011

US-APWR Design Certification

Mitsubishi Heavy Industries

Docket No. 52-021

SRP Section: 03.08.04 - Other Seismic Category I Structures
Application Section: 3.8.4

QUESTIONS for Structural Engineering Branch 1 (AP1000/EPR Projects) (SEB1)

03.08.04-50

In MUAP-11002 (R0), Subsection 7.3, “Turbine Building and Electrical Room Sliding and Overturning Analysis,” the first paragraph (page 26) states, “Overturning and sliding in the X (east-west) direction is not discussed, because movement in the X (east-west) direction does not impact the 4 inch space between the TI, and the R/B and PS/B.”
To meet the foundation stability acceptance criteria in SRP 3.8.5, the factor of safety for overturning and sliding in the X direction needs to be calculated. Thus, the applicant is requested to provide data that demonstrates that overturning and sliding in the X direction does not impact the 4 inch space between the safety-related structures. Additionally, the applicant is requested to include the results in Table 7.2 of MUAP-11002 (R0).

03.08.04-51

In MUAP-11002 (R0), Subsection 7.3, “Turbine Building and Electrical Room Sliding and Overturning Analysis,” the second paragraph (page 26) states, “The resistance to sliding is provided by friction at the base and sides of the substructures.”
The applicant is requested to provide the numerical value used for the friction coefficient, and to provide justification for using that value.