

REQUEST FOR ADITTIONAL INFORMATION TOPICAL REPORT
FINDS: Mitsubishi PWR Fuel Assemblies
Seismic Analysis Code
MUAP-07034 Revision 3

04/13/2011

US-APWR TOPICAL REPORT

Mitsubishi Heavy Industries

Docket No. 52-021

For guide tube (G/T) stress analysis the maximum SSE and LOCA are combined independent of time using the SRSS method. Using the SRSS method assumes the stresses are time independent and calculated separately. However, this may not account for the effect of grid crushing on G/T stresses, which may cause the additional LOCA load to produce a larger increment in bending stress compared to the independent LOCA analysis.

1. Demonstrate that the maximum G/T stress is calculated using time independent maxima (the SRSS of the independent SSE and LOCA analyses) versus adding the LOCA time history at the time of maximum SSE stress to calculate the total G/T bending stress. Perform this addition calculation for End of Life conditions of the G/T location in the core with the maximum combined SSE + LOCA bending stress.