

2.5.4.8.4 Earthquake Induced Cyclic Stress

Earthquake-induced cyclic stresses within soils considered for liquefaction analysis were the mean of the cyclic stress for each soil layer from the randomized set of soil profiles used to develop the PBSRS using the SHAKE program. The rock peak ground acceleration, the site class and F_a based on the International Building Code (2006), and the horizontal peak ground surface acceleration for the North and the South reactor are shown on Table 2.5.4.8-201.

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**Table 2.5.4.8-201
Summary of Peak Ground Acceleration Used for Liquefaction Analysis**

Structure	Rock Peak Ground Acceleration (g)	Site Class	F_a	a_{max} (g)
North Reactor	0.07	C	1.2	0.118
South Reactor	0.07	C	1.2	0.118

Notes:

Site Class and F_a were estimated based on International Building Code (IBC) (2006).

a_{max} = Horizontal peak acceleration at ground surface for the PBSRS with no CAV or scaling.
g = gravity acceleration

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