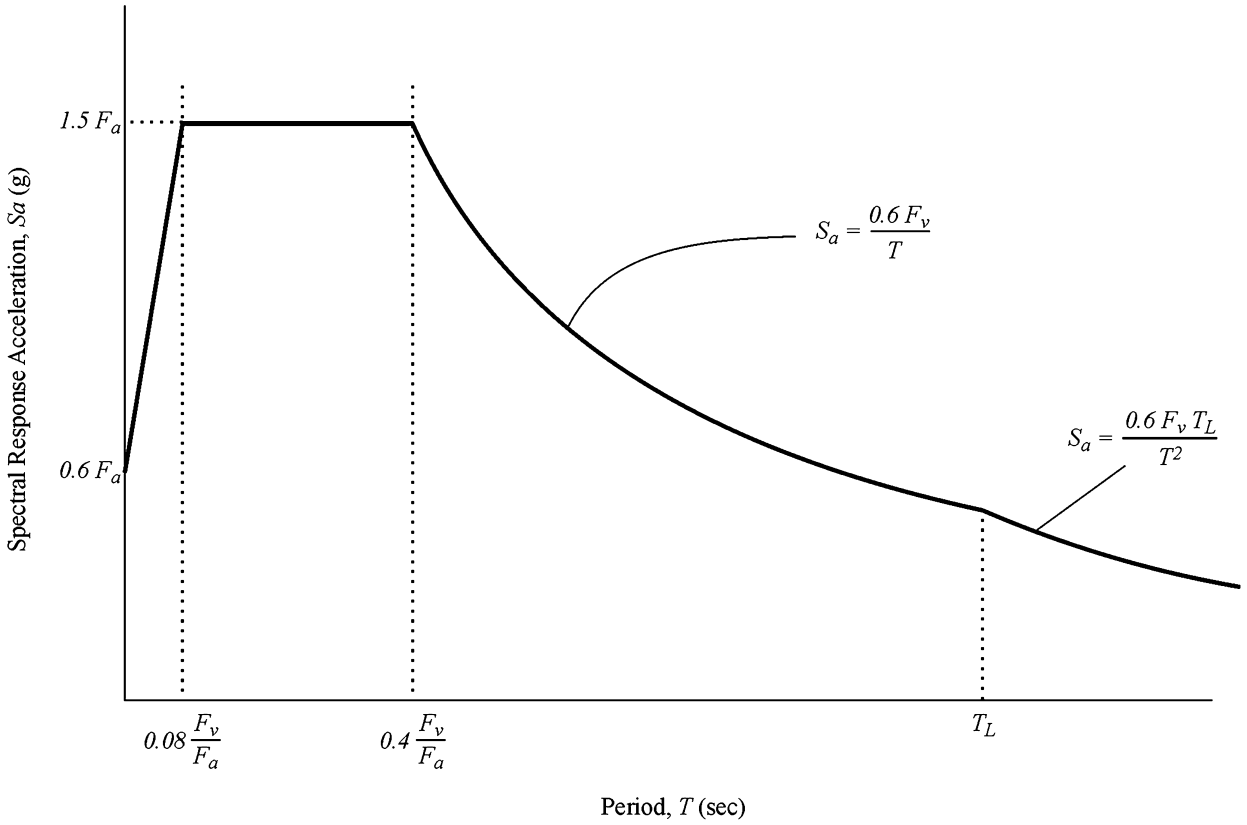

FIGURE 21.2-1 Deterministic Lower Limit on MCE_R Response Spectrum

accordance with Section 11.4.3 for S_{MS} and S_{M1} and Section 11.4.4 for S_{DS} and S_{D1}.

For use with the Equivalent Lateral Force Procedure, the site-specific spectral acceleration, S_a, at T shall be permitted to replace S_{D1}/T in Eq. 12.8-3 and $S_{D1}T_L/T^2$ in Eq. 12.8-4. The parameter S_{DS} calculated per this section shall be permitted to be used in Eqs. 12.8-2, 12.8-5, 15.4-1, and 15.4-3. The mapped value of S_1 shall be used in Eqs. 12.8-6, 15.4-2, and 15.4-4.

21.5 MAXIMUM CONSIDERED EARTHQUAKE GEOMETRIC MEAN (MCE_G) PEAK GROUND ACCELERATION

21.5.1 Probabilistic MCE_G Peak Ground Acceleration

The probabilistic geometric mean peak ground acceleration shall be taken as the geometric mean peak ground acceleration with a 2 percent probability of exceedance within a 50-year period.

21.5.2 Deterministic MCE_G Peak Ground Acceleration

The deterministic geometric mean peak ground acceleration shall be calculated as the largest 84th-percentile geometric mean peak ground acceleration for characteristic earthquakes on all known active faults within the site region. The deterministic geometric mean peak ground acceleration shall not be taken as lower than 0.5 F_{PGA}, where F_{PGA} is determined using Table 11.8-1 with the value of PGA taken as 0.5 g.

21.5.3 Site-Specific MCE_G Peak Ground Acceleration

The site-specific MCE_G peak ground acceleration, PGA_M, shall be taken as the lesser of the probabilistic geometric mean peak ground acceleration of Section 21.5.1 and the deterministic geometric mean peak ground acceleration of Section 21.5.2. The site-specific MCE_G peak ground acceleration shall not be taken as less than 80 percent of PGA_M determined from Eq. 11.8-1.