Table 13.1-1: Acceptance Criteria for Figures of Merit

Figure of Merit	Acceptance Criterion	Applicable Events
Peak TRISO temperature-time	Generally bounded by temperature-time curves derived from the assumed MHA fuel temperature-time curve	Salt Spill, Reactivity Insertion, Increase in Heat Removal, Loss of Forced Circulation, PHSS break, Seismic
TRISO failure probability	Negligible TRISO fuel failure probability	Salt Spill, Reactivity Insertion, Increase in Heat Removal, Loss of Forced Circulation, PHSS break
Peak Flibe-cover gas interfacial temperature	Generally bounded by temperature-time curves derived from the assumed MHA Flibe-cover gas interfacial temperature-time curve	Salt Spill, Reactivity Insertion, Increase in Heat Removal, Loss of Forced Circulation, PHSS break
Peak vessel and core barrel temperatures	Bounded by both the maximum allowable temperature derived to limit excessive creep deformation and damage accumulation and by 750°C (highest vessel temperature covered by qualification description in Section 4.3.3)	Salt Spill, Reactivity Insertion, Increase in Heat Removal, Loss of Forced Circulation, PHSS break
Minimum reactor vessel inner surface temperature	Above Flibe melting temperature	Loss of Forced Circulation (overcooling)
Airborne release fraction of spilled/splashed Flibe	Below airborne release fraction limit derived to bound total releases of the postulated event to less than the MHA	Salt Spill, Seismic
Volatile product formation from Flibe-air reaction	Negligible amount of additional volatile products formed	Salt Spill, PHSS break
Volatile product formation from Flibe chemical reaction with water, concrete, and/or construction materials (e.g., insulation, steel)	Negligible amount of additional volatile products formed	Salt Spill
Mass loss of pebble carbon matrix due to oxidation	Mass loss does not extend into the fueled zone	Salt Spill, PHSS break