

**3.3 SFSC CRITICALITY CONTROL****3.3.1 Boron Concentration**

LCO 3.3.1 The concentration of boron in the water in the MPC shall meet the following limits for the applicable MPC model and the most limiting fuel assembly array/class to be stored in the MPC:

MPC-37: Minimum soluble boron concentration as required by the table below<sup>†</sup>.

Array/Class	All Undamaged Fuel Assemblies		One or more Damaged Fuel Assemblies or Fuel Debris	
	Maximum Initial Enrichment $\leq 4.0$ wt% $^{235}\text{U}$ (ppmb)	Maximum Initial Enrichment 5.0 wt% $^{235}\text{U}$ (ppmb)	Maximum Initial Enrichment $\leq 4.0$ wt% $^{235}\text{U}$ (ppmb)	Maximum Initial Enrichment 5.0 wt% $^{235}\text{U}$ (ppmb)
All 14x14 and 16x16	1000	15600	1300	1800
All 15x15 and 17x17	1500	2000	1800	2300

<sup>†</sup> For maximum initial enrichments between 4.0 wt% and 5.0 wt%  $^{235}\text{U}$ , the minimum soluble boron concentration may be determined by linear interpolation between the minimum soluble boron concentrations at 4.0 wt% and 5.0 wt%.

## -----NOTE-----

This LCO does not apply if burnup credit as described in Section 2.4 of Appendix B is utilized in selecting assemblies prior to loading.  
14x14 classes must use soluble boron as described in this LCO.

APPLICABILITY: During PWR fuel LOADING OPERATIONS with fuel and water in the MPC

AND

During PWR fuel UNLOADING OPERATIONS with fuel and water in the MPC.

**ACTIONS**

## -----NOTE-----

Separate Condition entry is allowed for each MPC.