



Figure 3.29 Change of nuclide concentrations in PWR with burnup. (○) Equations of this chapter; (⊙)  $^{240}\text{Pu}$ , equations of this chapter; (⊗)  $^{241}\text{Pu}$ , equations of this chapter; (—) computer code CELL.

concentration increases, as a result of its very high absorption cross section at resonance energies, an effect that the equations of this chapter cannot take into account.

### 6.7 Reactivity Changes in PWR

Despite the inability of these equations to represent accurately the concentration of higher plutonium isotopes, the reactivity-limited burnup attainable from fuel initially containing 3.2