

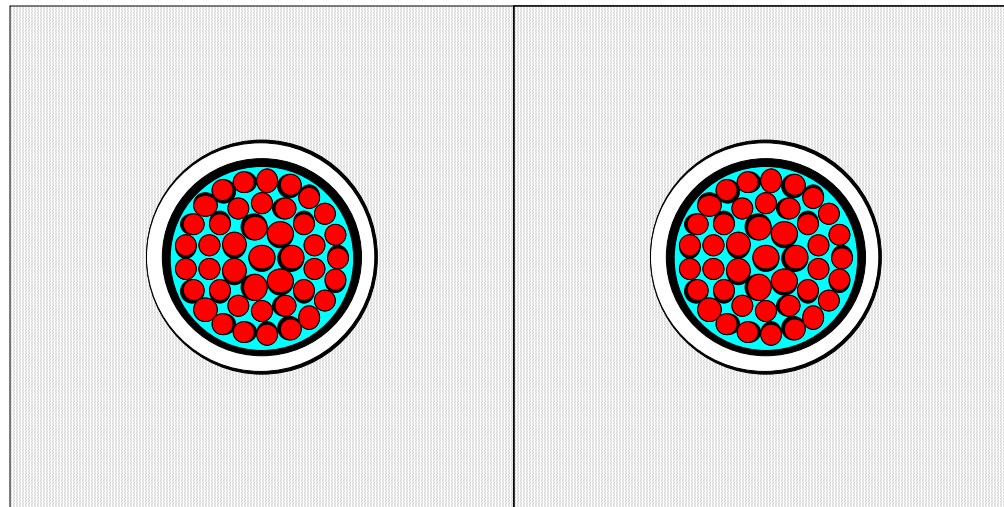


ACR Reduced Void Reactivity

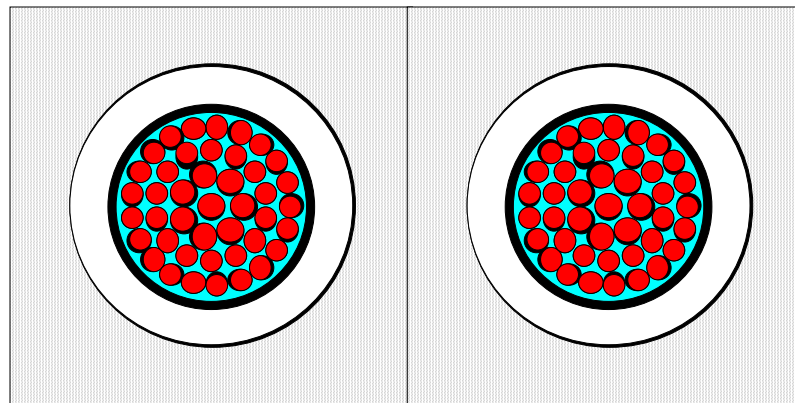
B. Rouben

ACR Full-Core Coolant Void

The full-core void reactivity in the ACR is negative, as a result of smaller lattice pitch and larger gap between pressure and calandria tube (\Rightarrow increased role of coolant as moderator), and dysprosium poison in the central fuel element)

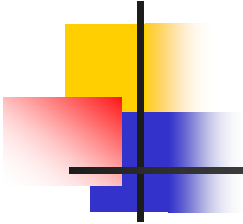


CANDU-6
Cells



ACR Cells

ACR Full-Core Coolant Void



Summary

The full-core void reactivity in the ACR is negative, as a result of:

A smaller lattice pitch

A larger gap between pressure and calandria tube (\Rightarrow increased role of coolant as moderator), and

dysprosium poison in the central fuel element