

# **NORMAL OPERATING LIMITS**

Chapter 14.0

# Objectives:

1. Define the following terms:
  - a. Axial shape index (ASI)
  - b. Equilibrium shape index (ESI)
2. Briefly describe the reasons for limiting power escalation rates.
3. Explain why load changes via soluble poison are preferred over load changes with CEA motion.
4. Briefly explain how fuel assembly waterlogging results in increased reactor coolant system (RCS) activity.

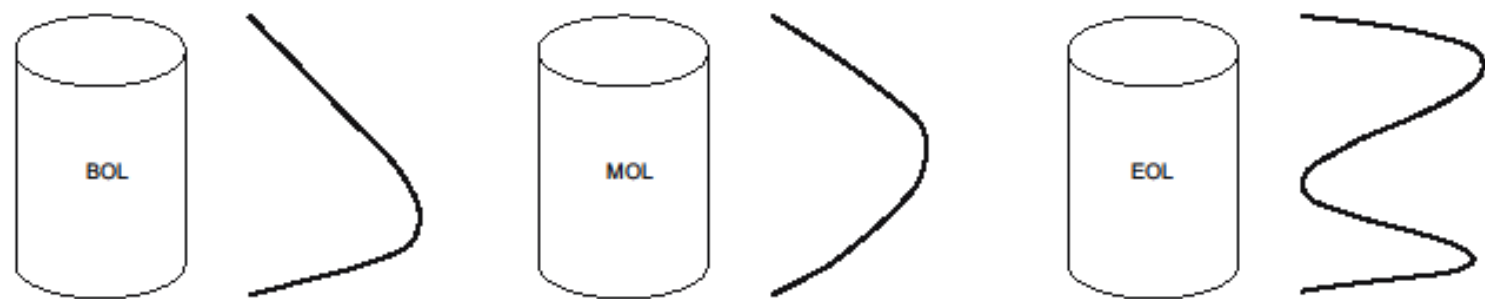


Figure 14-1 Axial Flux Profile vs. Core Age

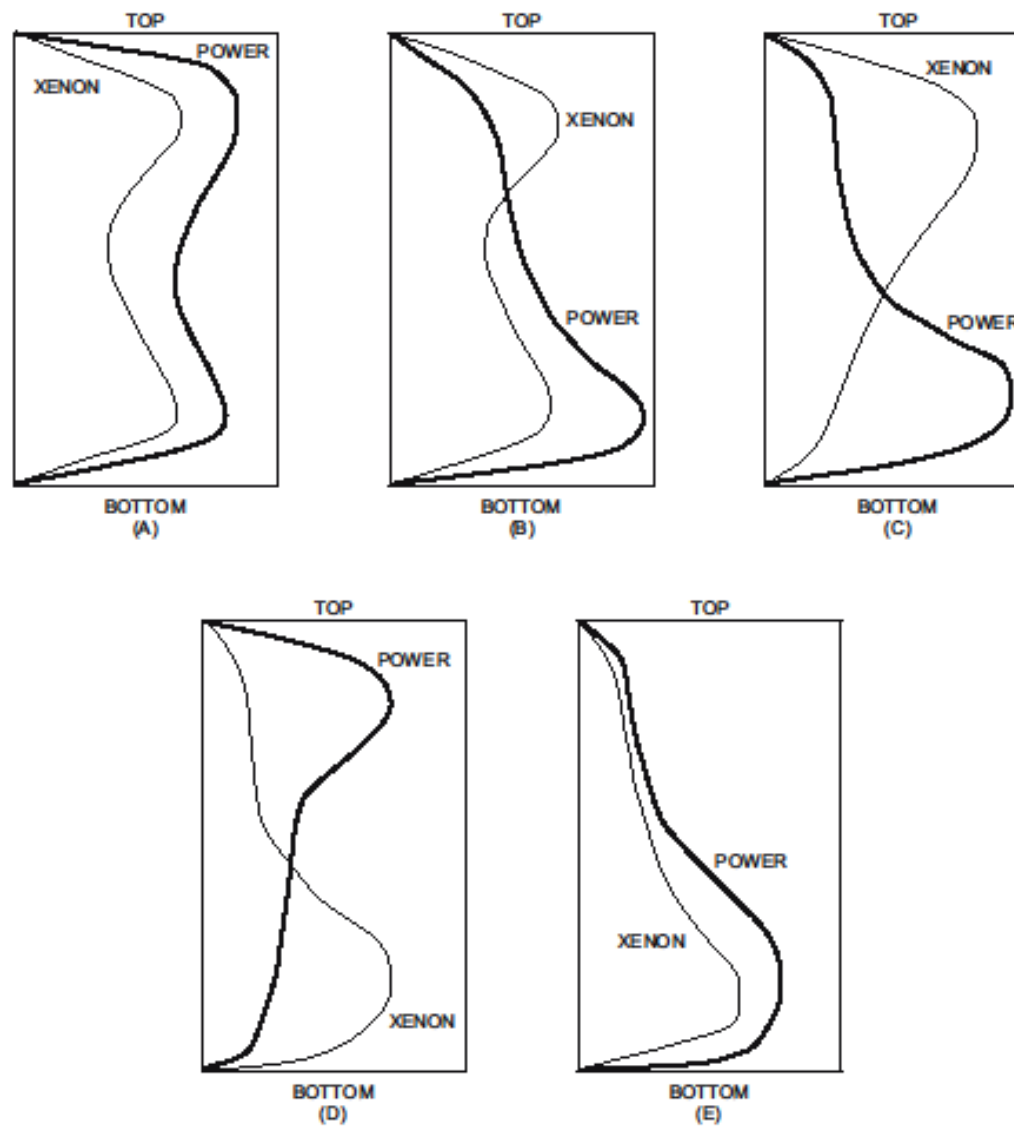


Figure 14-2 Axial Xenon Oscillation

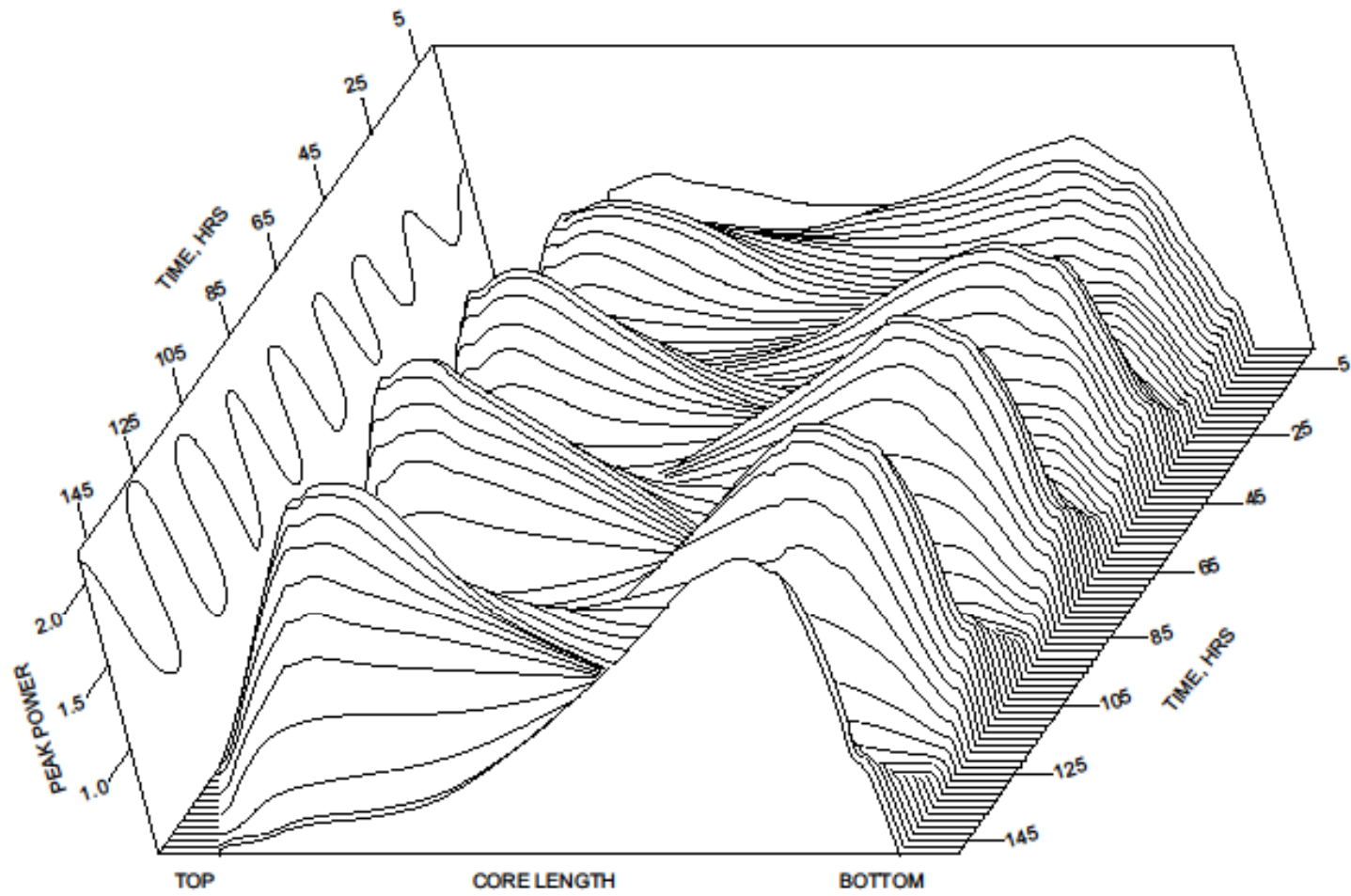


Figure 14-3 Divergent Axial Xenon Oscillation

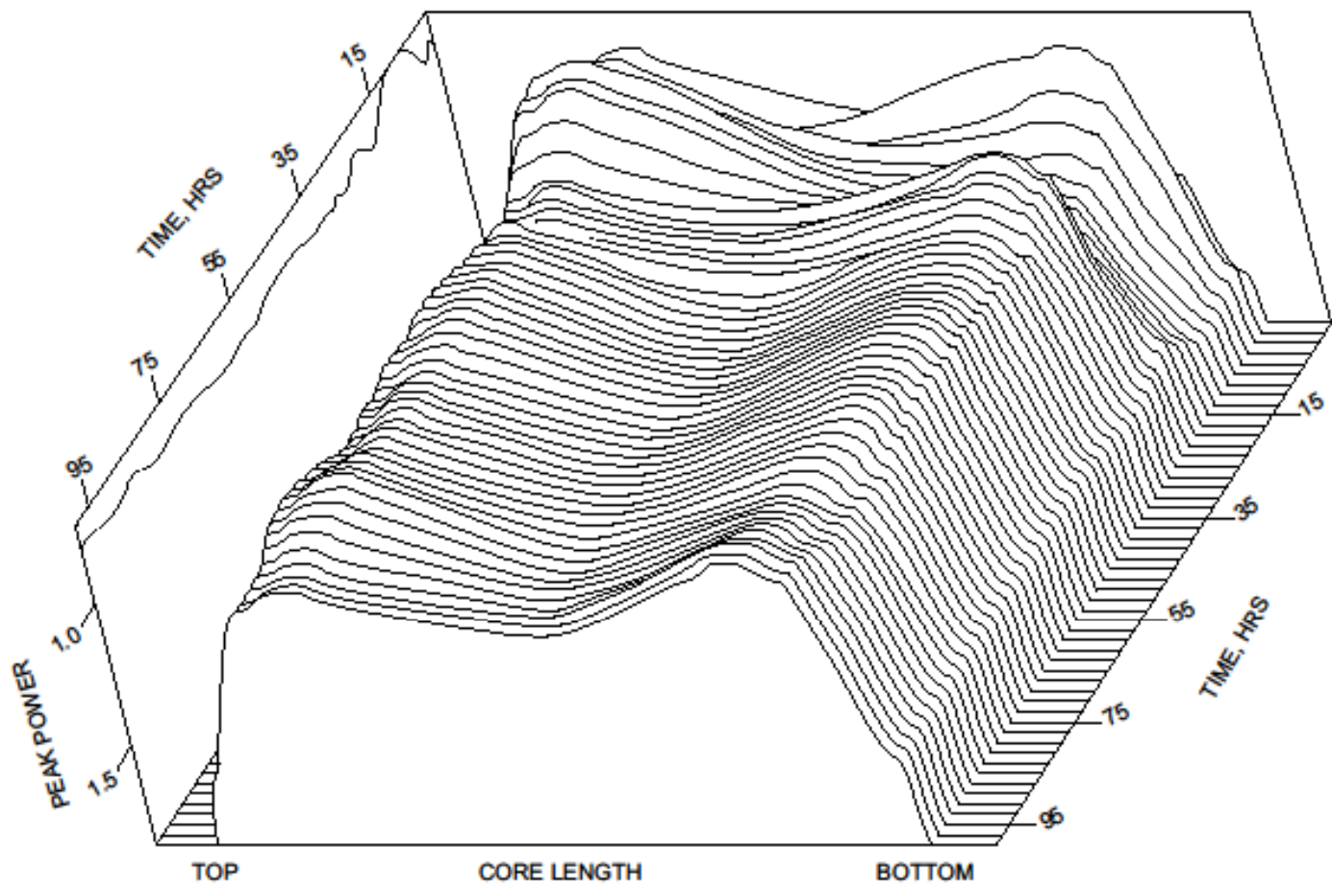


Figure 14-4 Dampened Xenon Oscillation

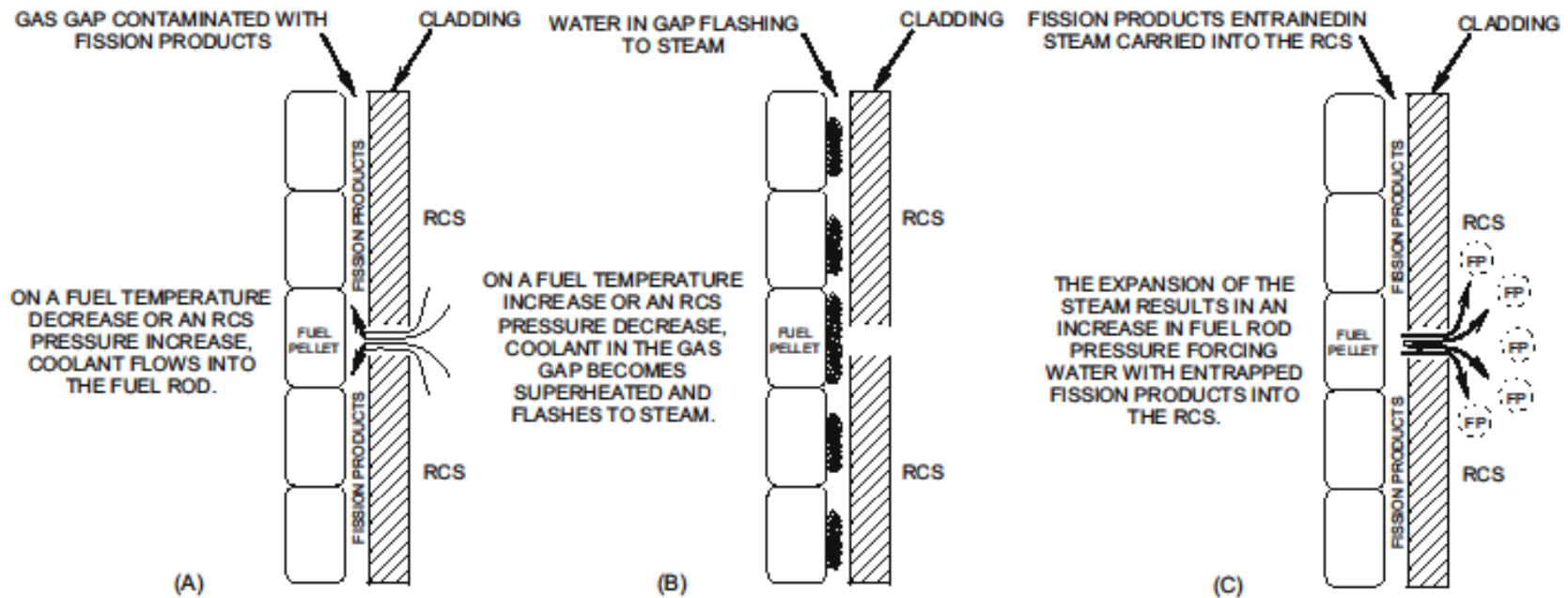


Figure 14-5 Waterlogged Fuel Assemblies

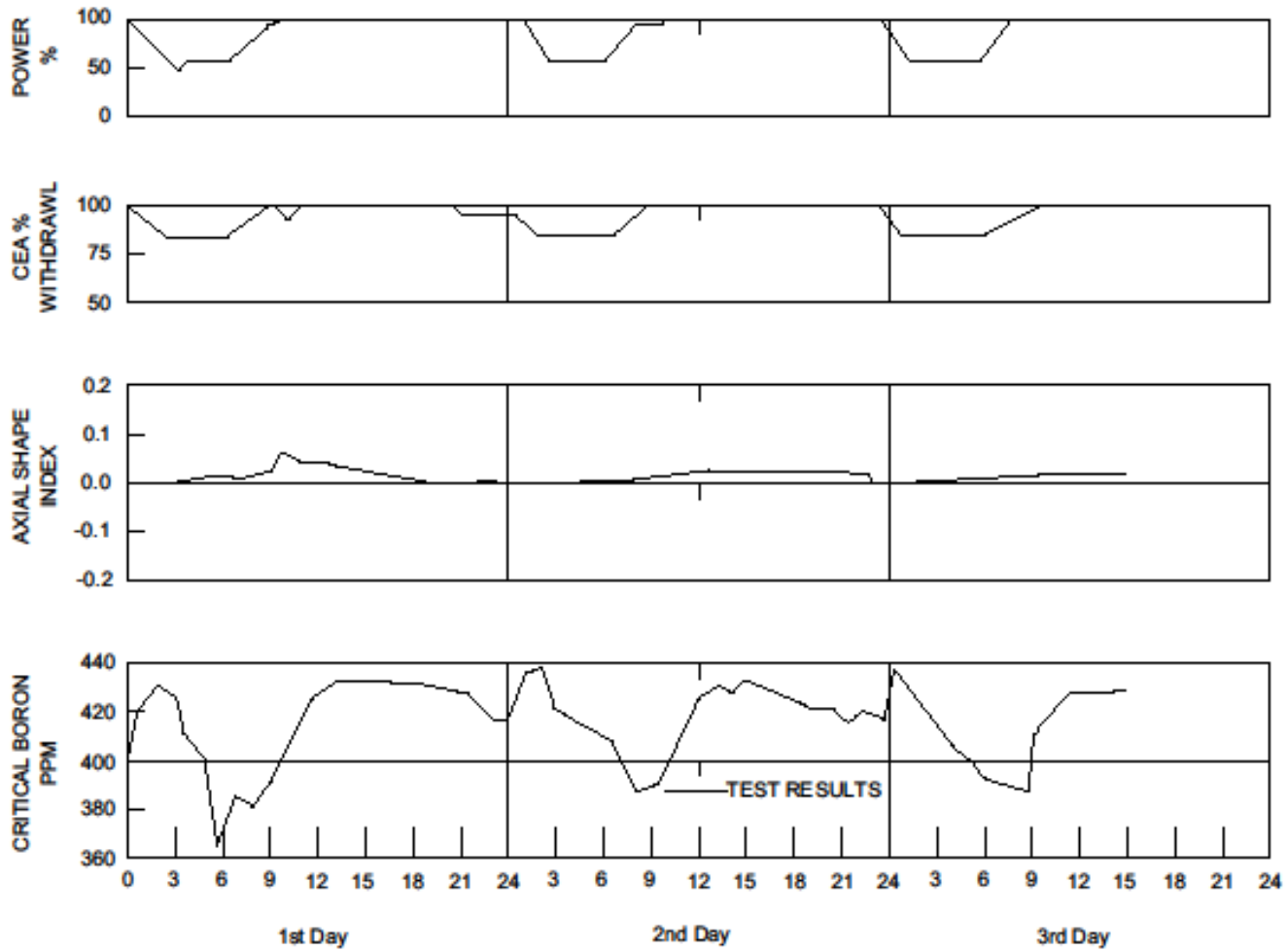


Figure 14-6 Load Following



**The End**