

CORE OPERATING LIMITS REPORT

The Core Operating Limits Report (COLR) for Turkey Point Unit 3 Up-rated Cycle 15 has been prepared in accordance with the requirements of Technical Specification 6.9.1.7.

The Technical Specifications (TS) affected by this report are:

- 3.1.3.6 Control Rod Insertion Limits
- 3.2.1 Axial Flux Difference (AFD)
- 3.2.2 Heat Flux Hot Channel Factor - $F_Q(Z)$
- 3.2.3 Nuclear Enthalpy Rise Hot Channel Factor - $F_{\Delta H}$

The Control rod Insertion Limits, AFD, $F_Q(Z)$, $K(Z)$, and $F_{\Delta H}$ have been developed using the NRC approved methodology specified in Technical Specification 6.9.1.7.

TS 3.1.3.6 Control Rod Insertion Limits

The control rod banks shall be limited in physical insertion as shown on page 2 for All Rods Out = 228 steps withdrawn.

TS 3.2.1 Axial Flux Difference

The AFD limits are provided on page 3.

TS 3.2.2 Heat Flux Hot Channel Factor - $F_Q(Z)$

$$F_Q^L = 2.35$$

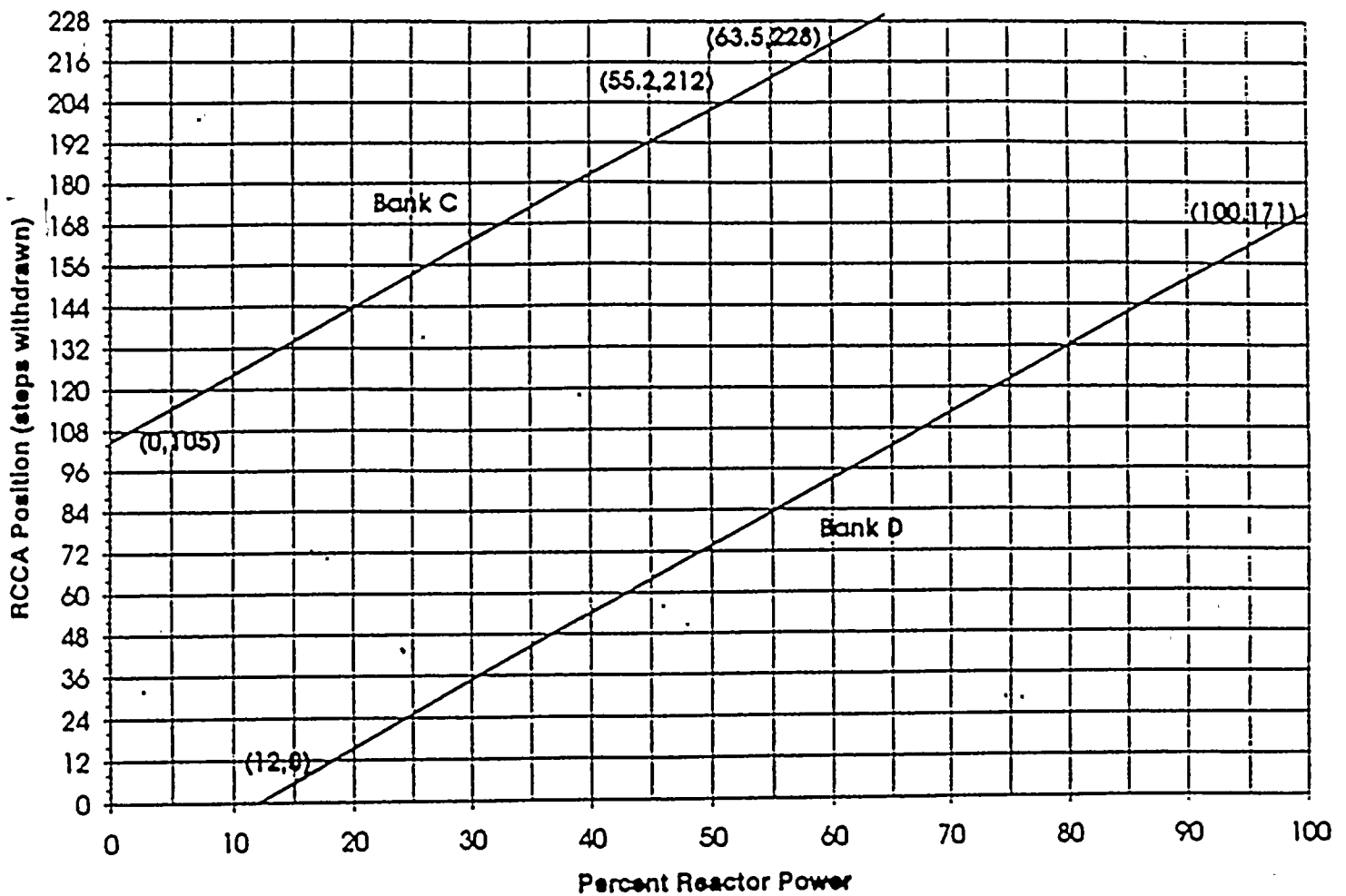
$K(Z)$ is provided on page 4.

TS 3.2.3 Nuclear Enthalpy Rise Hot Channel Factor

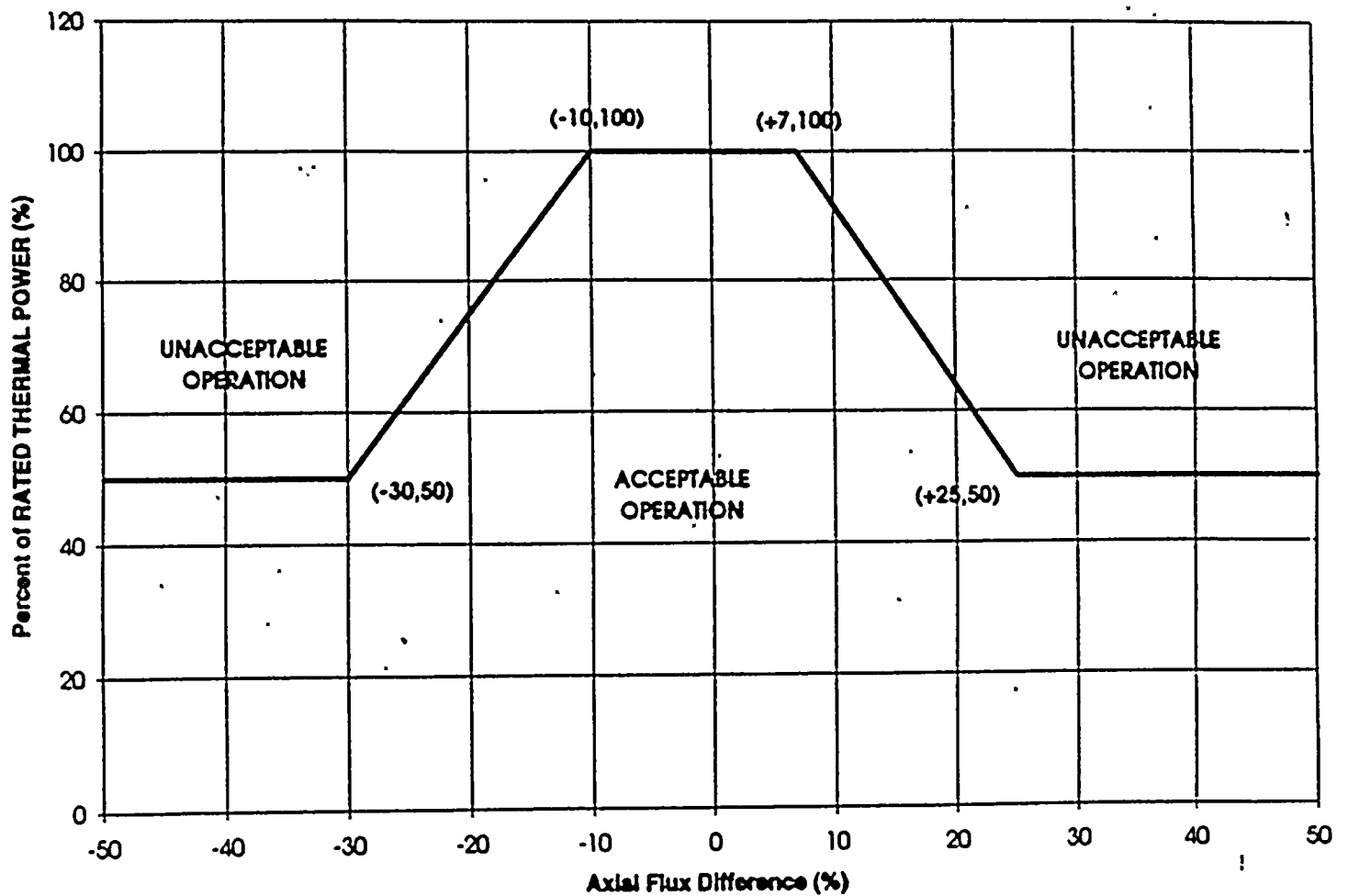
$$F_{\Delta H}^{RTP} = 1.64$$

$$PF_{\Delta H} = 0.3$$

Rod Bank Insertion Limits versus Thermal Power
ARO = 228 Steps Withdrawn, Overlap = 100 Steps
Turkey Point Unit 3 - Up-rated Cycle 15



Axial Flux Difference as a Function of Rated Thermal Power
Turkey Point Unit 3 - Upgraded Cycle 15



$K(Z)$ Normalized $F_Q(Z)$ as a Function of Core Height
Turkey Point Unit 3 - Uprated Cycle 15

