



**FPL**

OCT 20 2000

L-2000-205  
10 CFR 50.36

U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, D. C. 20555

Re: Turkey Point Unit 4  
Docket No. 50-251  
Core Operating Limits Report

By letter dated October 12, 1994, the NRC issued Amendment 161 to Facility Operating License No. DPR-41 for Turkey Point Unit 4. The amendment consisted of changes to the Technical Specifications to relocate certain cycle-specific parameter limits from the Technical Specifications to a Core Operating Limits Report (COLR). In accordance with Technical Specification 6.9.1.7, the attached COLR is provided for Turkey Point Unit 4. These curves are applicable for Unit 4 Cycle 19.

Should there be any questions, please contact us.

Very truly yours,

R. J. Hovey  
Vice President  
Turkey Point Plant

OIH

Attachment

cc: Regional Administrator, Region II, USNRC  
Senior Resident Inspector, USNRC, Turkey Point Plant

A001

## CORE OPERATING LIMITS REPORT UNIT 4 CYCLE 19

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

- 3.1.3.2 Analog Rod Position Indication System
- 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 3.1.3.2 Analog Rod Position Indication System

The All Rods Out position for all Shutdown Banks and Control Banks is defined to be 230 steps withdrawn.

### 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The control rod banks shall be limited in physical insertion as shown on page 2 for All Rods Out = 230 steps withdrawn.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 - $F_Q(Z)$

$$[F_Q]^L = 2.50$$

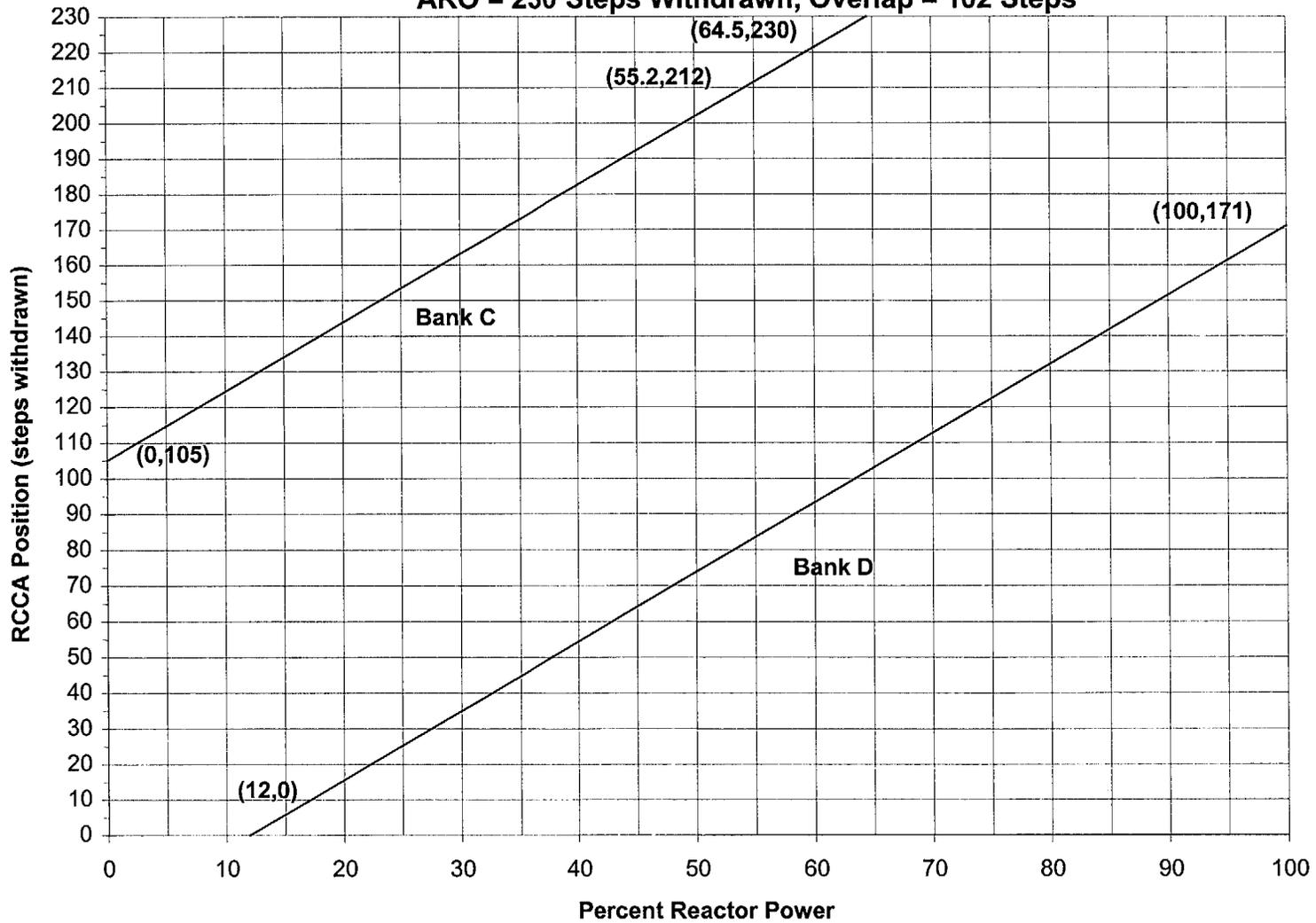
$K(Z) = 1.0$  for  $0 \text{ ft.} \leq z \leq 12 \text{ ft.}$  where  $z =$  core height.

### TS 3.2.3 Nuclear Enthalpy Rise Hot Channel Factor

$$F_{\Delta H}^{RTP} = 1.70$$

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

**Figure A1**  
**Turkey Point Unit 4 - Cycle 19 Rod Insertion Limit vs Thermal Power**  
**ARO = 230 Steps Withdrawn, Overlap = 102 Steps**



**Figure A2**  
**Axial Flux Difference as a Function of Rated Thermal Power**  
**Turkey Point Unit 4 - Cycle 19**

