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L-2011-118
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U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D. C. 20555-0001

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

In accordance with Technical Specification 6.9.1.7, the attached Core Operating Limits Report is provided for Turkey Point Unit 4. These curves are applicable for Unit 4 Cycle 26.

Should there be any questions, please contact Robert Tomonto, Licensing Manager, at 305-246-7327.

Very truly yours,

Michael Kiley
Site Vice President
Turkey Point Nuclear Plant

Attachment

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

ADD1
NRR

Turkey Point Unit 4 Cycle 26 Core Operating Limits Report

1.0 Introduction

The Core Operating Limits Report (COLR) for Turkey Point Unit 4 Cycle 26 has been prepared in accordance with the requirements of Technical Specifications 6.9.1.7.

The Technical Specifications 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

2.0 Operating Limits

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. These limits are provided in the following subsections:

2.1 Analog Rod Position Indication System (TS 3.1.3.2)

The All Rods Out (ARO) position for all shutdown Banks and Control Banks is defined to be 228 steps withdrawn.

2.2 Control Rod Insertion Limits (TS 3.1.3.6)

The control rod banks shall be limited in physical insertion as shown in Figure A1 for ARO = 228 steps withdrawn.

2.3 Axial Flux Difference (TS 3.2.1)

The Axial Flux Difference (AFD) limits are provided in Figure A2.

2.4 Heat Flux Hot Channel Factor $F_Q(z)$ (TS 3.2.2)

$[F_Q]^L = 2.50$
 $K(z) = 1.0$ for $0 \text{ ft.} \leq z \leq 12 \text{ ft.}$ where z = core height.

2.5 Nuclear Enthalpy Rise Hot Channel Factor (TS 3.2.3)

$F_{\Delta H}^{\text{RTP}} = 1.70$
 $PF_{\Delta H} = 0.3$

Figure A1
Turkey Point Unit 4 Cycle 26 Rod Insertion Limits vs Thermal Power
ARO = 228 Steps Withdrawn, Overlap = 100 Steps

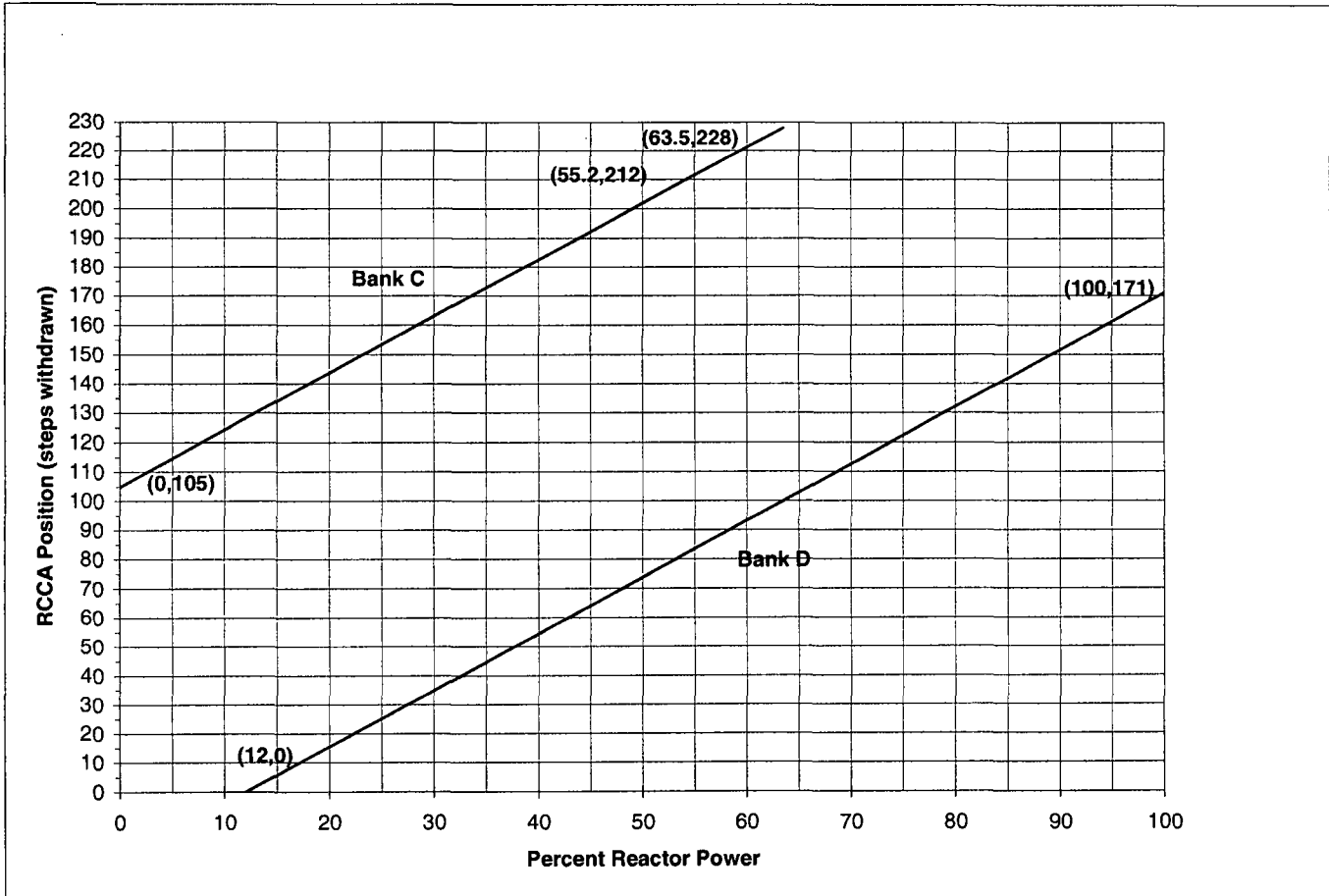


Figure A2
Axial Flux Difference as a Function of Rated Thermal Power
Turkey Point Unit 4 Cycle 26

