

ATTACHMENT II TO IPN-97-168

Core Operating Limits Report - Revision 2

NEW YORK POWER AUTHORITY
INDIAN POINT 3 NUCLEAR POWER PLANT
DOCKET NO. 50-286
DPR-64

9712220160 971212
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PROCEDURE USE IS

INFORMATION

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OPERATIONS DEPARTMENT

POP-2.3

Core Operating Limits Report For Cycle 9

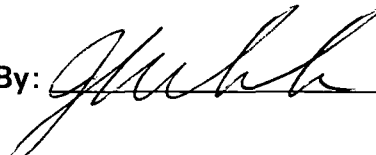
Revision No. 2

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PORC Meeting No. 94-123

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CORE OPERATING LIMITS REPORT FOR CYCLE 9

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CORE OPERATING LIMITS REPORT FOR CYCLE 91.0 Purpose

Presents cycle specific safety limits for the current operating cycle.

2.0 References

2.1 NRC Generic Letter 88-16

2.2 Technical Specifications 1.17, 3.10 and 6.9.1.6.

3.0 Footnotes

None

4.0 Precautions and Limitations

The data presented in this report applies to Cycle 9 Only and SHALL NOT be used for other operating cycles.

5.0 Prerequisites

None

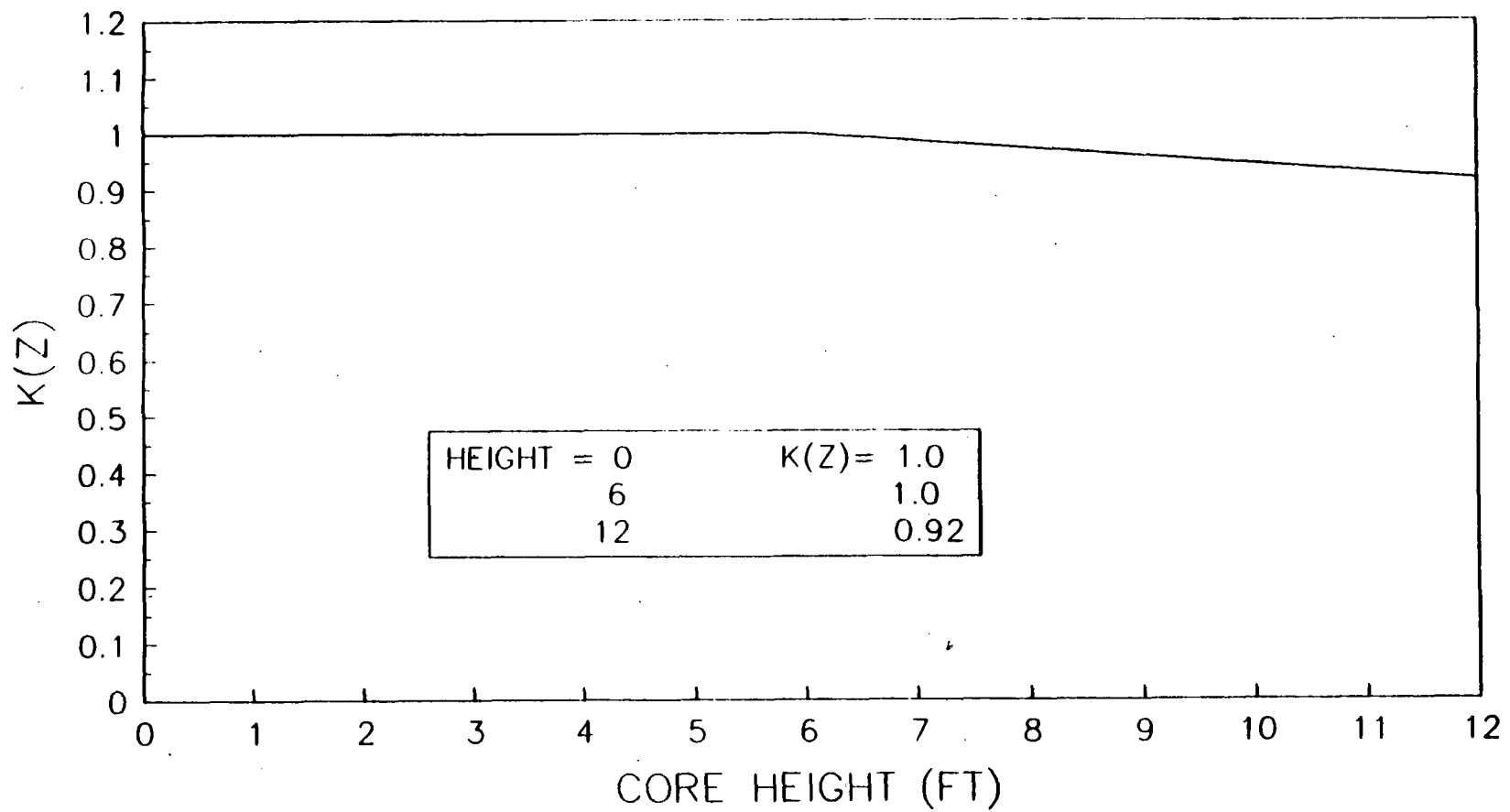
6.0 Procedure

The following are Cycle Specific Safety Limits:

<u>Limit</u>	<u>Corresponding T.S.</u>
6.1 Hot Channel Factors at Rated Thermal Power	
6.1.1 $F_Q^{RTP} = 2.32$	3.10.2.1
6.1.2 $F_{\Delta H}^{RTP} = 1.56$	3.10.2.1
6.2 Height Dependent F_Q Multiplier $K(Z)$, referred to as "fraction" (REFER to Figure 1)	3.10.2.1
6.3 Power Factor Multiplier for $F_{\Delta H} = PF_{\Delta H} = 0.3$	3.10.2.1
6.4 Axial Flux Difference Band Width = $\pm 5\%$	3.10.2.4 3.10.2.6.1

- | | | |
|-----|---|------------|
| 6.5 | Axial Flux Difference Envelope Limits at 90%
power = -11%, +11% | 3.10.2.6.1 |
| 6.6 | Axial Flux Difference Envelope Increase for each 2%
of rated power below 90% power = $\pm 1\%$ | 3.10.2.6.1 |
| 6.7 | Shutdown Bank Position for Criticality =
Fully Withdrawn | 3.10.4.1 |
| 6.8 | Control Bank Insertion Limits = (REFER to Figure 2) | 3.10.4.2 |

FIGURE 1

HEIGHT DEPENDENT FQ MULTIPLIER $K(Z)$ 

APPLIES TO FQ OF 2.32

FIGURE 2

CONTROL ROD INSERTION LIMITS VS. RELATIVE POWER