

APAL

L 84-204

Office of Nuclear Reactor Regulation
Attention: Mr. James R. Miller, Chief
Operating Reactors Branch #3
Division of Licensing
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Dear Mr. Miller:

Re: St. Lucie Unit No. 2
Docket No. 50-389
Cycle 2 Reload

In response to your letter of June 21, 1984, attached please find the requested figures.

Very truly yours,

JW
J. W. Williams, Jr.
J. W. Williams, Jr.
Group Vice President
Nuclear Energy

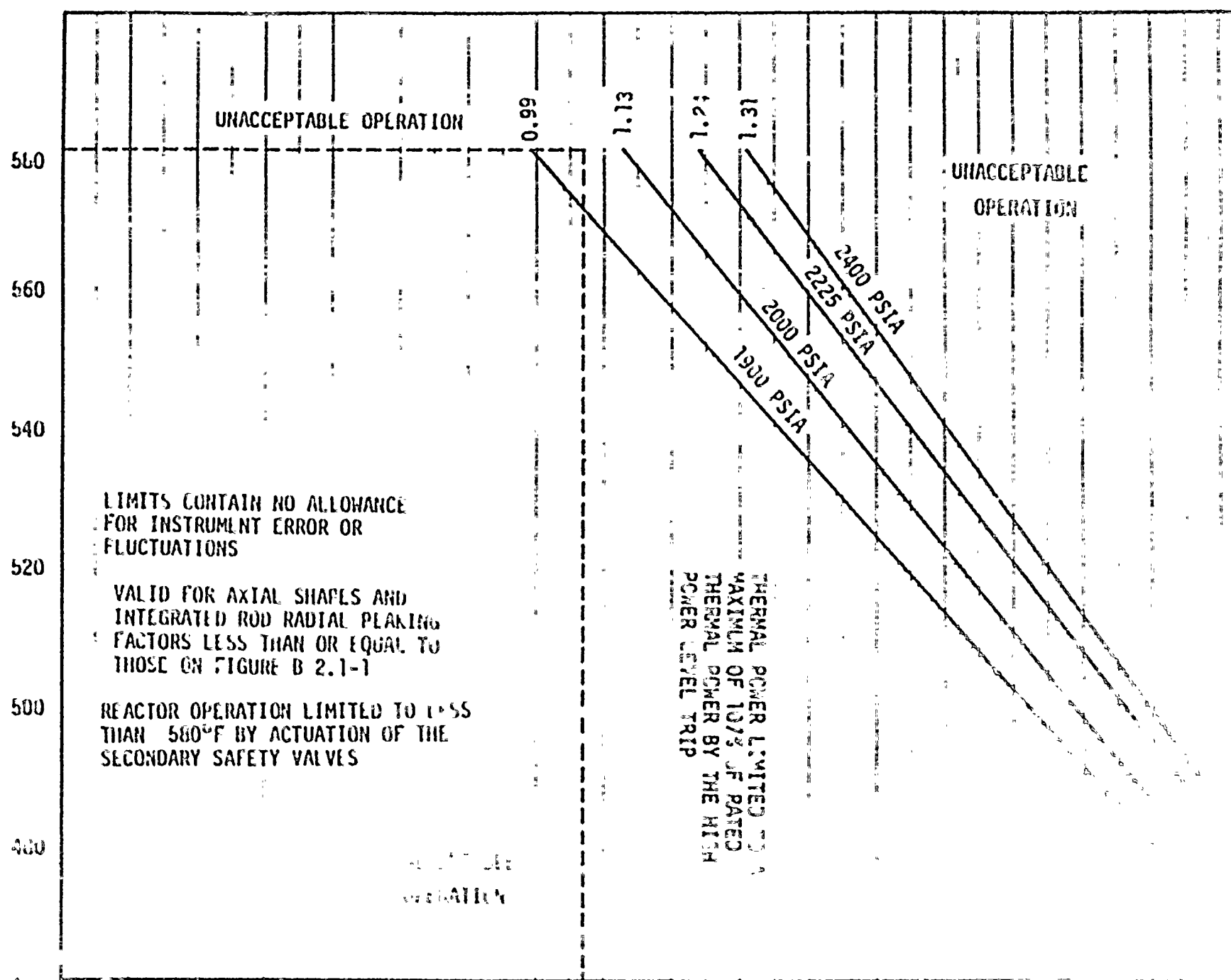
JWW/RJS/law

Attachments

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PDR ADOCK 05000389
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A001
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MAXIMUM COOLDING ELEMENTS ARE 100%



UNACCEPTABLE OPERATION

UNACCEPTABLE OPERATION

LIMITS CONTAIN NO ALLOWANCE FOR INSTRUMENT ERROR OR FLUCTUATIONS

VALID FOR AXIAL SHAPES AND INTEGRATED ROD RADIAL PLAKING FACTORS LESS THAN OR EQUAL TO THOSE ON FIGURE B 2.1-1

REACTOR OPERATION LIMITED TO LESS THAN 580°F BY ACTUATION OF THE SECONDARY SAFETY VALVES

THERMAL POWER LIMITED TO A MAXIMUM OF 107% OF RATED THERMAL POWER BY THE HIGH POWER LEVEL TRIP

Power Level

MAXIMUM COOLDING ELEMENTS ARE 100%

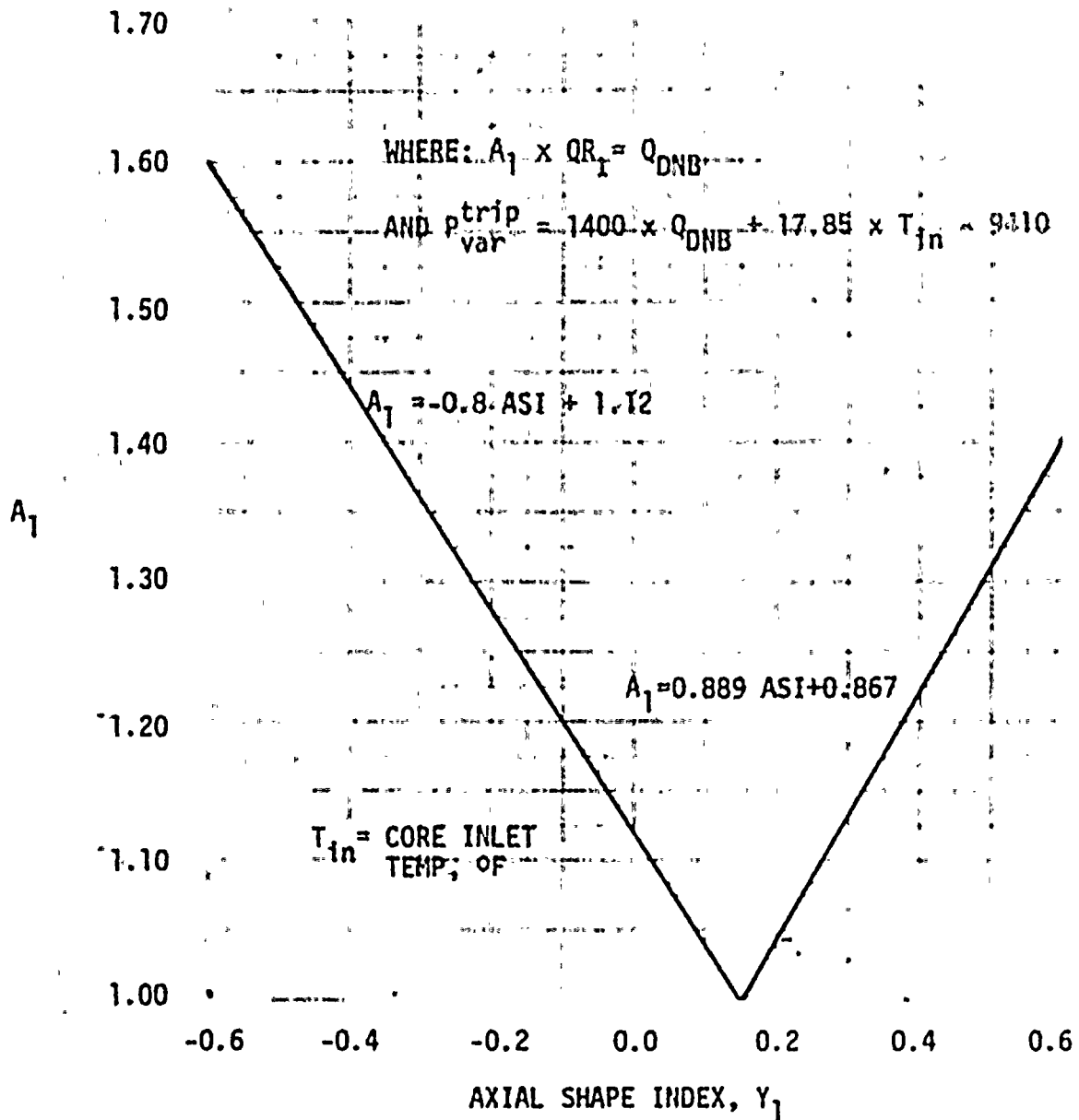


FIGURE 2.2-3

THERMAL MARGIN/LOW PRESSURE TRIP SETPOINT
PART 1 (Y_1 Versus A_1)

WHERE: $A_1 \times QR_1 = Q_{DNB}$

AND $p_{var}^{trip} = 1400 \times Q_{DNB} + 17.85 \times T_{in} - 9410$

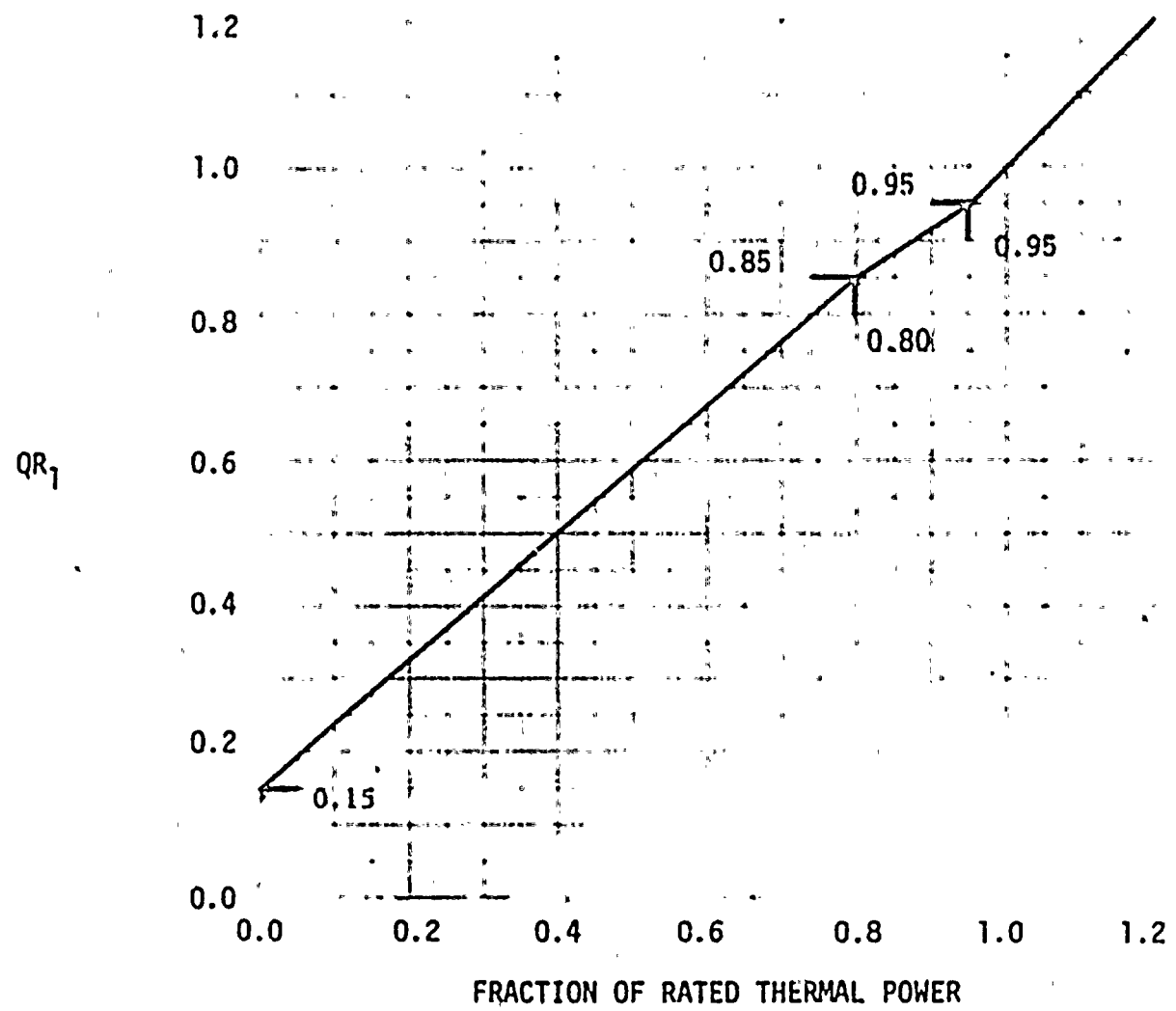


FIGURE 2.2-4

THERMAL MARGIN/LOW PRESSURE TRIP SETPOINT
PART 2 (FRACTION OF RATED THERMAL POWER VERSUS QR₁)

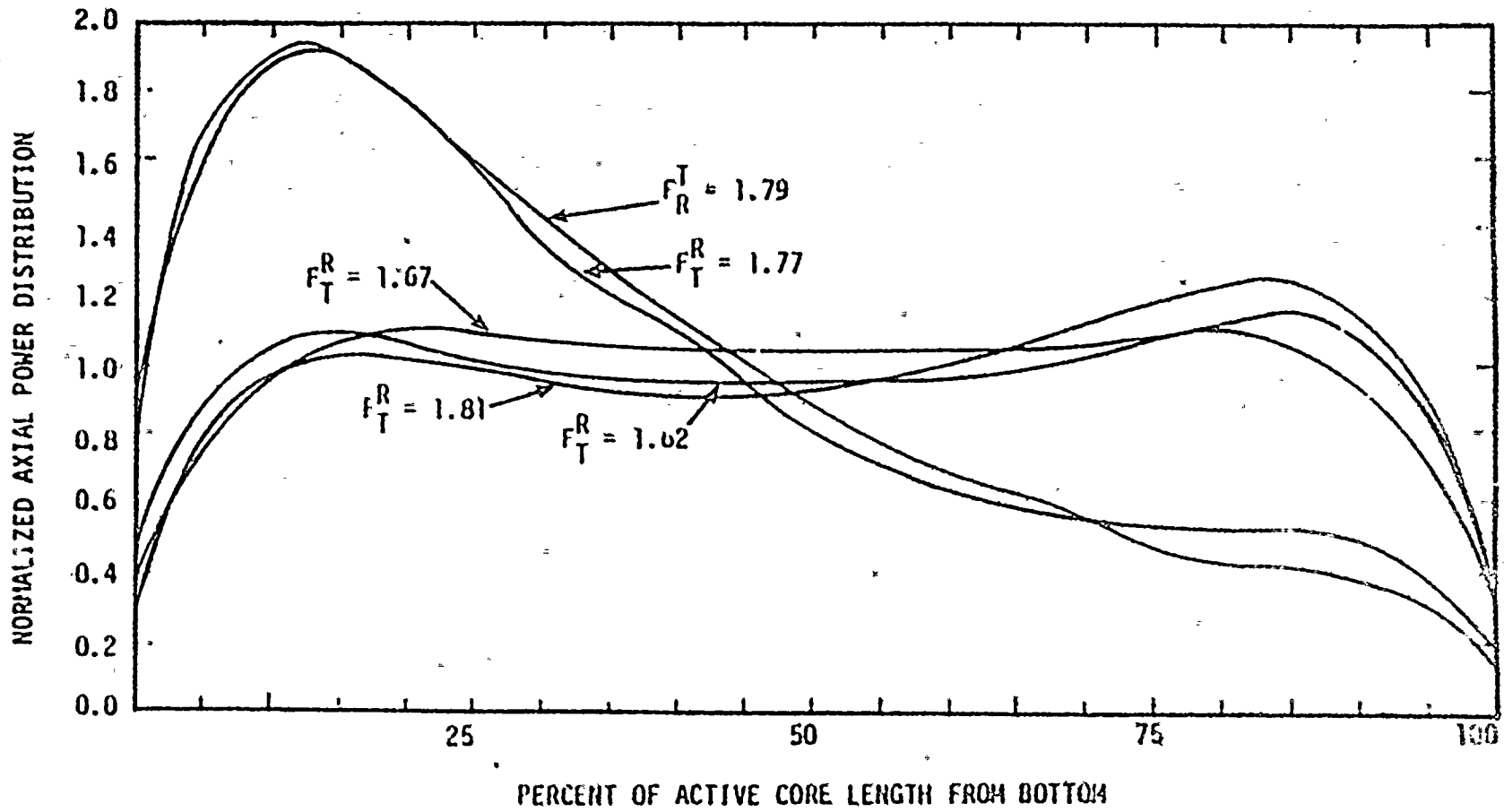
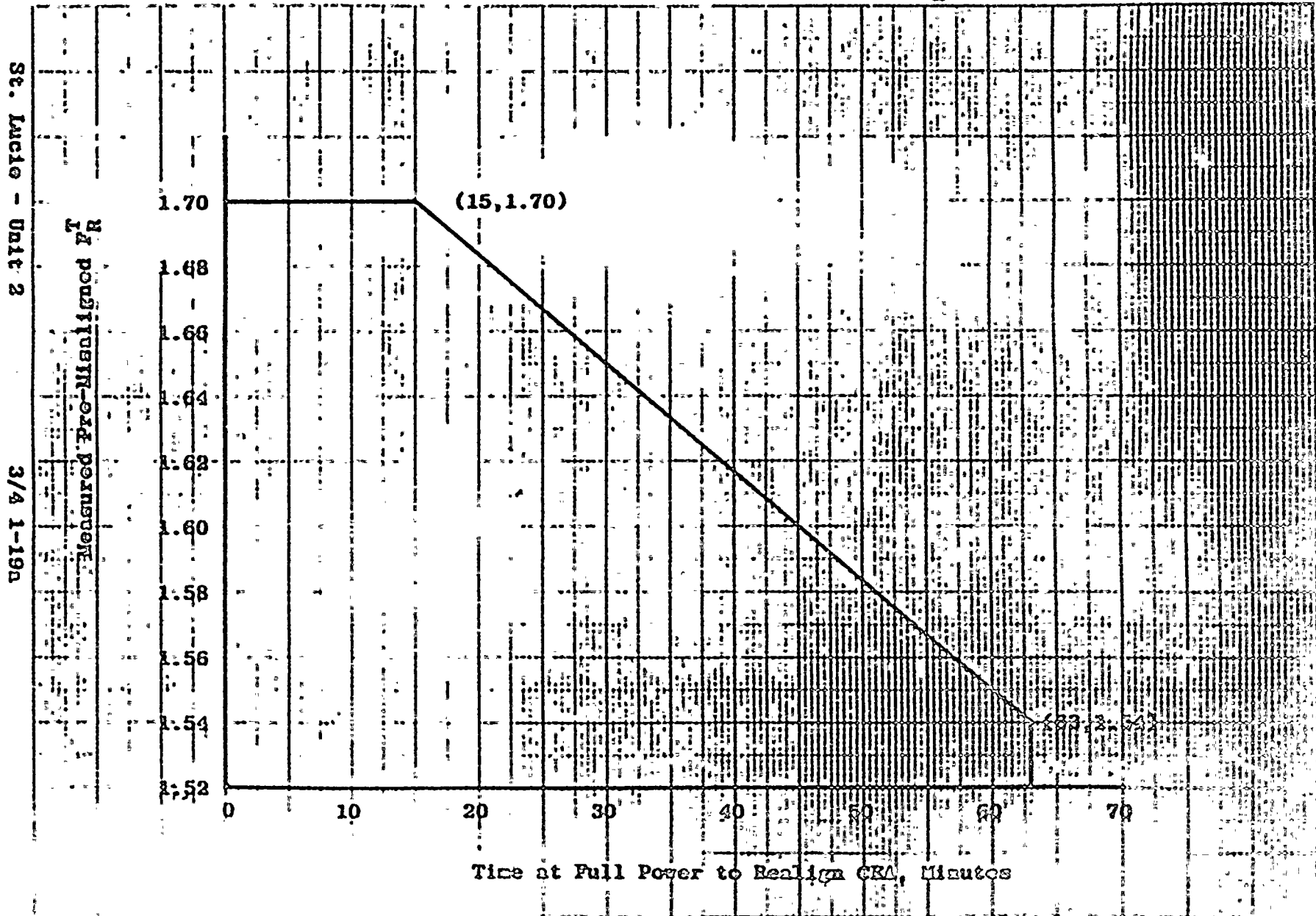
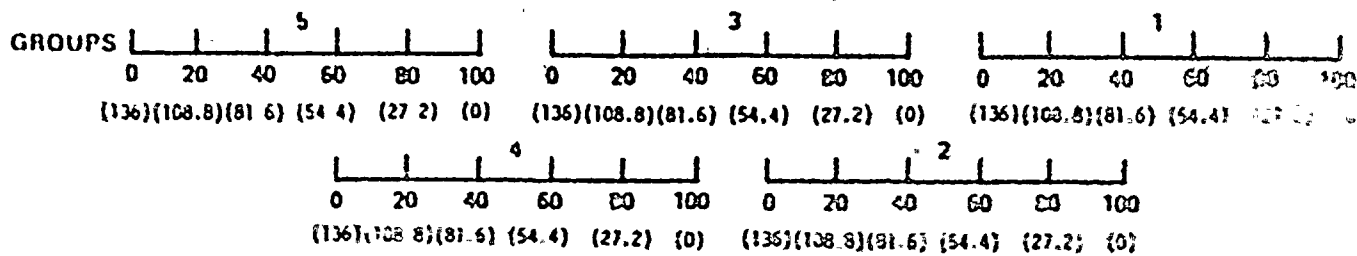
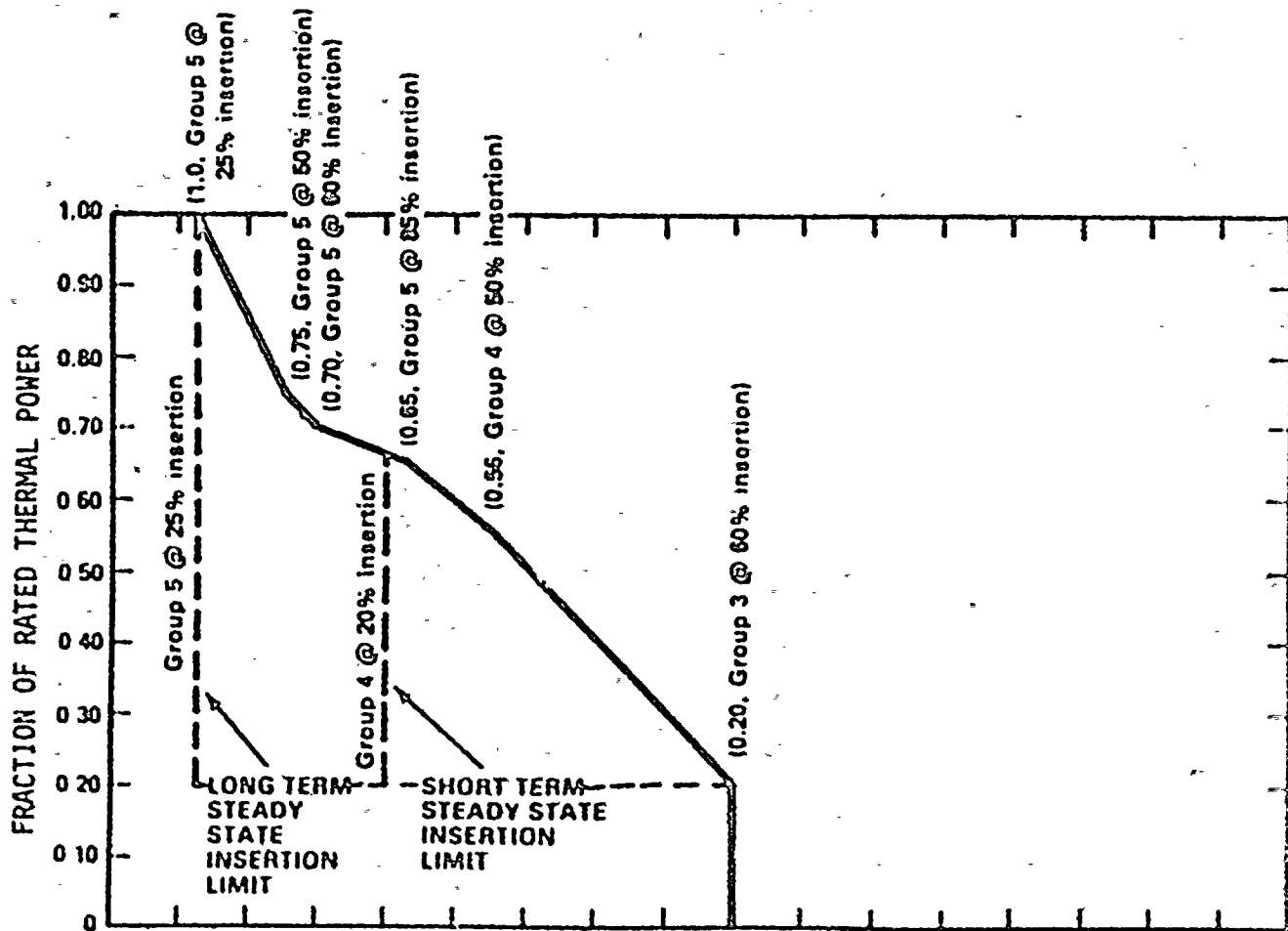


Figure B 2.1-1

Axial power distribution for thermal margin safety limits

Figure 3.1-1a
 Allowable Time to Realign CRA vs. Initial P_R^T





%CEA INSERTION
(INCHES CEA WITHDRAWN)

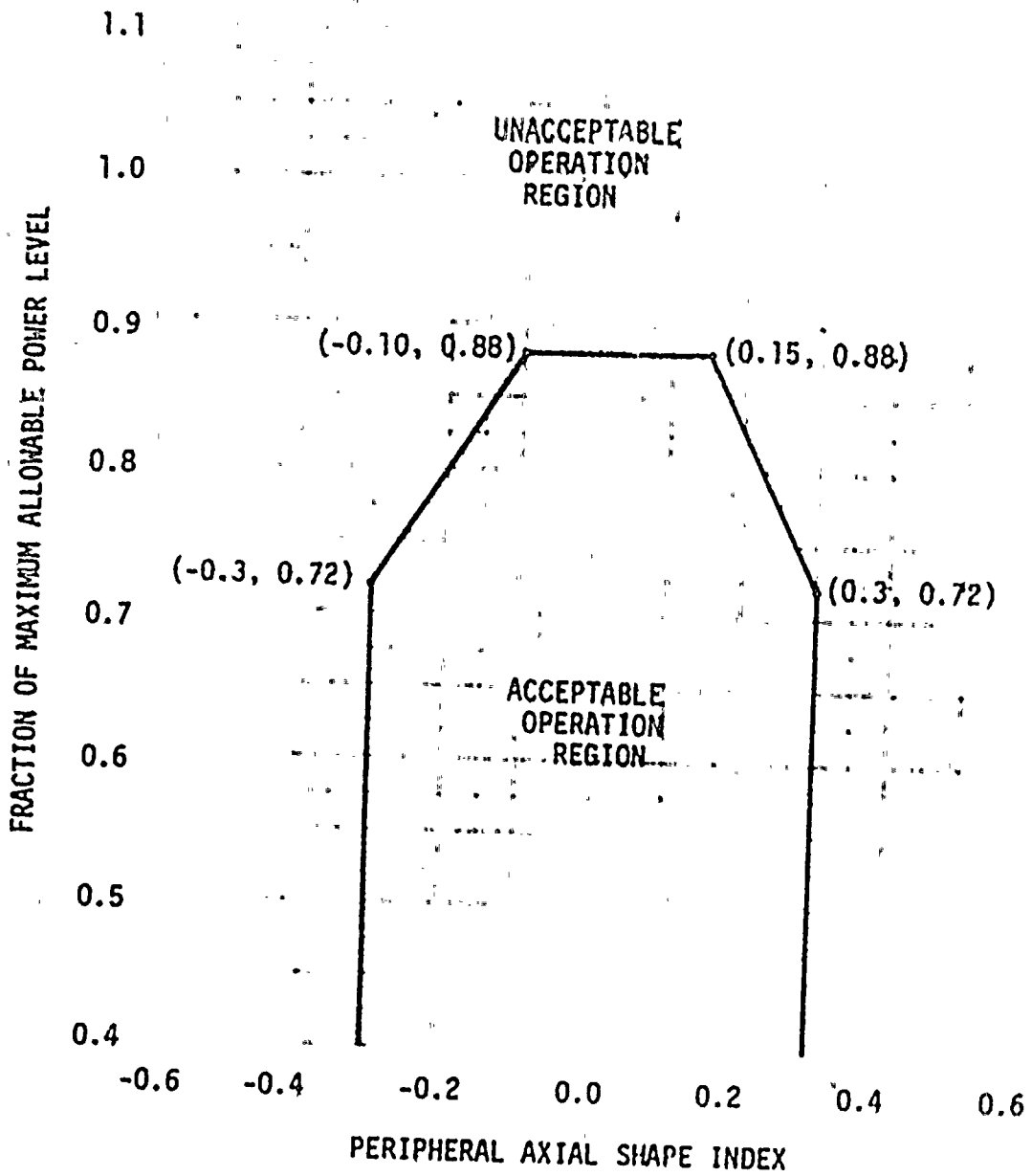
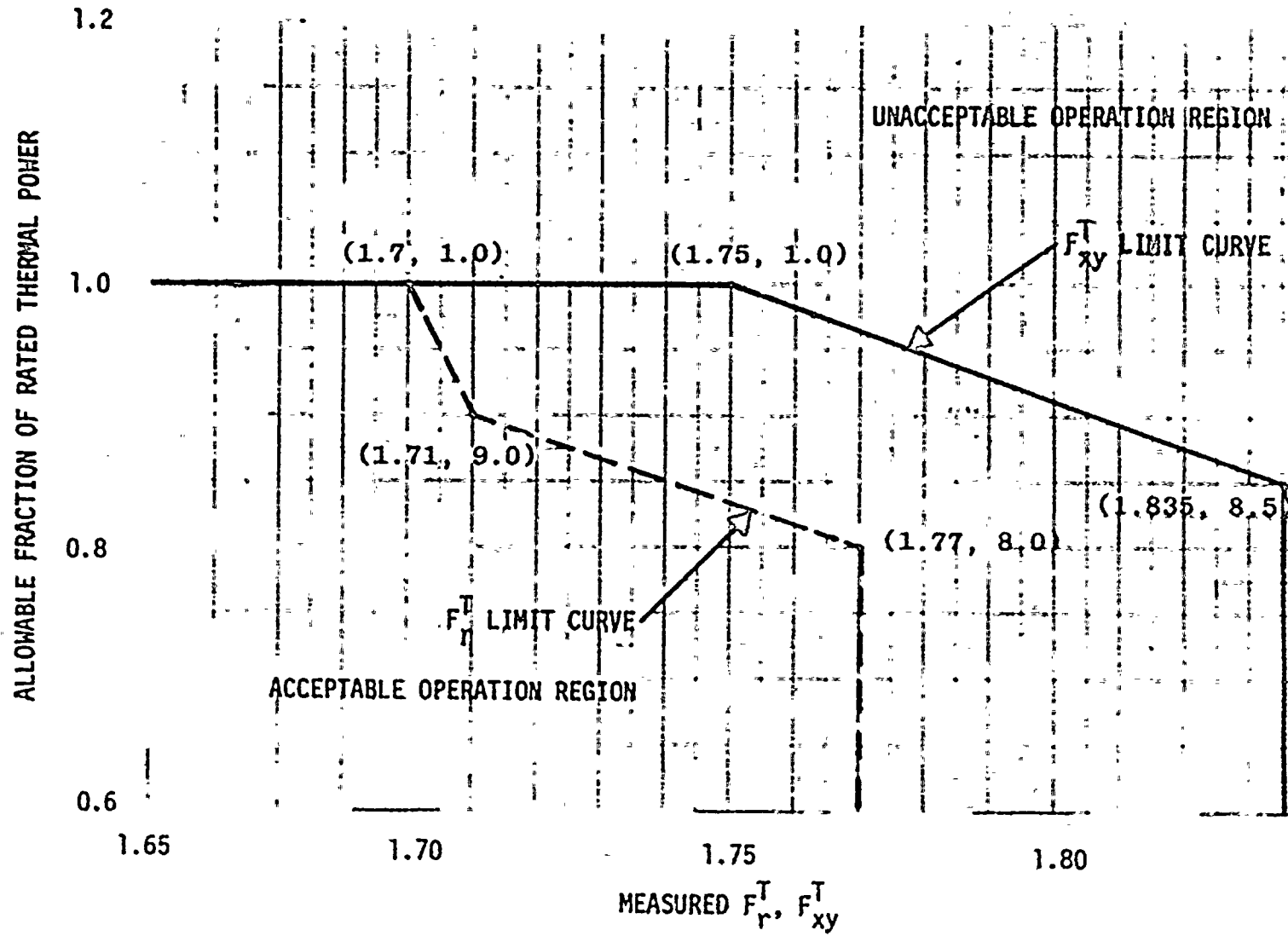


FIGURE 3.2-2

AXIAL SHAPE INDEX VS FRACTION OF MAXIMUM ALLOWABLE POWER LEVEL PER SPECIFICATION 4.2.1.3

FIGURE 3.2-3

ALLOWABLE COMBINATIONS OF THERMAL POWER AND F_r^T, F_{xy}^T



ST. LUCIE - UNIT 2

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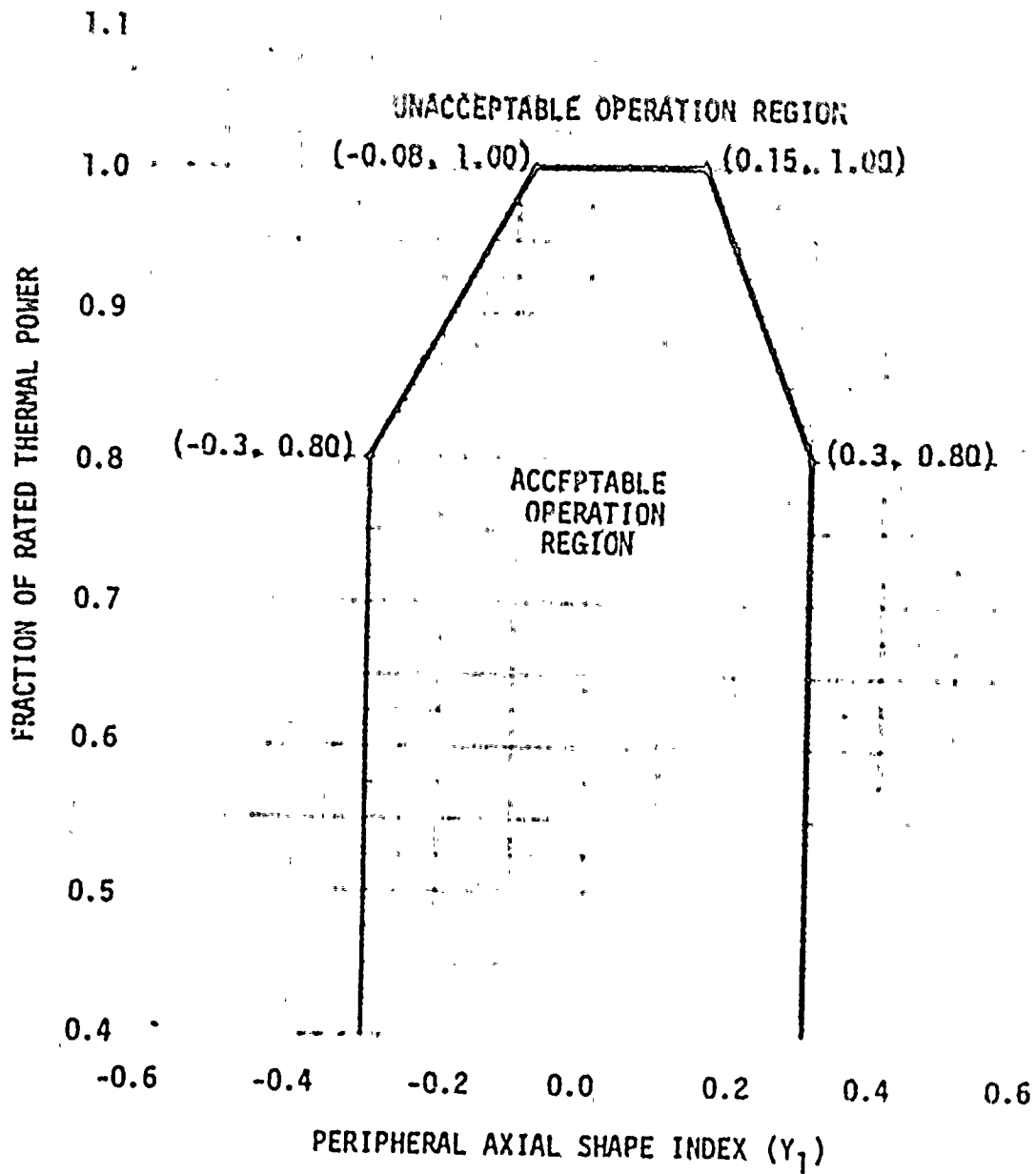


FIGURE 3.2-4

AXIAL SHAPE INDEX OPERATING LIMITS WITH
FOUR REACTOR COOLANT PUMPS OPERATING