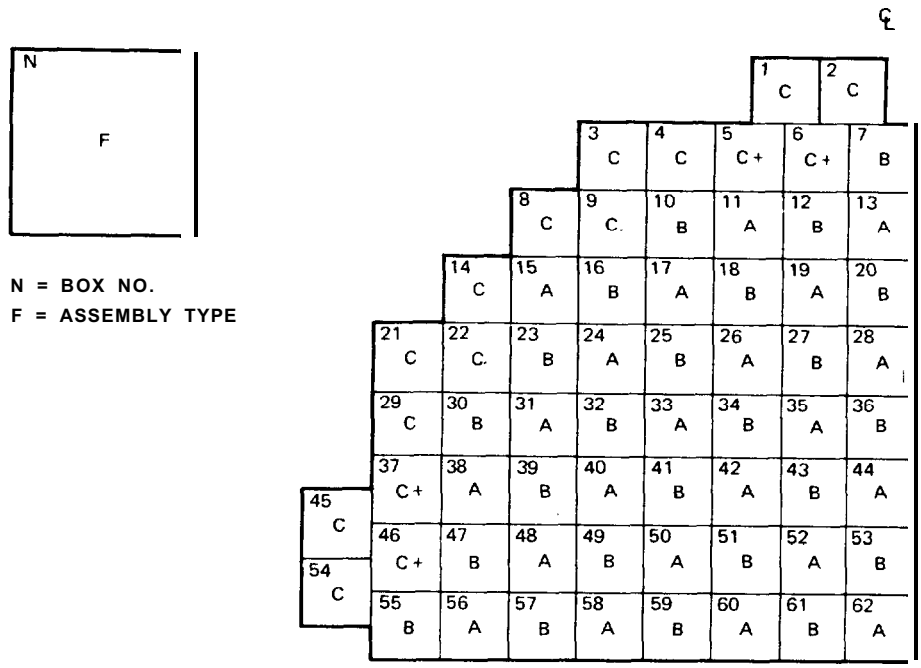
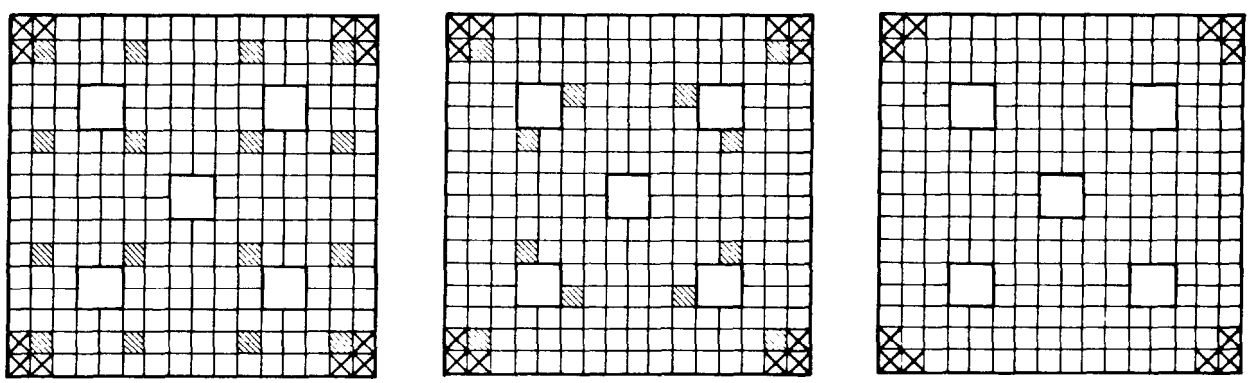
ASSEMBLY TYPE	NUMBER OF ASSEMBLIES	FUEL ENRICHMENT WT % U235	NO. OF FUEL RODS PER ASSEMBLY	NO. OF SHIM RODS/ ASSEMBLY	WT % B_4C	gm B^{10}/IN.
A	73	1.87	236	0		
B	80	187 2.41	12 208	16	3.60	0.02276
C	40	2.41 2.91	12 224	0	1.62	0.01034
C.	8	2.41 2.91	12 212	12	1.62	0.01034
C+	16	2.41 2.91	12 208	16	1.62	0.01034





LOWER ENRICHED FUEL PIN

HIGHER ENRICHED FUEL PIN

SHIM PIN

LOUISIANA POWER & LIGHT CO. Waterford Steam Electric Station	FUELMANAGEMENTPATTERN	Figure 4.3-1

x.xx	BOX AVERAGE (BOX POWER / CORE AVERAGE POWER)
x.xx	MAX. ENTHALPY RISEFACTOR (Max. of the Average Power of 4 Neighboring Pins / Core Average Power)
x.xx	MAX. ONE-PIN FACTOR (Max. Pin Power / Core Average Power)

						C 1 0.67 1.08 1.10	C 2 0.90 1.17 1.19	
				C 3 0.60 0.97 0.99	C 4 0.83 1.10 1.13	C+ 5 0.96 1.19 1.23	C+ 6 1.12 1.19 1.23	B 7 1.00 1.08 1.11
			C 8 0.67 1.03 [illegible]	C 9 0.96 1.06 1.09	B 10 0.95 1.04 1.09	A 11 0.99 1.07 1.09	B 12 1.05 1.11 1.15	A 13 1.03 1.11 1.13
		C 14 0.67 1.03 1.05	A 15 0.81 0.90 0.92	B 16 0.95 1.03 1.08	A 17 0.98 1.06 1.08	B 18 1.08 1.13 1.18	A 19 1.06 1.14 6	B 20 1.12 1.16 0
	C 21 0.60 0.97 0.99	C 22 0.96 1.06 1.09	B 23 0.95 1.03 1.08	A 24 0.98 1.06 1.08	B 25 1.08 1.13 1.18	A 26 1.07 1.15 1.18	B 27 1.14 1.19	A 28 1.10 1.19
	C 25 0.83 1.10 1.13	B 30 0.95 1.04 1.09	A 31 0.98 1.06 1.08	B 32 1.08 1.13 1.18	A 33 1.08 1.16 1.18	B 34 1.16 1.20 1.25	A 35 1.13 1.21 1.24	B 36 1.18 1.22 1.26
C 45 0.67 1.08 1.10	C+ 37 0.96 1.19 1.23	A 38 0.99 1.07 1.09	B 39 1.08 1.13 1.18	A 40 1.07 1.15 1.18	B 41 1.16 1.20 1.25	A 42 1.14 1.22 1.25	B 43 1.20 1.24	A 44 1.16 1.25 1.27
C 54 0.90 1.17 1.19	C+ 46 1.12 1.20 1.23	B 47 1.05 1.11 1.15	A 48 1.06 1.14 1.16	B 49 1.14 1.19 1.23	A 50 1.13 1.21 1.24	B 51 1.20 1.24 1.29	A 52 1.17 1.26 1.28	B 53 1.23 1.26 1.30
	B 55 1.00 1.08 1.11	[illegible] 1.11 1.13	B 57 1.12 1.16 1.20	A 58 1.10 1.19 1.21	B 59 1.18 1.22 1.26	A 60 1.16 1.25 1.27	B 61 1.23 1.26 1.30	62 1.18 1.27 1.29

LOUISIANA POWER & LIGHT CO. Waterford Steam Electric Station	PLANAR AVERAGE POWER DISTRIBUTION BOC, UNRODDED, FULL POWER, NO XENON	Figure 4.3-2

x.xx x.xx x.xx

BOX AVERAGE (BOX POWERICOREAVERAGEPOWER)
MAX. ENTHALPY RISEFACTOR (Max. of the Average Power of 4 Neighboring Pins/ Core Average Power)
MAX. ONE-PINFACTOR (Max. Pin Power/Core Average Power)

						C 1 0.62 1.01 1.03	C 2 0.83 1.08 1.11	
			C 3 0.58 0.93 0.96	c 4 0.80 1.06 1: 10	C+ 5 0.92 1.15 1.19	C+ 6 1.06 1.13 1.17	B 7 0.95 1.04 1.07	
		C 8 0.65 1.01 1.04	C. 9 0.93 1.04 1.08	B 10 0.93 1.03 1.08	A 11 0.98 1.06 1.09	B 12 1.04 1.10 1.15	A 13 1.01 1.10 1.12	
	C 14 0.65 1.01 1.04	A 15 0.81 0.90 0.93	B 16 0.95 1.04 1.09	A 17 0.99 1.08 1.10	B 18 1.08 1.14 1.20	A 19 1.07 1.16 1.18	B 20 1.12 1.17 1.22	
C 21 0.58 0.93 0.96	C. 22 0.93 1.04 1.08	B 23 0.95 1.04 1.09	A 24 1.00 1.08 1.10	B 25 1.10 1.16 1.21	A 26 1.10 1.19 1.21	B 27 1.17 1.22 1.27	A 28 1.13 1.22 1.25	
C 29 0.80 1.06 1.10	B 30 0.93 1.03 1.08	A 31 0.99 1.08 1.10	B 32 1.10 1.16 1.21	A 33 1.11 1.20 1.22	B 34 1.19 1.24 1.29	A 35 1.17 1.26 1.29	B 36 1.22 1.26 1.31	
C+ 37 0.92 1.15 1.19	A 38 0.98 1.06 1.09	B 39 1.08 1.14 1.20	A 40 1.10 1.19 1.21	B 41 1.19 1.24 1.29	A 42 1.18 1.27 1.30	B 43 1.25 1.26 1.34	A 44 1.21 1.30 1.33	C 45 0.62 1.01 1.03
C+ 46 1.06 1.13 1.17	B 47 1.04 1.10 1.15	A 48 1.07 1.17 1.18	B 49 1.17 1.22 1.27	A 50 1.17 1.26 1.29	B 51 1.25 1.28 1.34	A 52 1.22 1.31 1.34	B 53 1.27 1.31 1.35	C 54 0.83 1.08 1.11
B 55 0.95 1.04 1.07	A 56 1.02 1.10 1.12	B 57 1.12 1.17 1.22	A 58 1.13 1.22 1.25	B 59 1.22 1.26 1.31	A 60 1.21 1.30 1.33	B 61 1.27 1.31 1.35	A 62 1.23 1.32 1.35	

LOUISIANA POWER & LIGHT CO. Waterford Steam Electric Station	PLANAR AVERAGE POWER DISTRIBUTION BOC, UNRODDED FULL POWER, EQUILIBRIUM XENON	Figure 4.3-3

x.xx x.xx x.xx

BOX AVERAGE (BOX POWERICOREAVERAGE POWER))
MAX. ENTHALPY RISEFACTOR (Max. of the Average Power of 4 Neighboring Pins/ Core Average Power)
MAX. ONE-PIN FACTOR (Max. Pin Power / Core Average Power)

					C 1 0.61 0.97 0.99	C 2 0.77 1.03 1.05
			C 3 0.59 0.96 0.99	C 4 0.80 1.08 1.11	C+ 5 1.00 1.20 1.25	C+ 6 1.17 1.28 1.31	B 7 1.13 1.20 1.22
		C 8 0.65 1.02 1.05	C 9 1.04 1.21 1.25	B 10 1.10 1.17 1.19	A 11 1.02 1.07 1.08	B 12 1.19 1.22 1.24	A 13 1.06 1.08 1.09
	C 14 0.65 1.02 1.05	A 15 0.86 1.00 1.02	B 16 1.13 1.19 1.20	A 17 1.04 1.06 1.08	B 18 1.18 1.20 1.23	A 19 1.05 1.07 1.08	B 20 1.18 1.21 1.23
C 21 0.59 0.96 0.99	C 22 1.04 1.21 1.25	B 23 1.13 1.19 1.20	A 24 1.04 1.06 1.07	B 25 1.18 1.20 1.23	A 26 1.03 1.06 1.07	B 27 1.15 1.18 1.20	A 28 1.02 1.05 1.06
C 29 0.80 1.08 1.11	B 30 1.10 1.17 1.19	A 31 1.04 1.06 1.08	B 32 1.18 1.20 1.23	A 33 1.03 1.06 1.07	B 34 1.14 1.17 1.19	A 35 0.99 1.03 1.04	B 36 1.11 1.14 1.16
C+ 37 1.00 1.20 1.25	A 38 1.02 1.07 1.08	B 39 1.18 1.20 1.23	A 40 1.03 1.06 1.07	B 41 1.14 1.17 1.19	A 42 0.99 1.02 1.03	B 43 1.09 1.12 1.14	A 44 0.96 0.99 1.00
C 45 0.61 0.97 0.99	C+ 46 1.17 1.28 1.31	B 47 1.19 1.22 1.24	A 48 1.05 1.07 1.08	B 49 1.15 1.18 1.20	A 50 0.99 1.03 1.04	B 51 1.09 1.12 1.14	A 52 0.95 0.98 0.99	B 53 1.07 1.09 1.11
C 54 0.77 1.03 1.05	B 55 1.13 1.20 1.22	A 56 1.06 1.08 1.09	B 57 1.18 1.21 1.23	A 58 1.02 1.05 1.06	B 59 1.11 1.14 1.16	A 60 0.96 0.99 1.00	B 61 1.07 1.09 1.11	A 62 0.94 0.96 0.97

LOUISIANA POWER & LIGHT CO. Waterford Steam Electric Station	PLANAR AVERAGE POWER DISTRIBUTION EOC, UNRODDED, FULL POWER, EQUILIBRIUM XENON	Figure 4.3-4

x.xx
x.xx
x.xx

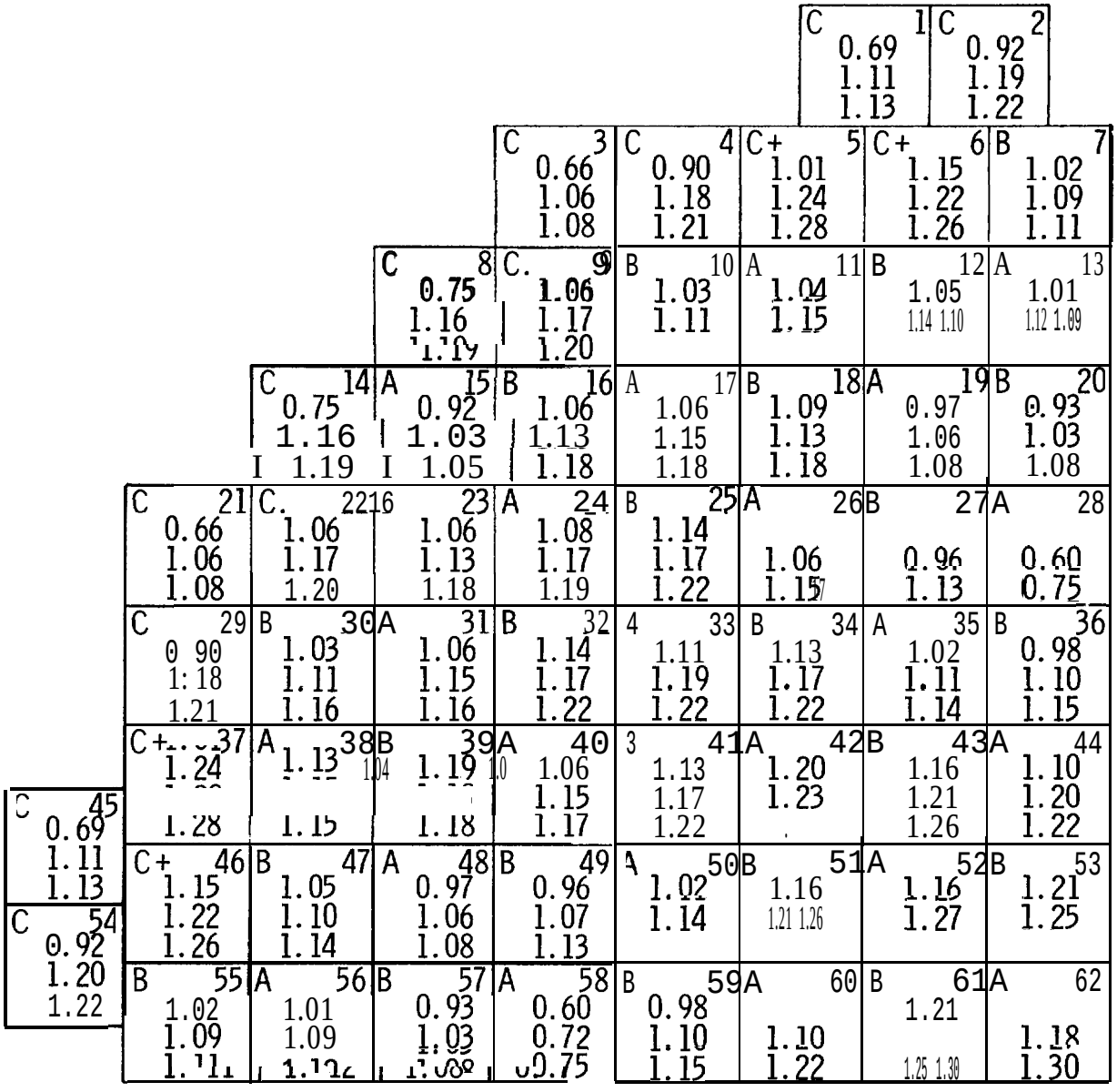
BOX AVERAGE (BOX POWER/CORE AVERAGE POWER)
MAX. ENTHALPY RISE FACTOR (Max. of the Average Power of 4 Neighboring Pins / Core Average Power)
MAX. ONE-PIN FACTOR (Max. Pin Power / Core Average Power)

										C 1 0.74 1.19 1.22	C 2 1.00 1.29 1.31			
					C 3 0.68 1.09 1.12	C 4 0.93 1.22 1.25	C+ 5 1.05 1.28 1.32	C+ 6 1.21 1.29 1.33	B 7 1.08 1.13 1.17					
				C 8 0.76 1.17 1.20	C 9 1.08 1.19 1.22	B 10 1.05 1.11 1.16	A 11 1.05 1.14 1.16	B 12 1.08 1.13 1.16	A 13 1.03 1.11 1.14					
			C 14 0.76 1.17 1.20	A 15 0.92 1.02 1.04	B 16 1.06 1.12 1.17	A 17 1.06 1.13 1.16	B 18 1.08 1.12 1.16	A 19 0.97 1.05 1.08	B 20 0.93 1.04 1.09					
		C 21 0.68 1.09 1.12	C 22 1.08 1.19 1.22	B 23 1.05 1.12 1.17	A 24 1.06 1.14 1.16	B 25 1.11 1.14 1.18	A 26 1.03 1.11 1.14	B 27 0.93 1.04 1.09	A 28 0.59 0.70 0.73					
		C 29 0.93 1.22 1.25	B 30 1.05 1.11 1.16	A 31 1.05 1.16	B 32 1.11 1.14 1.18	A 33 1.07 1.15 1.17	B 34 1.09 1.14 1.18	A 35 0.98 1.06 1.08	B 36 0.94 1.05 1.10					
		C+ 37 1.05 1.29 1.32	A 38 1.05 1.14 1.16	B 39 1.08 1.12 1.16	A 40 1.03 1.11 1.14	B 41 1.09 1.14 1.18	A 42 1.06 1.14 1.17	B 43 1.10 1.15 1.19	A 44 1.05 1.14 1.16					
C 45 0.74 1.19 1.22		C+ 46 1.21 1.29 1.33	B 47 1.08 1.13 1.16	A 48 0.97 1.05 1.08	B 49 1.04 1.09	A 50 0.98 1.06 1.08	B 51 1.10 1.15 1.19	A 52 1.10 1.18 1.20	B 53 1.15 1.19 1.23					
C 54 1.00 1.29 1.31		B 55 1.08 1.13 1.17	A 56 1.03 1.11 1.14	B 57 0.93 1.04 1.09	A 58 0.59 0.70 0.73	B 59 0.94 1.05 1.10	A 60 1.05 1.14 1.16	B 61 1.15 1.19 1.23	A 62 1.12 1.20 1.23					

LOUISIANA POWER & LIGHT CO. Waterford Steam Electric Station	**PLANAR AVERAGE POWER DISTRIBUTION** **BOC, BANK 6 FULL'IN, FULL POWER, NO XENON**	Figure **4.3-5**

x.xx
x.xx
x.xx

BOX AVERAGE (BOX POWER / CORE AVERAGE POWER)
MAXENTHALPY RISE FACTOR (Max. of the Average Power of 4 Neighboring Pins / Core Average Power)
MAX. ONE-PIN FACTOR (Max Pin Power/ Core Average Power)



LOUISIANA POWER & LIGHT CO. Waterford Steam Electric Station	PLANAR AVERAGE POWER DISTRIBUTION – BOC, **BANK 6 FULL IN, FULL POWER EQUILIBRIUM XENON**	Figure 4.3-6

X.XX	BOX AVERAGE (BOX POWER / CORE AVERAGE POWER)
X.XX	MAX. ENTHALPY RISE FACTOR (Max. of the Average Power of 4 Neighboring Pins/ Core Average Power)
X.XX	MAX. ONE-PIN FACTOR (Max. Pin Power / Core Average Power)

						c 1 0.67 1.05 1.07	C 2 0.84 1.11 1.13	
				C 3 0.66 1.07 1.10	C 4 0.88 1.18 1.21	C+ 5 1.08 1.29 1.33	C+ 6 1.25 1.35 1.37	B 7 1.20 1.26 1.28
			C 8 0.74 1.15 1.18	C. 9 1.16 1.34 1.38	B 10 1.20 1.27 1.29	A 11 1.08 1.11 1.13	B 12 1.21 1.26 1.28	A 13 1.06 1.12 1.13
		C 14 0.74 1.15 1:18	A 15 0.96 1.11 1.13	B 16 1.25 1.29 1.32	A 17 1.11 1.14 1.16	B 18 1.19 1.25 1.26	A 19 0.97 1.07 1.08	B 20 1.00 1.12 1.14
	C 21 0.66 1.07 1.10	c. 22 1.16 1.34 1.38	B 23 1.25 1.29 1.32	A 24 1.12 1.14 1.16	B 25 1.22 1.28 1.29	A 26 1.00 1.08 1.10	B 27 0.95 1.07 1.10	A 28 0.56 0.74 0.78
	C 29 0.88 1.18 1.21	B 30 1.20 1.27 1.29	A 31 1.11 1.14 1.16	B 32 1.22 1.28 1.29	A 33 1.03 1.10 1.11	B 34 1.08 1.14 1.16	A 35 0.86 0.92 0.94	B 36 0.88 0.95 0.96
C 45 0.67 1.05 1.07	C+ 37 1.08 1.29 1.33	A 38 1.08 1.11 1.13	B 39 1.19 1.25 1.26	A 40 1.00 1.08 1.10	B 41 1.08 1.14 1:16	A 42 0.92 0.98 0.99	B 43 0.99 1.03 1.04	A 4 0.86 0.89 0.90
C 54 0.84 1.12 1.13	C+ 46 1.25 1.35 1.37	B 47 1.21 1.26 1.28	A 48 0.97 1.07 1.08	B 49 0.95 1.07 1:10	A 50 0.86 0.92 0.94	B 51 0.99 1.03 1.04	A 52 0.88 0.90 0:91	B 53 0.99 1.01 1.03
	B 55 1.20 1.26 1.28	A 56 1.06 1.12 1.13	B 57 1.00 1.12 1.14	A 58 0.56 0.74 0.78	B 59 0.88 0.95 .0.96	A 60 0.86 0.89 0.90	B 61 0.99 1.01 0	A 62 0.88 0.89 0.90

LOUISIANA POWER & LIGHT CO. Waterford Steam Electric Station	PLANAR AVERAGE POWER DISTRIBUTION – EOC, BANK 6 FULL IN, FULL POWER EQUILIBRIUM XENON	Figure 4.3-7

x.xx
x.xx
x.xx

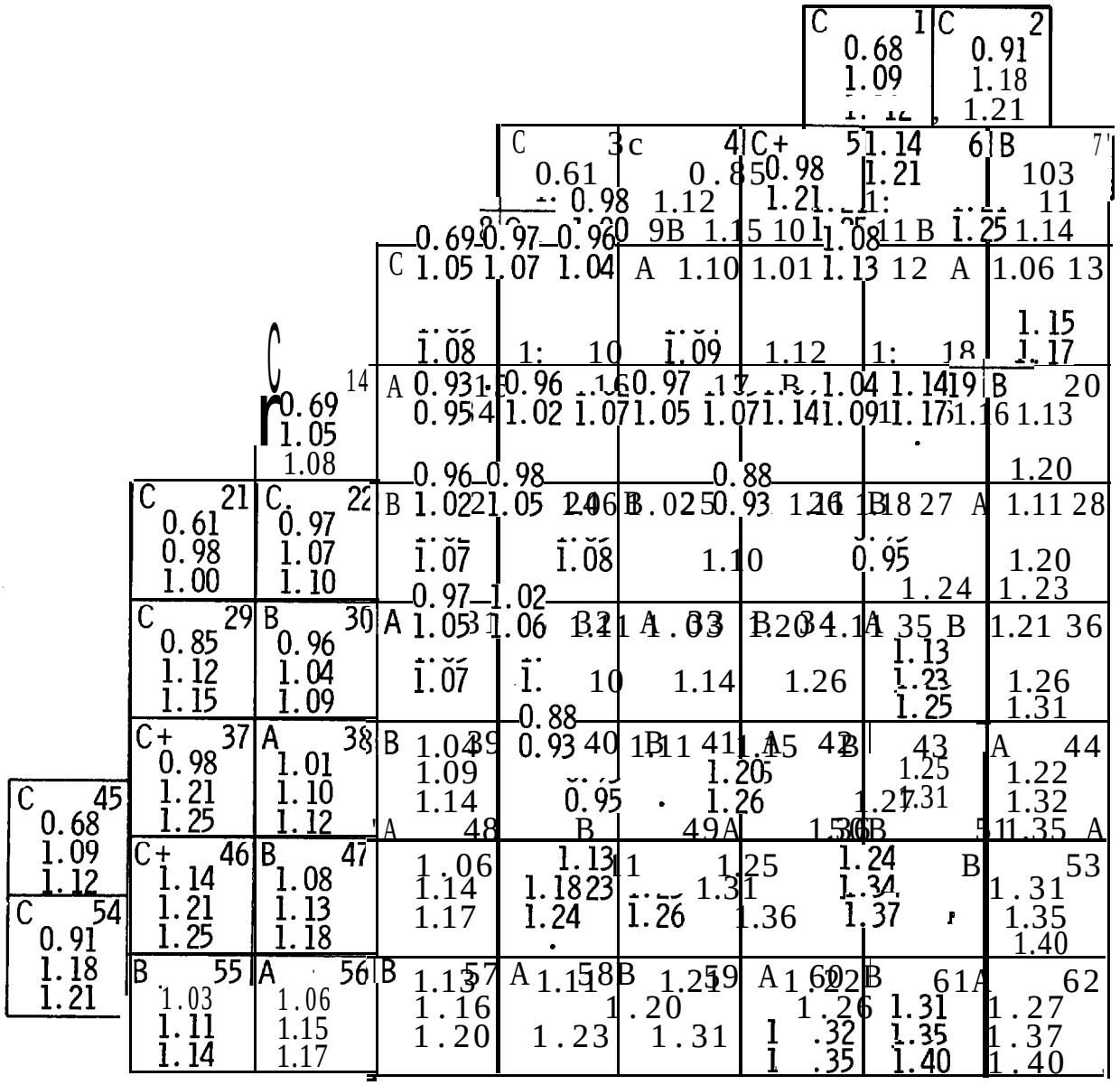
BOX AVERAGE (BOX POWER / CORE AVERAGE POWER)
MAX. ENTHALPY RISE FACTOR (Max. of the Average Power of 4 Neighboring Pins / Core Average Power)
MAX. ONE-PIN FACTOR (Max. Pin Power / Core Average Power)

										C 1 0.72 1.17 1.19	C 2 0.98 1.27 1.29			
				C 3 0.63 1.02 1.04	c 4 0.88 1.15 1.19	C+ 5 1.02 1.25 1.29	C+ 6 1.20 1.28 1.31	B 7 1.08 1.14 1.17						
			C 8 0.70 1.07 1.09	C. 9 0.09 1.09 1.12	B 10 0.98 1.06 1.09	A 11 1.02 1.11 1.13	B 12 1.09 1.14 1.18	A 13 1.07 1.16 1.18						
		C 14 0.70 1.07 1.09	A 15 0.84 0.93 0.95	B 16 0.96 1.02 1.06	A 17 0.97 1.04 1.06	B 18 1.03 1.09 1.14	A 19 1.05 1.13 1.15	B 20 1.12 1.15 1.18						
	C 21 0.63 1.02 1.04	C. 22 0.99 1.09 1.12	B 23 0.96 1.02 1.06	A 24 0.96 1.03 1.06	B 25 1.01 1.04 1.08	A 26 0.86 0.91 0.92	B 27 1.08 1.14 1.20	A 28 1.08 1.16 1.19						
	C 29 0.88 1.15 1.19	B 30 0.98 1.06 1.09	A 31 0.97 1.04 1.06	B 32 1.01 1.04 1.08	A 33 1.00 1.08 1.10	B 34 1.07 1.15 1.21	A 35 1.09 1.18 1.20	B 36 1.16 1.21 1.25						
	C+ 37 1.02 1.25 1.29	A 38 1.02 1.11 1.13	3 39 1.03 1.09 1.14	A 40 0.86 0.91 0.92	B 41 1.07 1.15 1.21	A 42 1.10 1.19 1.22	B 43 1.20 1.25 1.30	A 44 1.16 1.25 1.28						
C 45 0.72 1.17 1.19	C+ 46 1.20 1.28 1.31	B 47 1.09 1.14 1.18	4 1.05 48 1.13 1.15	B 1.08 49 1.14 1.20	A 50 1.09 1.18 1.20	B 1.20 51 1.25 1.30	A 52 1.27 1.18 1.30	B 53 1.25 1.29 1.33						
C 54 0.98 1.27 1.29	B 55 1 1.14 1.17	A 56 1.07 1.18 1.16	3 57 1.12 1.15 1.18	A 58 1.08 1.16 1.19	B 59 1.16 1.21 1.25	A 60 1.16 1.25 1.28	B 61 1.25 1.29 1.33	A 62 1.21 1.30 1.32						

LOUISIANA POWER & LIGHT CO. Waterford Steam Electric Station	**PLANAR AVERAGE POWER DISTRIBUTION BOC, PART-LENGTH ROD AS IF FULL LENGTH, FULL POWER, NO XENON**	Figure 4.3-8

x.xx
x.xx
x.xx

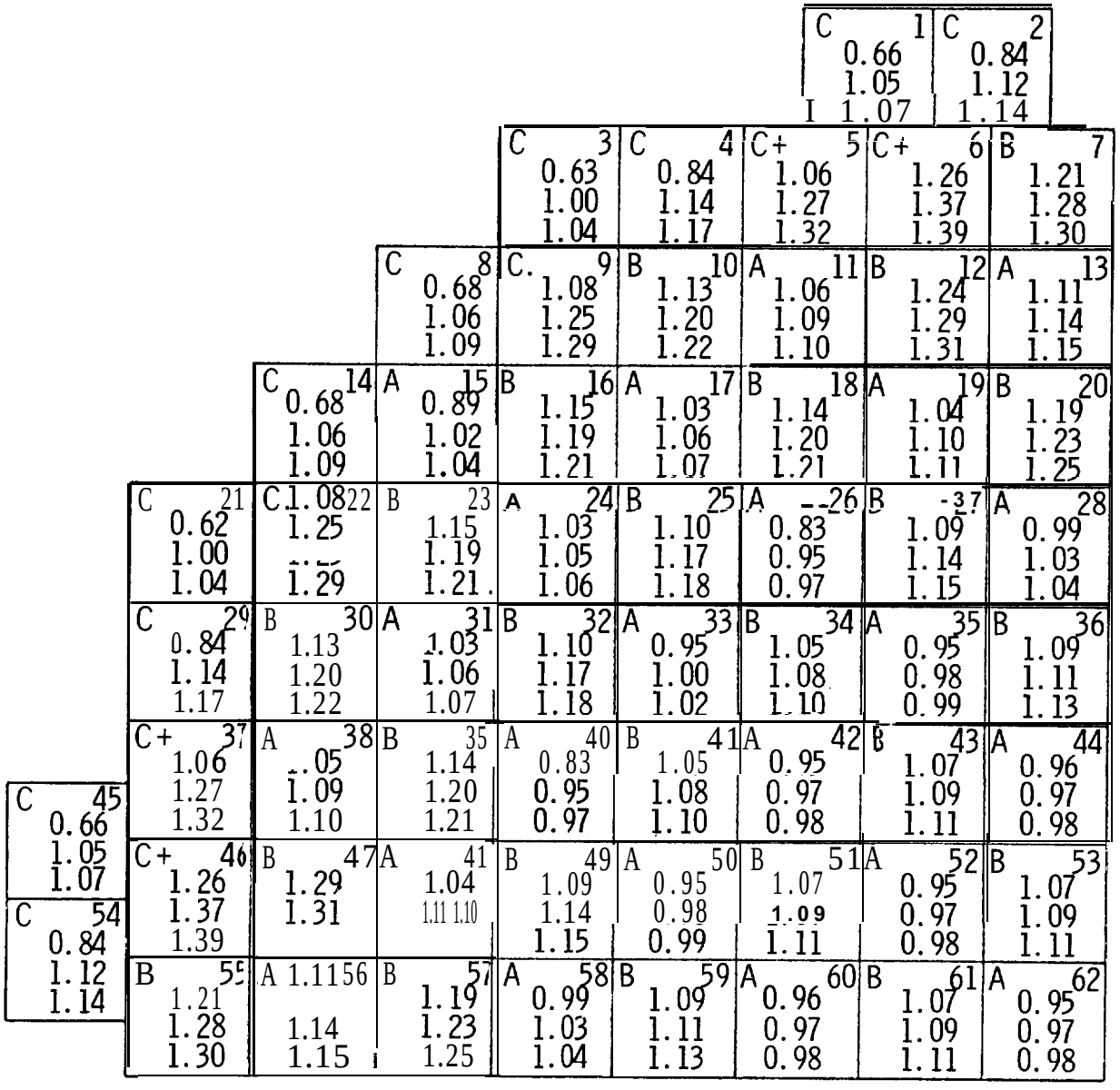
BOX AVERAGE (BOX POWER / CORE AVERAGE POWER)
MAX. ENTHALPY RISE FACTOR (Max. of the Average Power of 4 Neighboring Pins / Core Average Power)
MAX. ONE-PIN FACTOR (Max. Pin Power / Core Average Power)



LOUISIANA POWER & LIGHT CO. Waterford Steam Electric Station	PLANAR AVERAGE POWER DISTRIBUTION **BOC, PART-LENGTH ROD AS IF** FULL LENGTH, FULL POWER, EQUILIBRIUM XENON	Figure 4.3-9

x.xx
x.xx
x.xx

BOX AVERAGE (BOX POWER / CORE AVERAGE POWER)
MAX. ENTHALPY RISE FACTOR (Max. of the Average Power of 4 Neighboring Pins / Core Average Power)
MAX. ONE-PIN FACTOR (Max. Pin Power / Core Average Power)



LOUISIANA POWER & LIGHT CO. Waterford Steam Electric Station	PLANAR AVERAGE POWER DISTRIBUTION EOC, PART-LENGTH ROD AS IF FULL LENGTH, FULL POWER, EQUILIBRIUM XENON	Figure 4.3-10

x.xx
x.xx
x.xx

BOX AVERAGE (BOX POWER / CORE AVERAGE POWER)
MAX. ENTHALPY RISE FACTOR (Max. of the Average Power of 4 Neighboring Pins / Core Average Power)
MAX. ONE-PIN FACTOR (Max. Pin Power / Core Average Power)

						C 1 0.80 1.30 1.32	C 2 1.09 1.40 1.43
			C 3 0.72 1.15 1.18	C 4 0.99 1.28 1.31	C+ 5 1.12 1.36 1.40	C+ 6 1.30 1.39 1.43	B 7 1.17 1.23 1.26
		C 8 0.80 1.22 1.25	C. 9 1.13 1.23 1.27	B 10 1.08 1.15 1.18	A 11 1.09 1.18 1.21	B 12 1.12 1.18 1.21	A 13 1.08 1.17 1.20
	C 14 0.80 1.22 1.25	A 15 0.95 1.05 1.07	B 16 1.07 1.12 1.15	A 17 1.04 1.12 1.15	B 18 1.04 1.12 1.17	A 19 0.96 1.05 1.07	B 20 0.94 1.07 1.12
C 21 0.72 1.15 1.18	C. 22 1.13 1.23 1.27	B 23 1.07 1.12 1.15	A 24 1.04 1.12 1.14	B 25 1.04 1.10 1.15	A 26 0.82 0.88 0.89	B 27 0.87 0.95 0.99	A 28 0.57 0.60 0.71
C 29 0.99 1.28 1.31	B 30 1.08 1.15 1.18	A 31 1.04 1.12 1.15	B 32 1.04 1.10 1.15	A 33 0.99 1.06 1.09	B 34 1.00 1.06 1.09	A 35 0.92 1.01 1.03	B 36 0.91 1.03 1.07
C+ 37 1.12 1.36 1.40	A 38 1.09 1.18 1.21	B 39 1.04 1.12 1.17	A 40 0.82 0.88 0.89	B 41 1.00 1.06 1.09	A 42 1.02 1.09 1.12	B 43 1.08 1.13 1.18	A 44 1.03 1.12 1.14
C+ 46 1.30 1.39 1.43	B 47 1.12 1.18 1.21	A 48 0.96 1.05 1.07	B 49 0.87 0.95 0.99	A 50 0.92 1.01 1.03	B 51 1.08 1.13 1.18	A 52 1.09 1.17 1.20	B 53 1.15 1.19 1.23
B 55 1.17 1.23 1.26	A 56 1.08 1.18 1.20	B 57 0.94 1.07 1.12	A 58 0.57 0.60 0.71	B 59 0.91 1.03 1.07	A 60 1.03 1.12 1.14	B 61 1.15 1.19 1.23	A 62 1.12 1.21 1.23

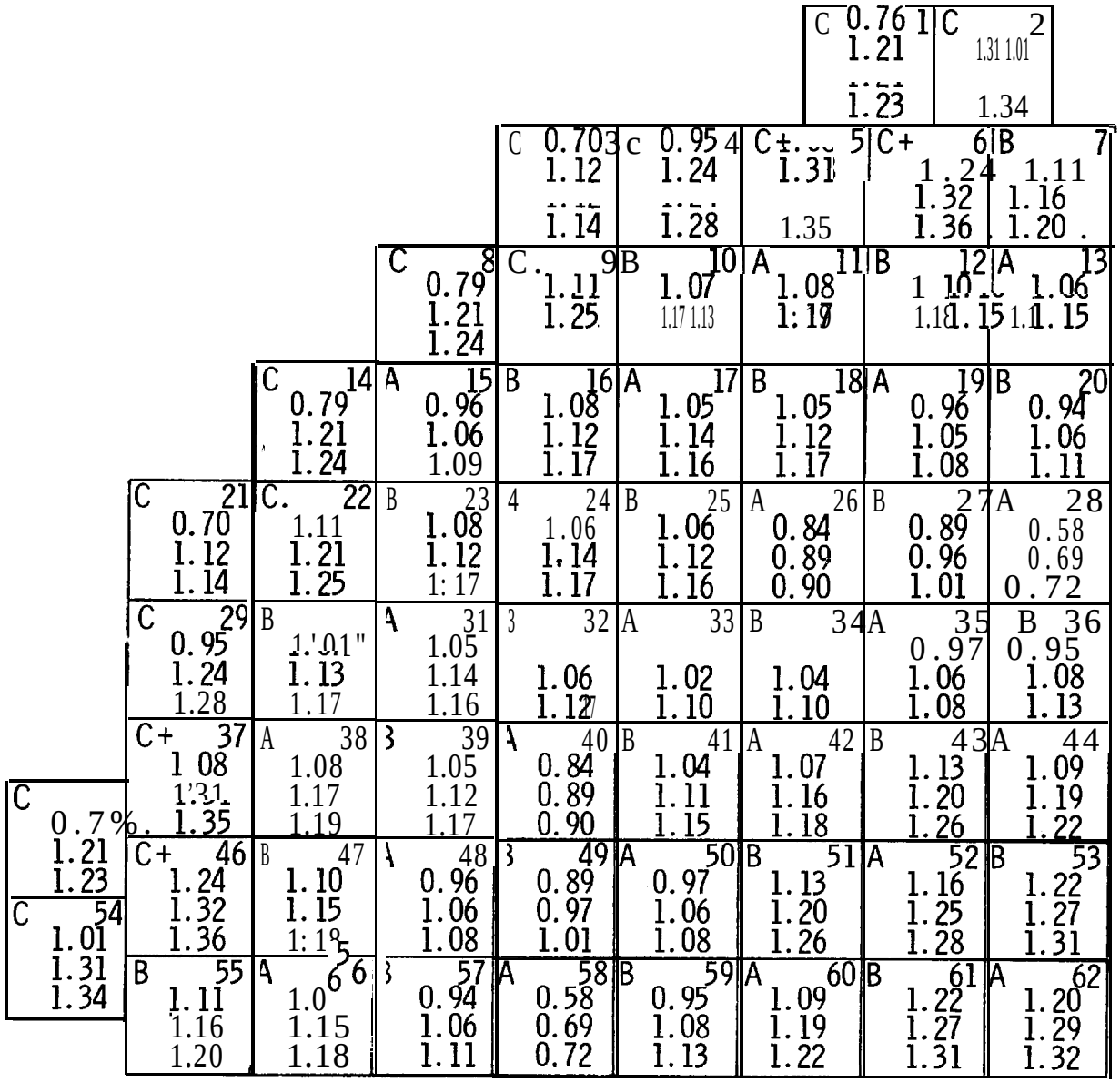
C 45
0.81
1.30
1.32

C 54
1.09
1.40
1.43

LOUISIANA POWER & LIGHT CO. Waterford Steam Electric Station	PLANAR AVERAGE POWER DISTRIBUTION BOC, PART-LENGTH ROD AS IF FULL LENGTH, BANK 6 FULL IN, FULL POWER NO XENON	Figure 4.3-11

X.XX
X.XX
X.XX

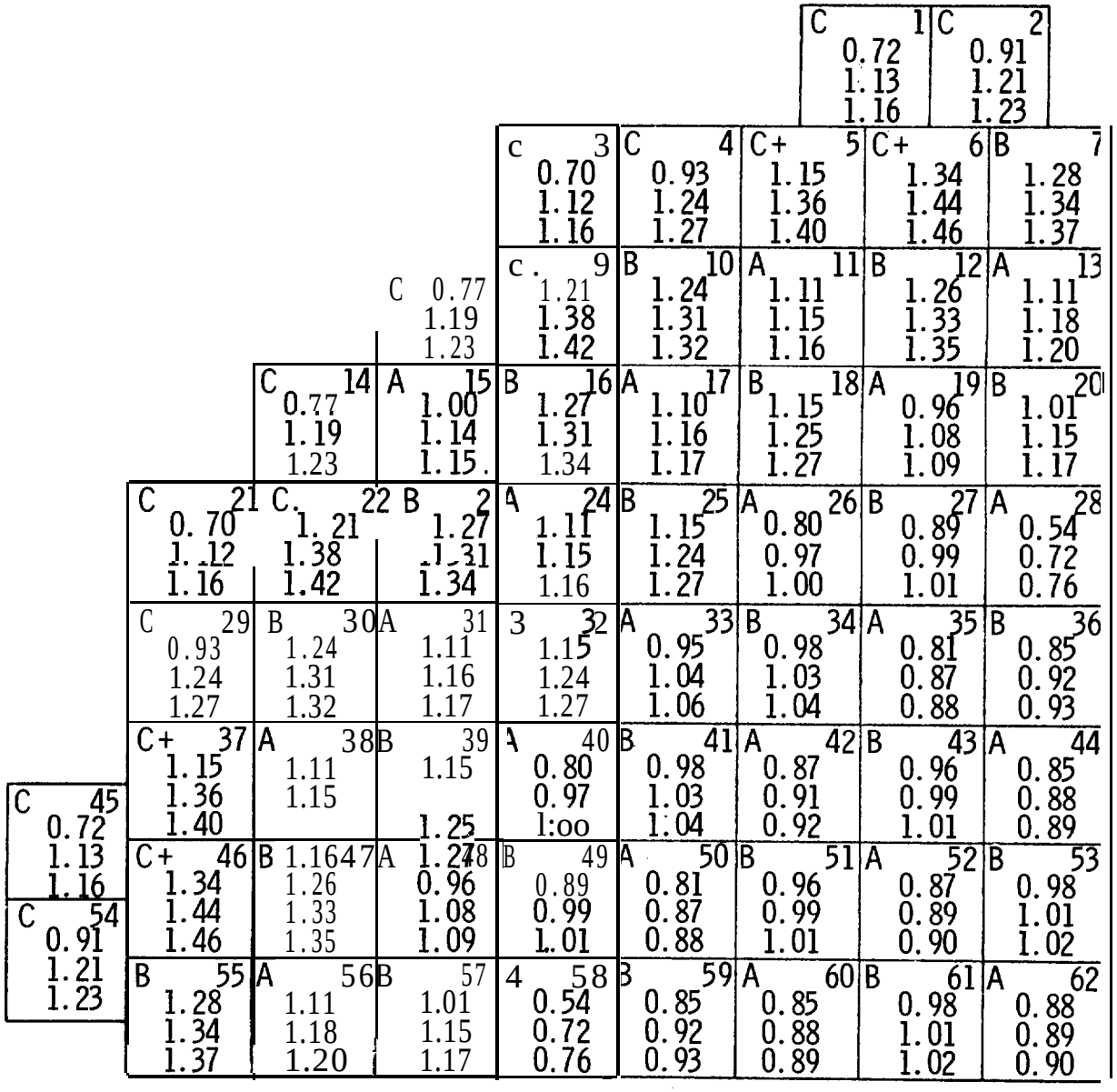
BOX AVERAGE (BOX POWER / CORE AVERAGE POWER)
MAX. ENTHALPY RISE FACTOR (Max. of the Average Power of 4 Neighboring Pins / Core Average Power)
MAX. ONE-PINFACTOR (Max. Pin Power / Core Average Power)



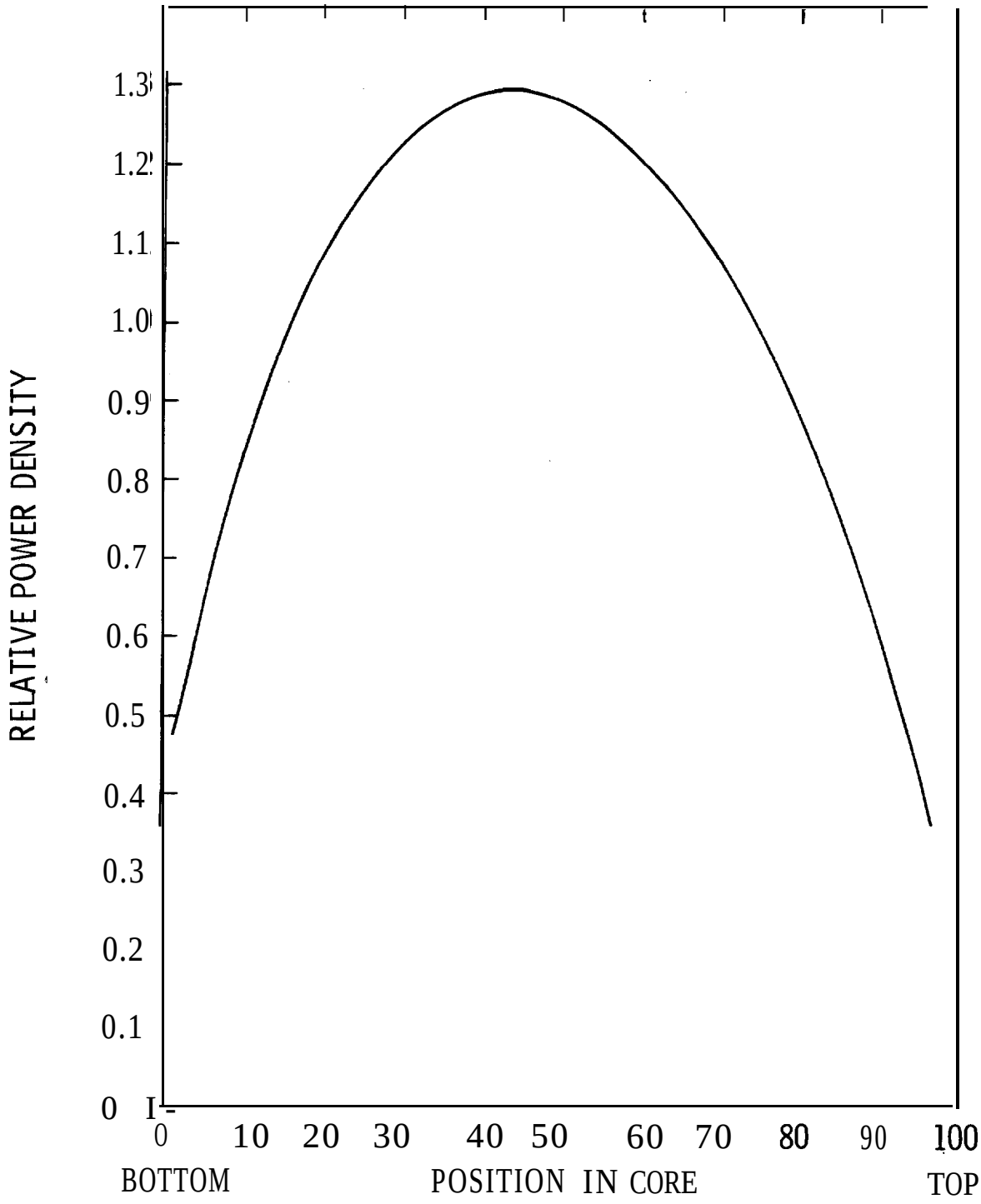
LOUISIANA POWER & LIGHT CO. Waterford Steam Electric Station	PLANAR AVERAGE POWER DISTRIBUTION BOC, PART-LENGTH ROD AS IF FULL LENGTH., BANK 6 FULLY, FULL POWER EQUILIBRIUM XENON	Figure 4.3-12

X.XX
X.XX
r X.XX

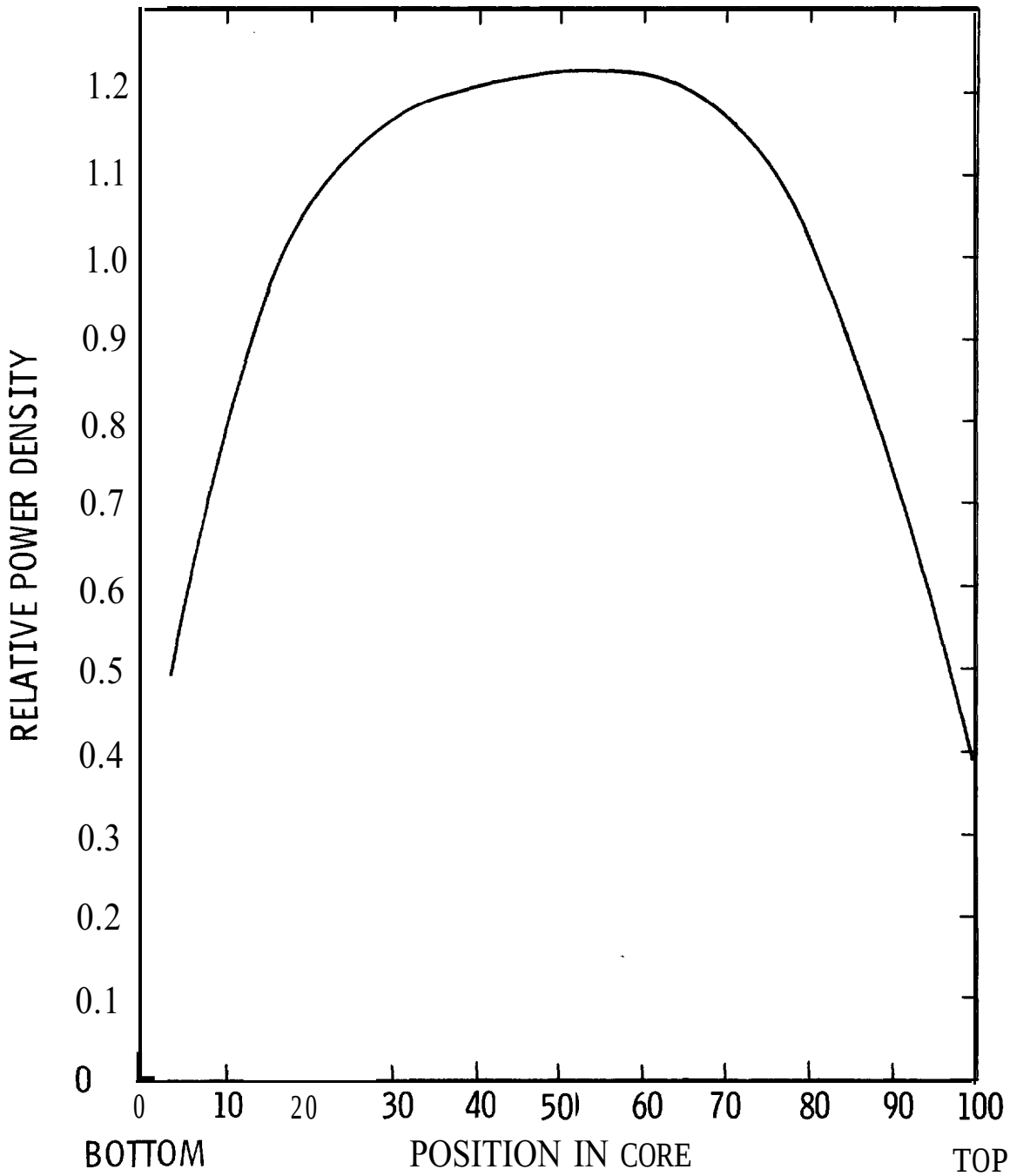
BOX AVERAGE (BOX POWER / CORE AVERAGE POWER)
MAX. ENTHALPY RISEFACTOR (Max. of the Average Power of4 Neighboring Pins / Core Average Power)
MAX. ONE-PIN FACTOR (Max. Pin Power / Core Average Power)



LOUISIANA POWER & LIGHT CO. Waterford Steam Electric Station	PLANAR AVERAGE POWER DISTRIBUTION EOC, PART-LENGTH ROD AS IF FULL LENGTH BANK 6 FULL IN, FULL POWER EQUILIBRIUM XENON	Figure 4.3-13



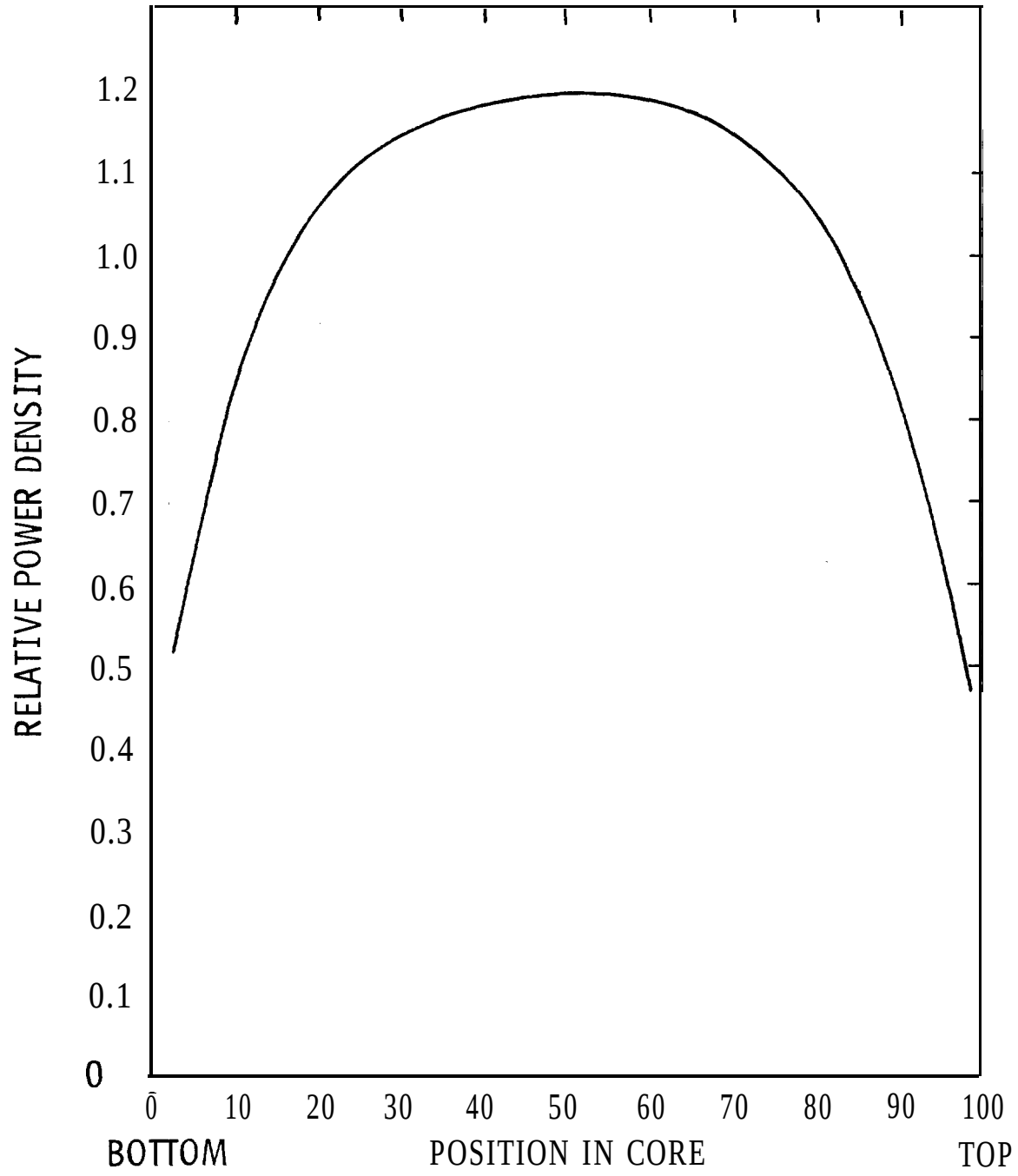
LOUISIANA POWER & LIGHT CO. Waterford Steam Electric Station	**AXIAL POWER DISTRIBUTION, BOC, UNRODDED**	**Figure** 4.3-I 4



LOUISIANA
POWER & LIGHT CO.
Waterford Steam
Electric Station

AXIAL POWER DISTRIBUTION AT 3000 MWD/MTU, UNRODDED

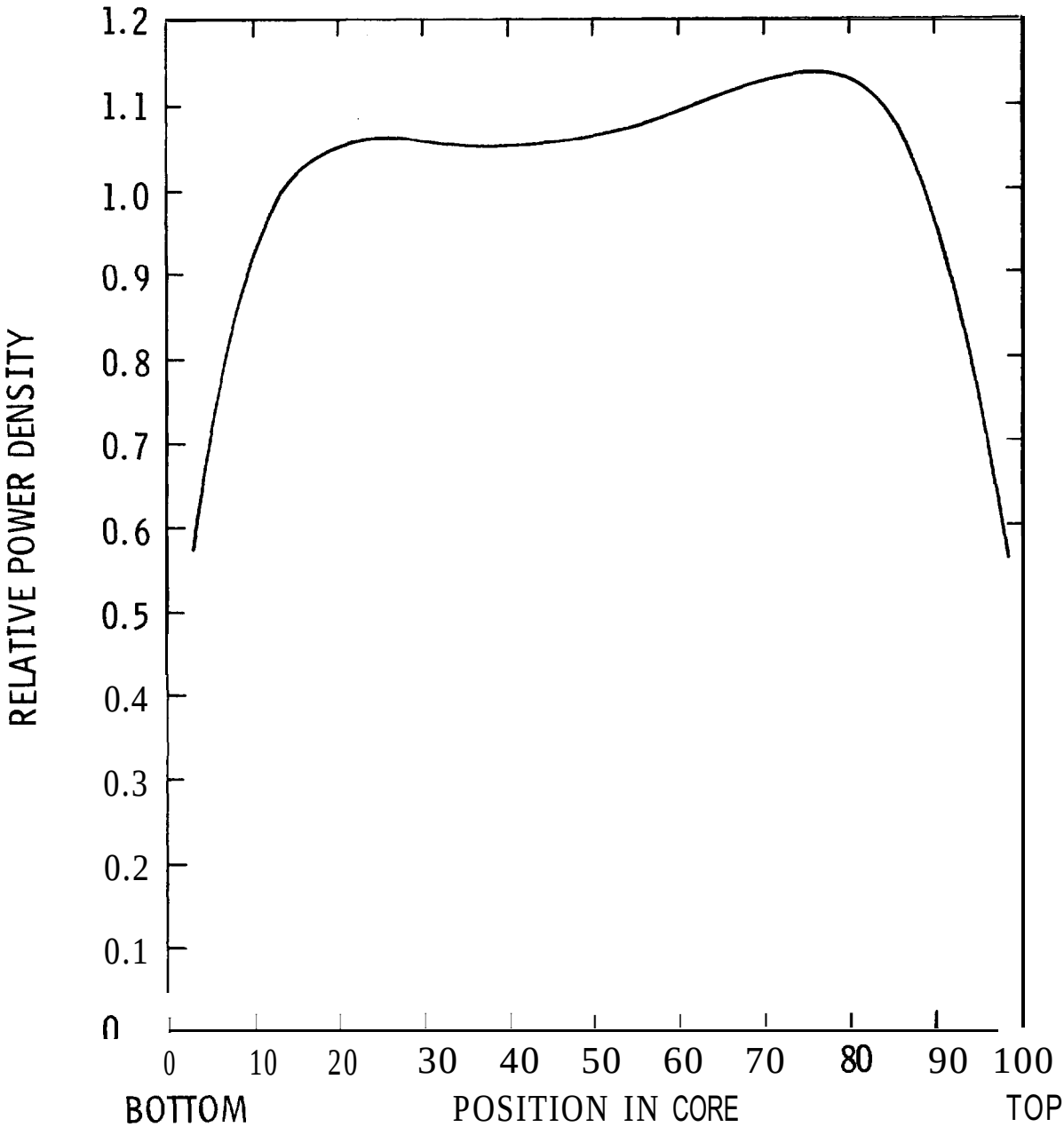
Figure
4.3-15



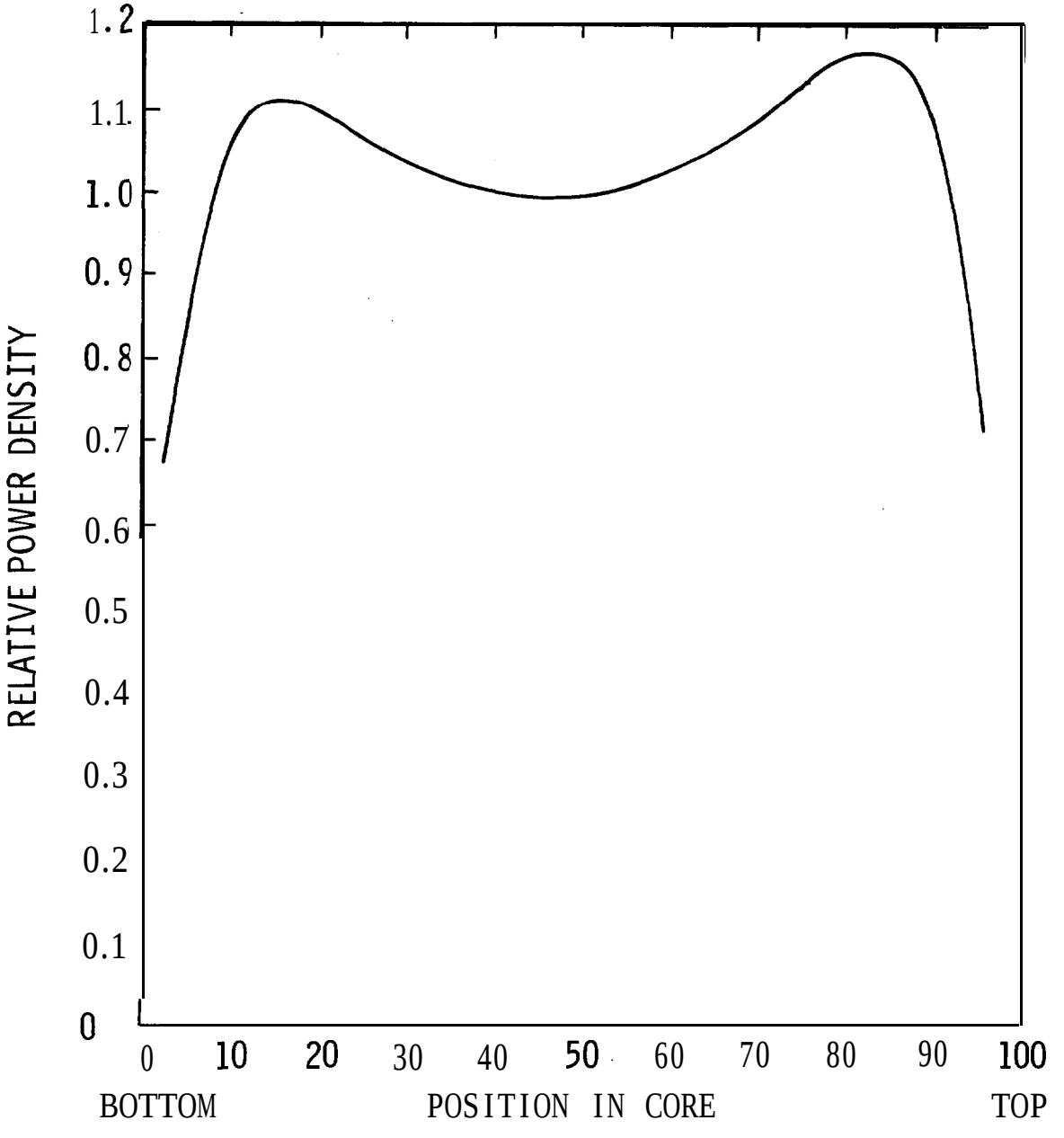
LOUISIANA
POWER & LIGHT CO.
Waterford Steam
Electric Station

AXIAL POWER DISTRIBUTION AT
6000 MWD/MTU, UNRODDED

Figure
4.3-16



LOUISIANA POWER & LIGHT CO. Waterford Steam Electric Station	AXIAL POWER DISTRIBUTION AT 9000 MWD/MTU, UNRODDED	Figure 4.3-I 7



LOUISIANA POWER & LIGHT CO. Waterford Steam Electric Station	**AXIAL POWER DISTRIBUTION AT THE END OF THE FIRST CYCLE, UNRODDED**	**Figure** 4.3-1 8

FIGURE 4.3-19
HAS BEEN INTENTIONALLY
DELETED

REVISION 6 (12/92)

Waterford Steam Electric Station ● 3	PLANAR AVERAGE POWER DISTRIBUTION AT THE BEGINNING OF THE SECOND CYCLE, UNRODDED	Figure 4.3-I 9

FIGURE 4.3-20
HAS BEEN INTENTIONALLY
DELETED

REVISION 6 (12/92)

Woterford Steam Electric Station •3	PLANAR AVERAGE POWER DISTRIBUTION AT THE END OF THE SECOND CYCLE. UNRODDED	Figure 4.3-20

FIGURE 4.3-21
HAS BEEN INTENTIONALLY
DELETED

REVISION 6 (12/92)

Waterford Steam Electric Station ● 3	PLANAR AVERAGE POWER DISTRIBUTION AT THE BEGINNING OF THE THIRD CYCLE. UNRODDED	Figure 4.3-21

FIGURE 4.3-22
HAS BEEN INTENTIONALLY
DELETED

REVISION 6 (12/92)

Woterford Steam Electric Station ● 3	PLANAR AVERAGE POWER DISTRIBUTION AT THE END OF THE TH IRD CYCLE • UNRODDED	Figure 4.3-22

F I GURE 4 . 3-23
HAS BEEN INTENTIONALLY
DELETED

REVISION 6 (12/92)

Waterford Steam Electric Station ● 3	PLANAR AVERAGE POWER DISTRIBUTION AT THE BEGINNING OF THE FOURTH CYCLE. UNRODDED	Figure 4.3-23

F IGURE 4.3-24
HAS BEEN INTENTIONALLY
DELETED

REVISION 6 (12/92)

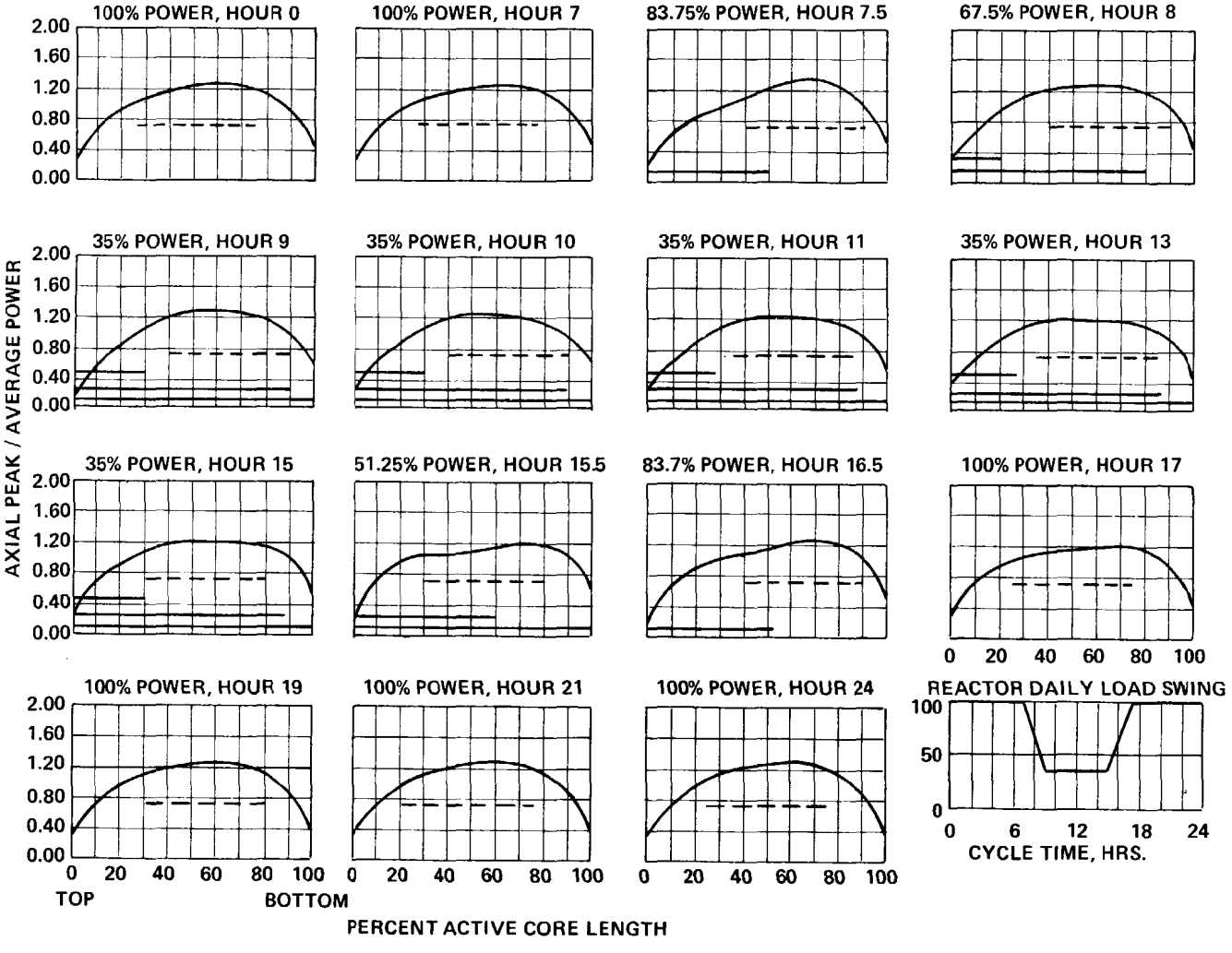
Waterford Steam Electric Station •3	PLANAR AVERAGE POWER DISTRIBUTION AT THE END OF THE FOURTH CYCLE. UNRODDED	Figure 4.3-24

LOUISIANA POWER & LIGHT CO.
Waterford Steam Electric Station

DAILY REACTOR POWER MANEUVERING NEAR BEGINNING OF CYCLE (100% TO 35% TO 100% POWER)

Figure 4.3-25

100% TO 35% TO 100% POWER – TWO HOUR RAMPS – 6 HOURS AT 35% POWER – WITH PART LENGTH RODS
POWER CONTROL ON RODS, XENON CONTROL ON BORON – EQUILIBRIUM DAILY MANEUVERING CYCLE



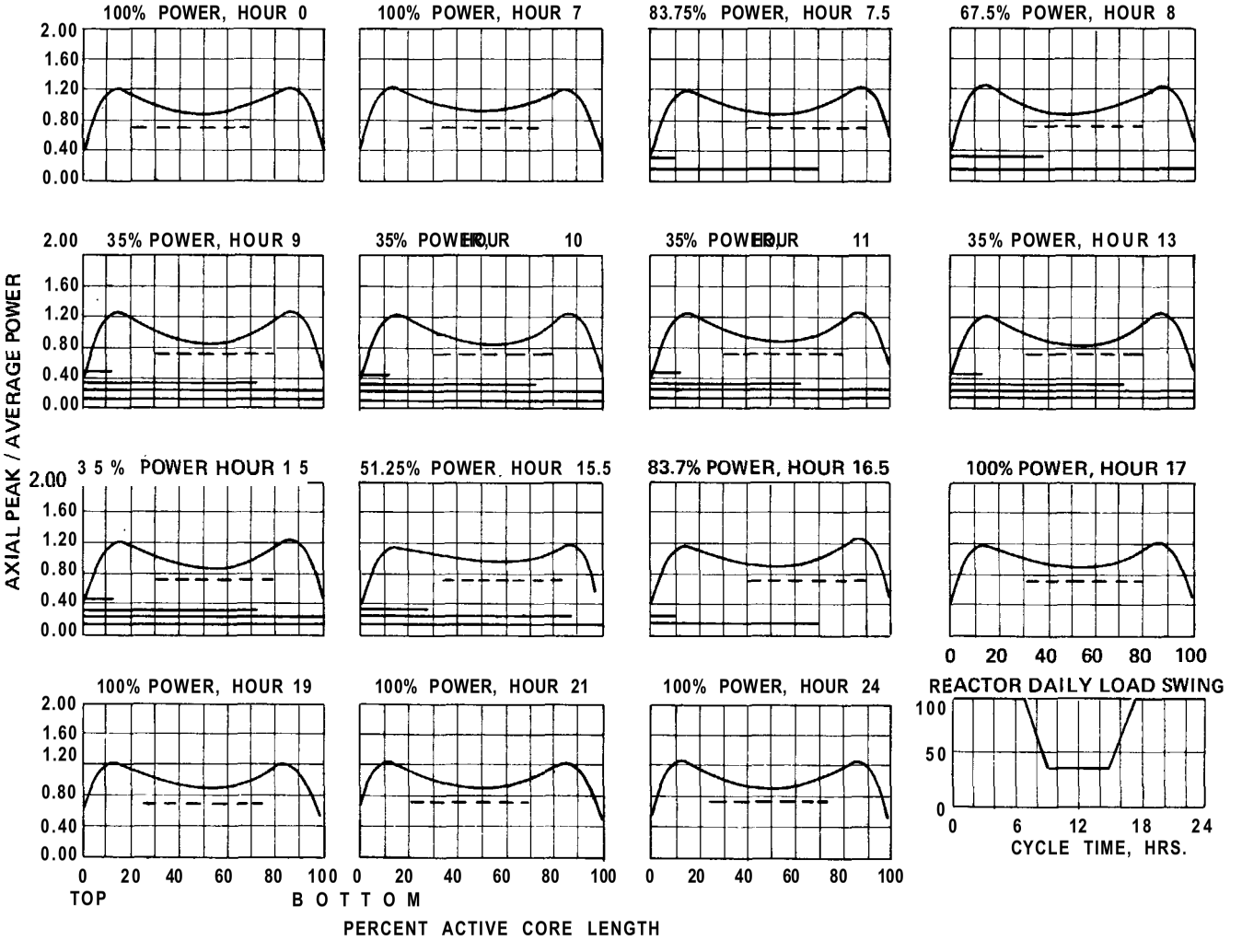
LEGEND:
——— Regulating Bank
– – – – Part Length Rod

LOUISIANA POWER & LIGHT CO.
Waterford Steam Electric Station

DAILY REACTOR POWER MANEUVERING NEAR END OF CYCLE (100% TO 35% TO 100% POWER)

Figure 4.3-26

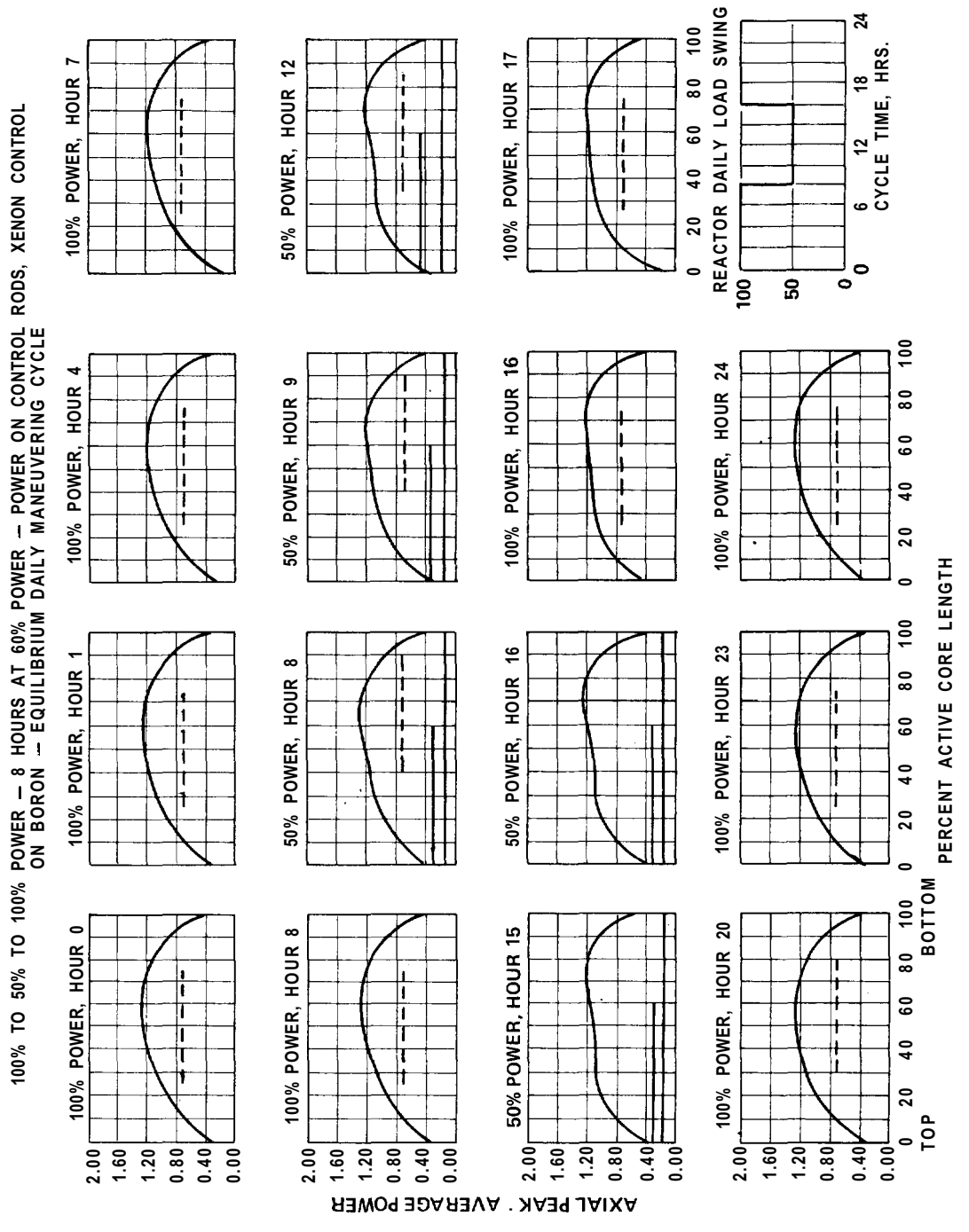
100% TO 35% TO 100% POWER — TWO HOUR RAMPS — 6 HOURS AT 35% POWER — WITH PART LENGTH RODS
POWER CONTROL ON RODS, XENON CONTROL ON BORON — EQUILIBRIUM DAILY MANEUVERING CYCLE



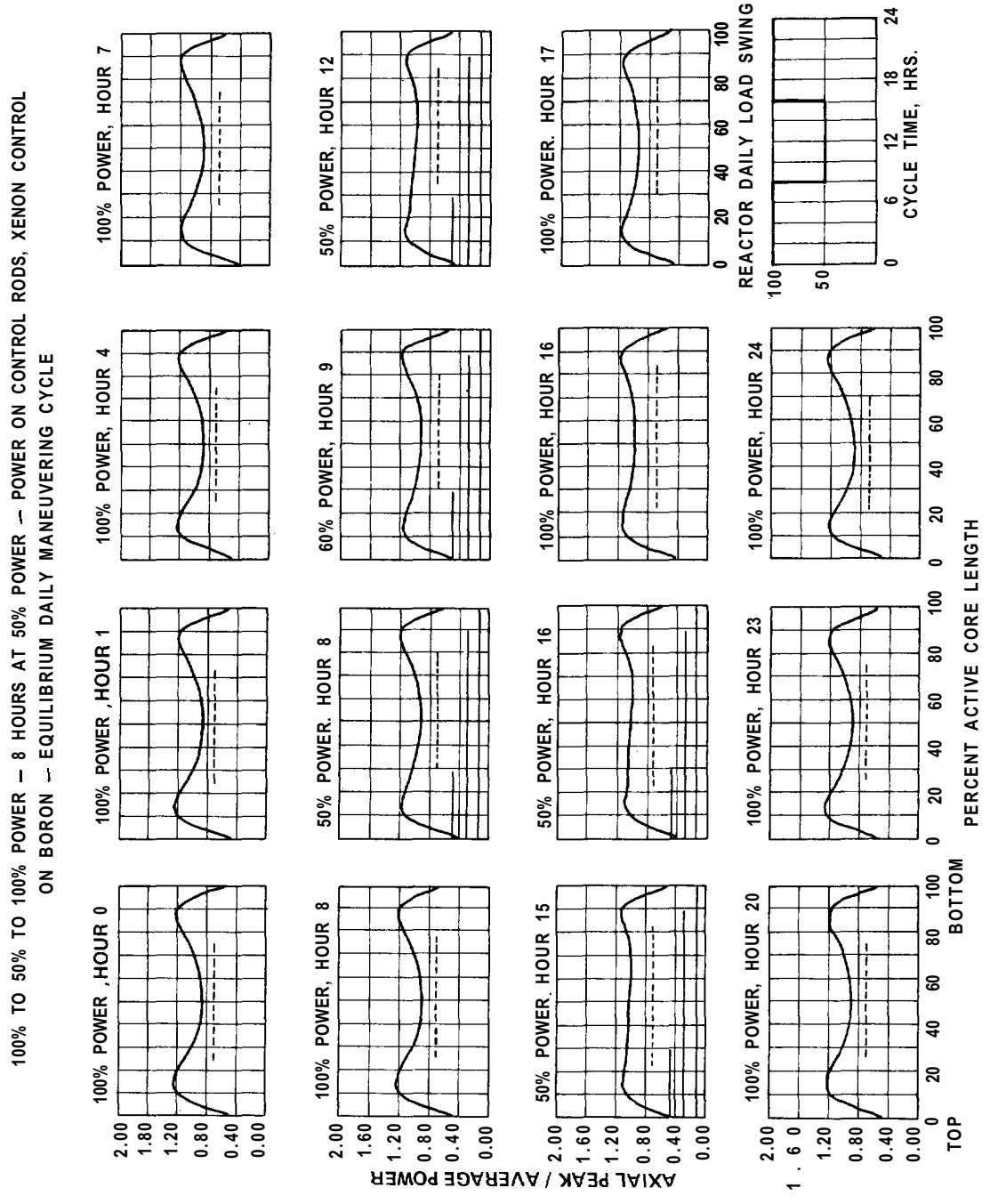
LEGEND:

——— Regulating Bank

- - - Part Length Rod



LOUISIANA POWER & LIGHT CO Waterford Steam Electric Station	DAILY REACTOR POWER MANEUVERING NEAR THE BEGINNING OF CYCLE (100% TO 50% TO 100% POWER)	Figure 4.3-27



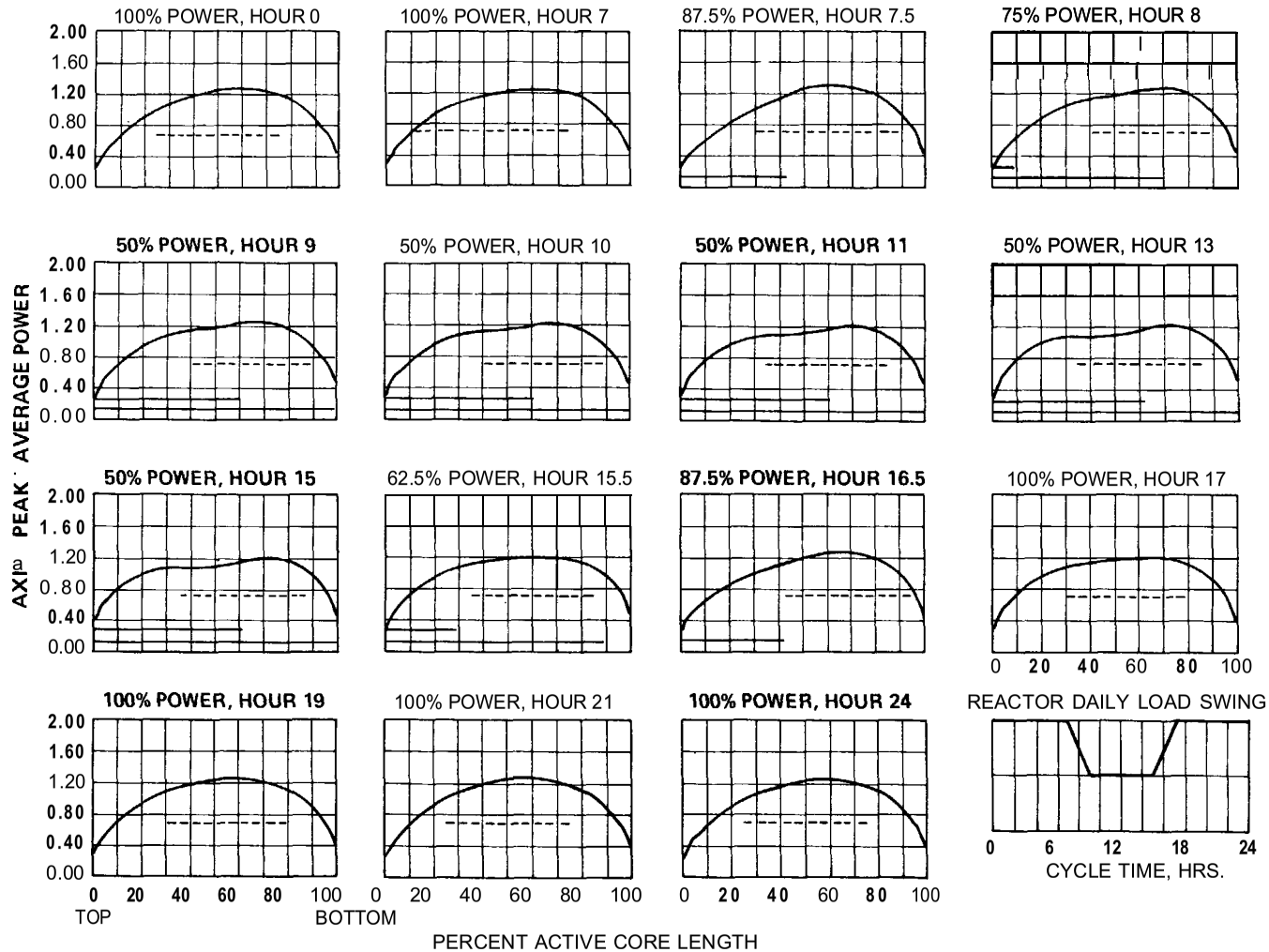
LOUISIANA POWER & LIGHT CO. Waterford Steam Electric Station	DAILY REACTOR POWER MANEUVERING NEAR THE END OF CYCLE (100% TO 50% TO 100% POWER)	Figure 4.3-28

LOUISIANA POWER & LIGHT CO.
Waterford Steam Electric Station

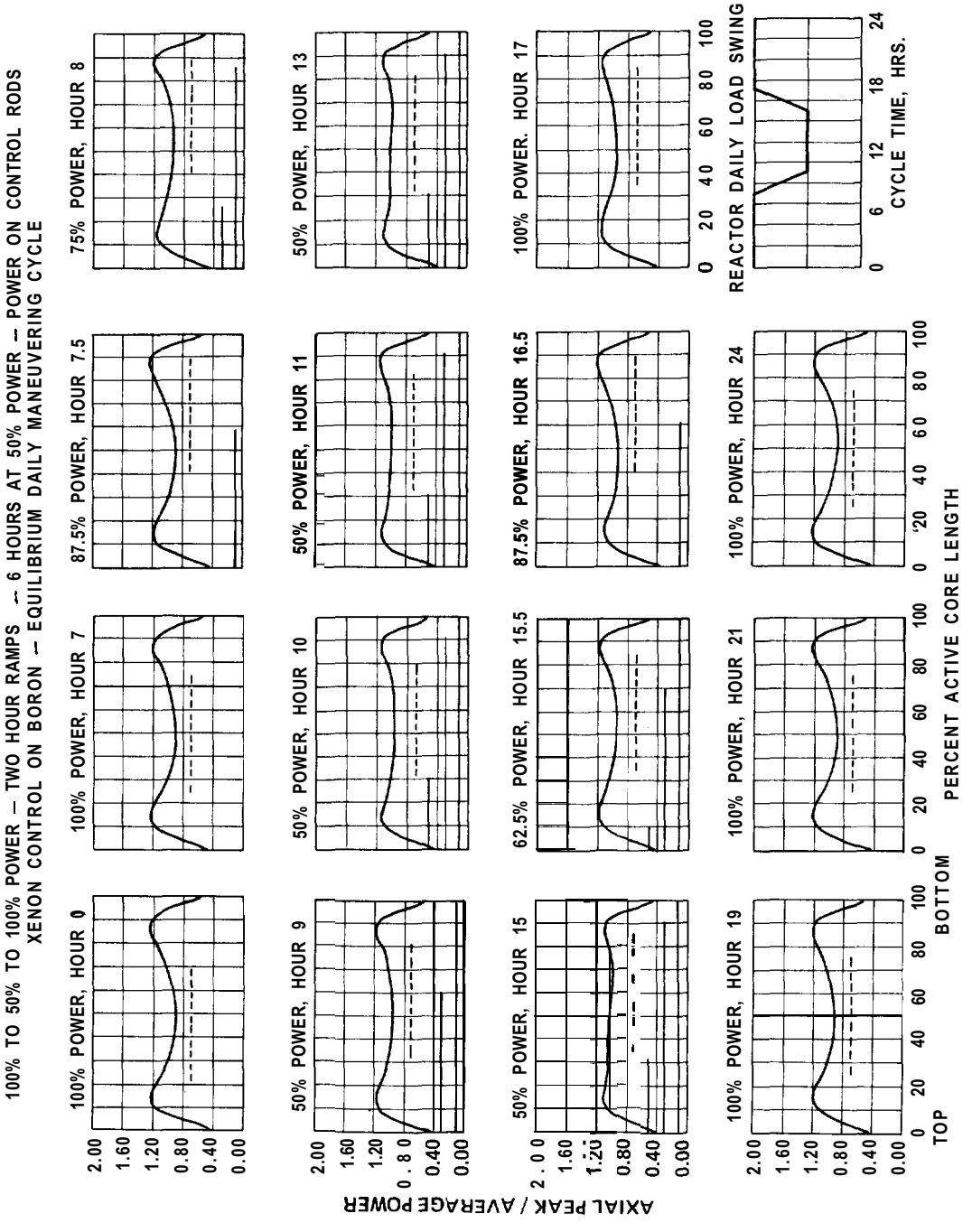
DAILY REACTOR POWER MANEUVERING NEAR THE BEGINNING OF CYCLE (2-HOUR RAMPS)

Figure 4.3-29

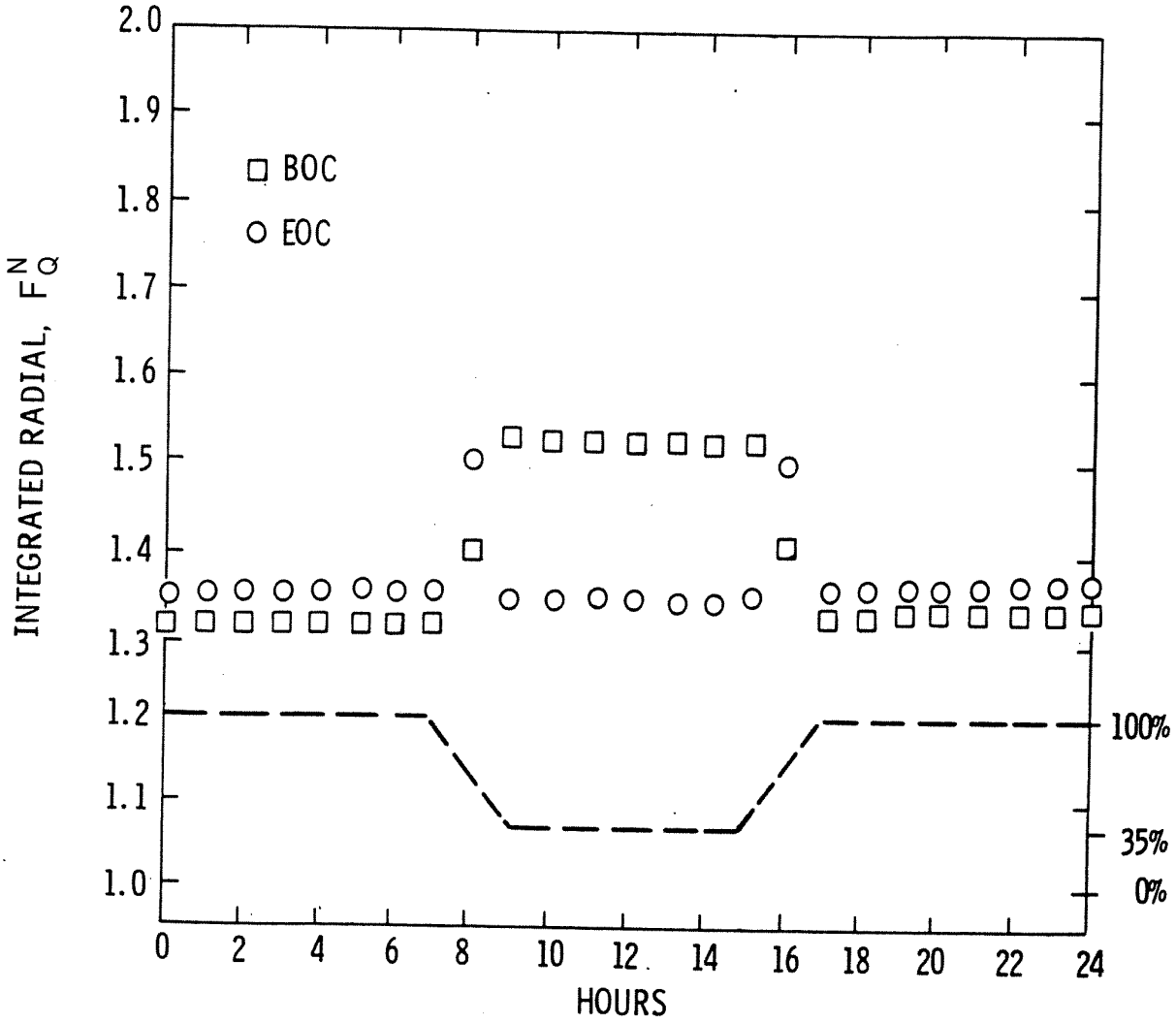
100% TO 50% TO 100% POWER -TWO HOUR RAMPS – 6 HOURS AT 50% POWER – POWER ON CONTROL RODS
XENON CONTROL ON BORON – EQUILIBRIUM DAILY MANEUVERING CYCLE



LEGEND:
——— Regulatiny Bank
– – – – Part Length Rod

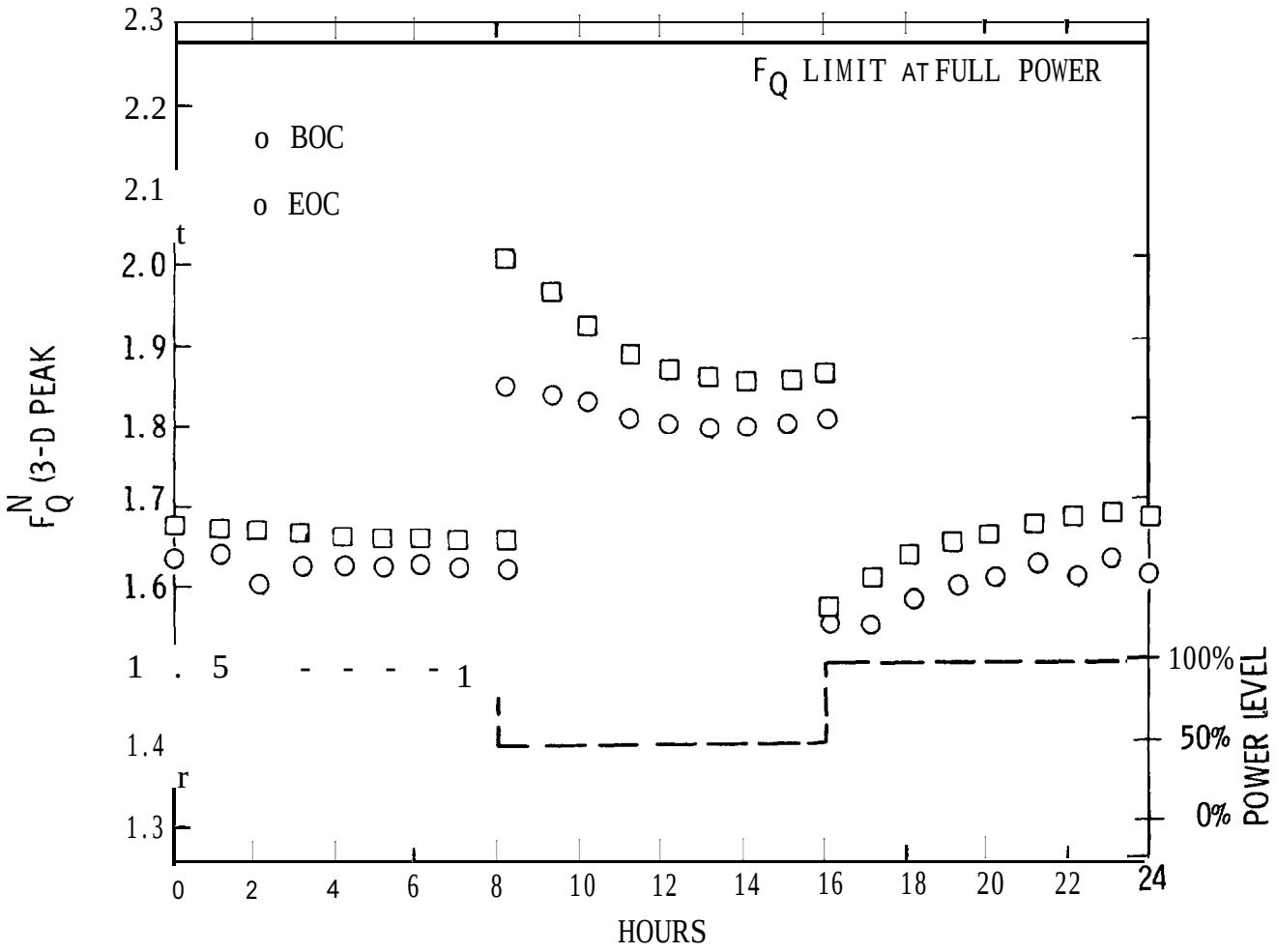


LOUISIANA POWER & LIGHT CO. Waterford Steam Electric Station	DAILY REACTOR POWER MANEUVERING NEAR THE END OF CYCLE (2-HOUR RAMPS)	Figure 4.3-30

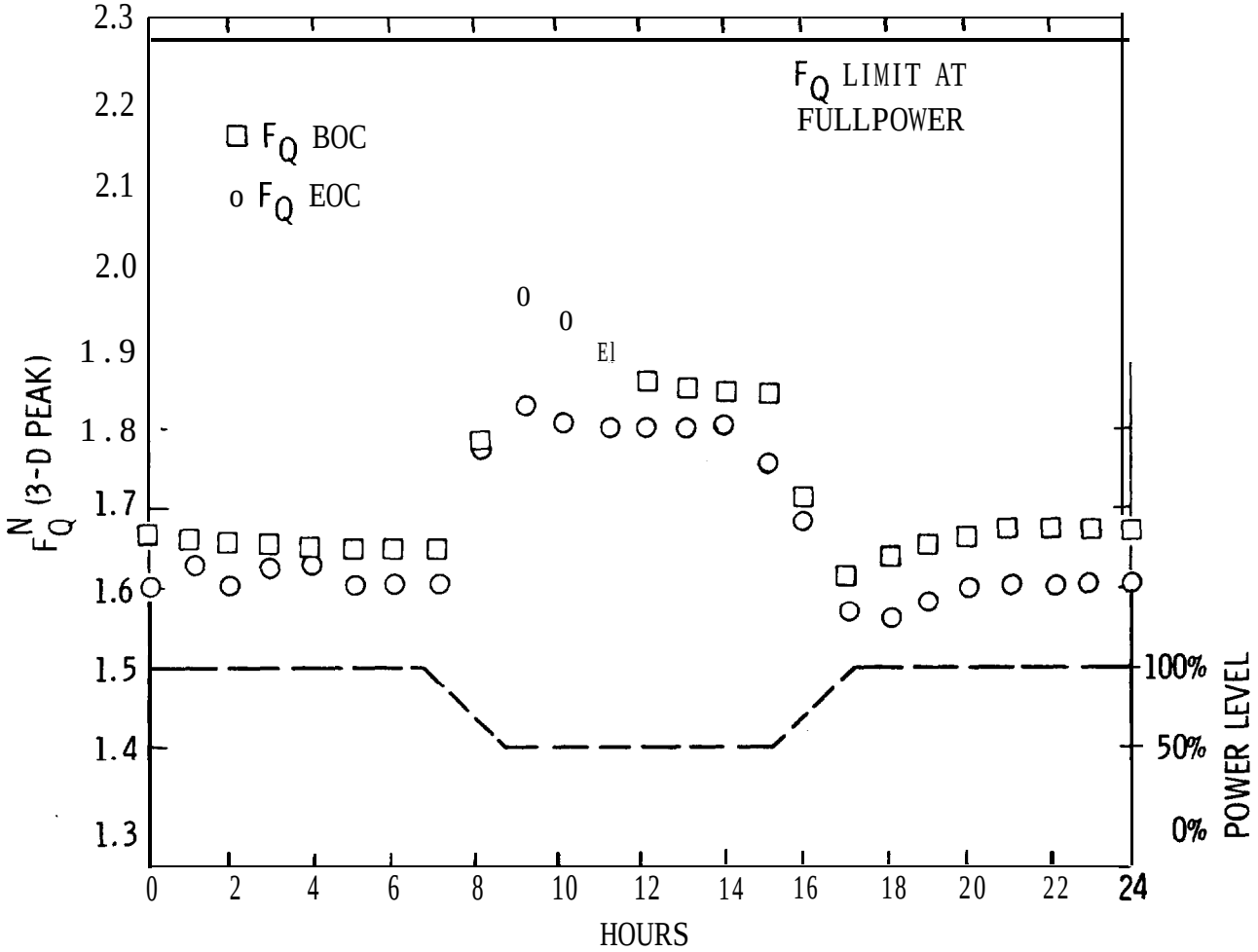


Revision 11 (05/01)

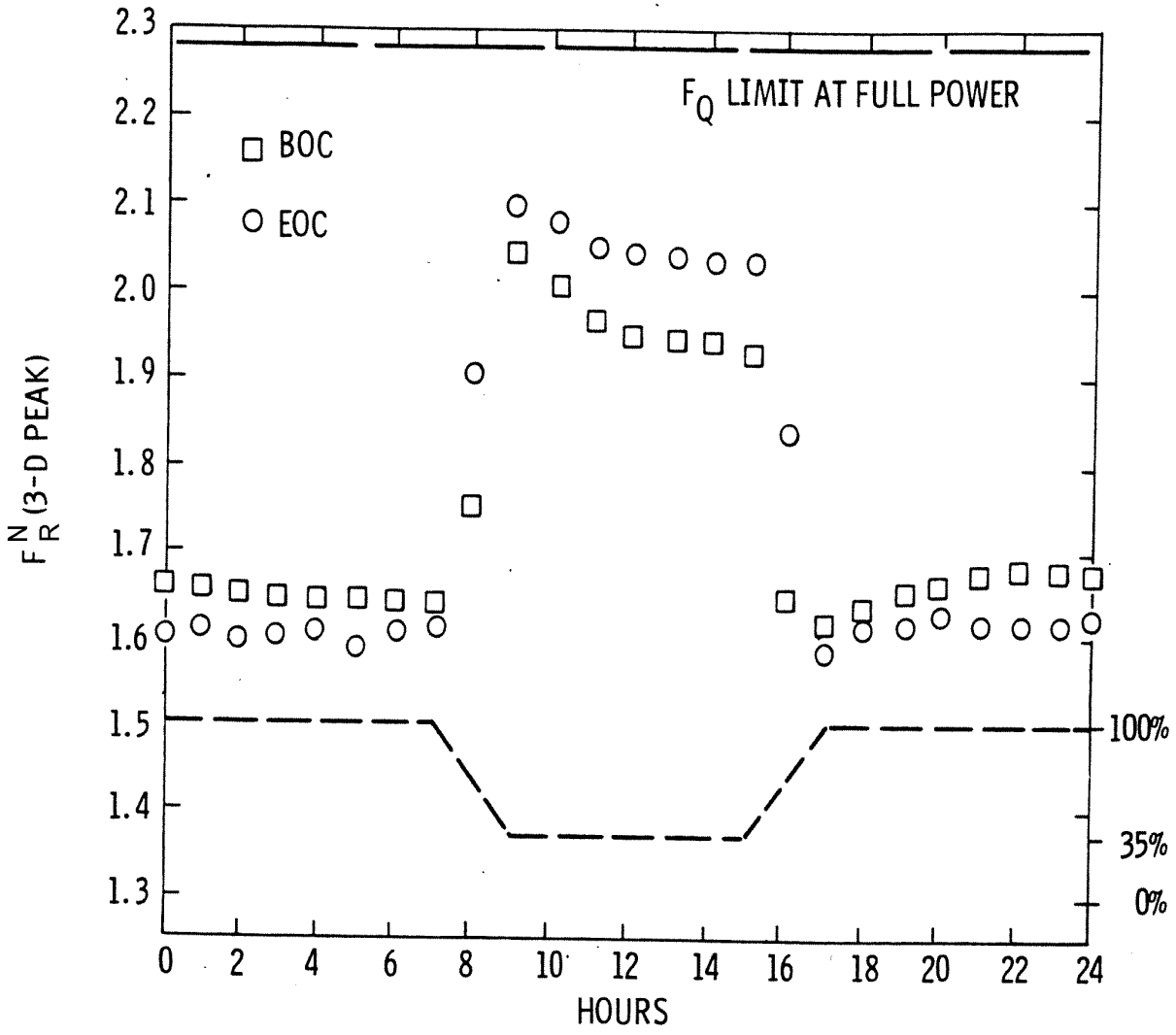
Waterford Steam Electric Station #3	F_Q^N VS. TIME FOR A LOAD FOLLOWING TRANSIENT (SHEET 1 OF 3)	Figure 4.3-31



LOUISIANA POWER & LIGHT CO. Waterford Steam Electric Station	F_Q^N VS. TIME FOR A LOAD FOLLOWING TRANSIENT (SHEET 2 OF 3)	Figure 4.3-31

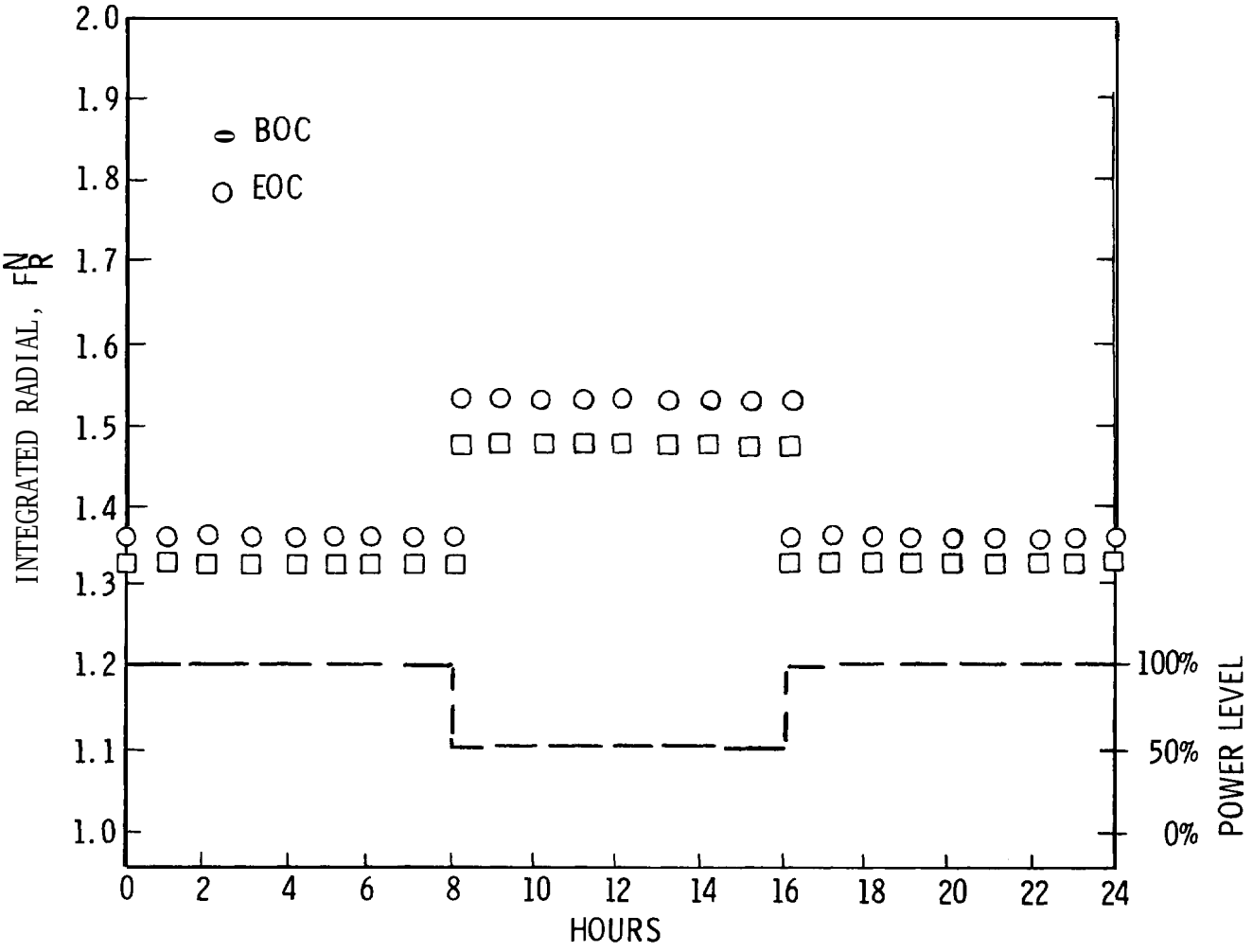


LOUISIANA POWER & LIGHT CO. Waterford Steam Electric Station	F_Q^N VS. TIME FOR A LOAD FOLLOWING TRANSIENT (SHEET 3 OF 3)	Figure 4.3-31

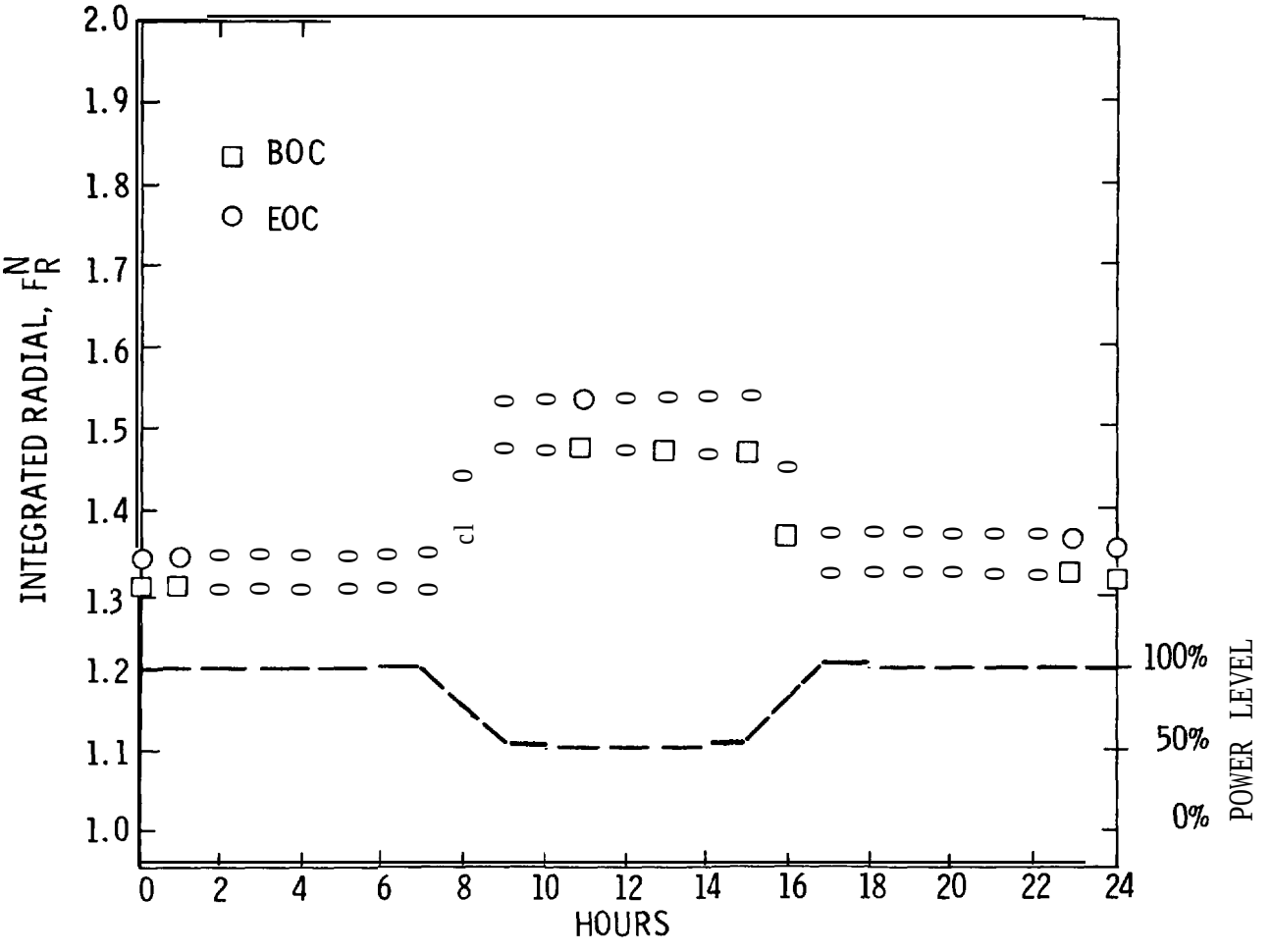


Revision 11 (05/01)

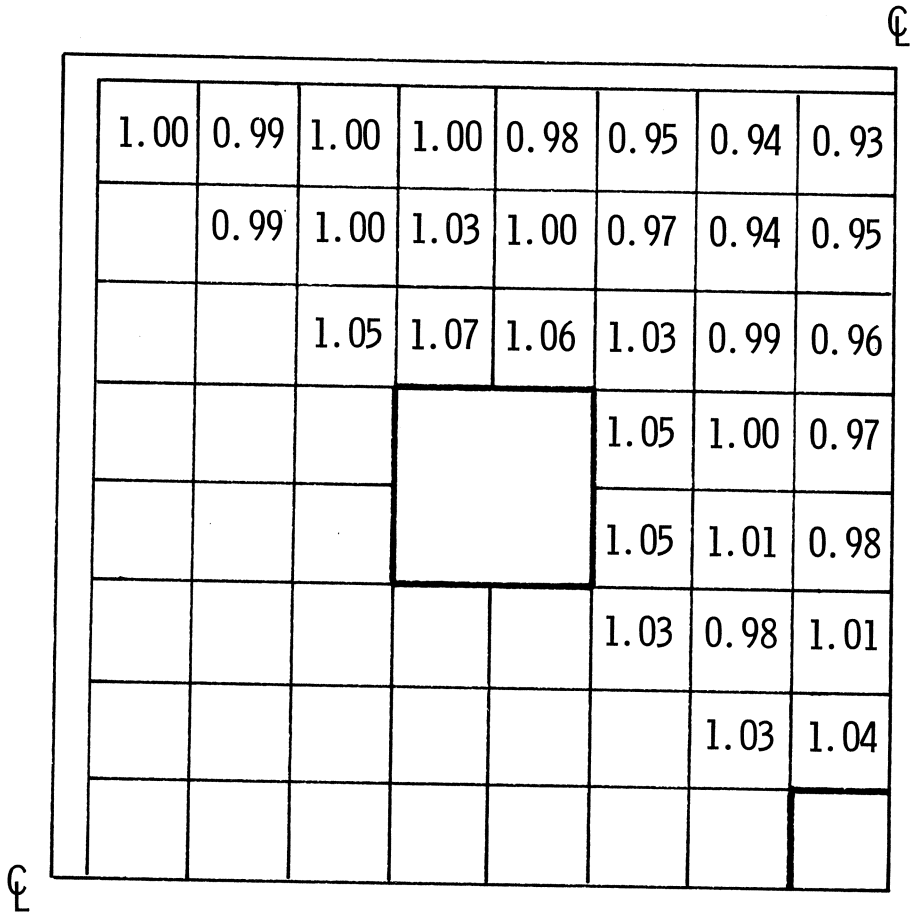
Waterford Steam Electric Station #3	F_R^N VS. TIME FOR A LOAD FOLLOWING TRANSIENT (SHEET 1 OF 3)	Figure 4.3-32



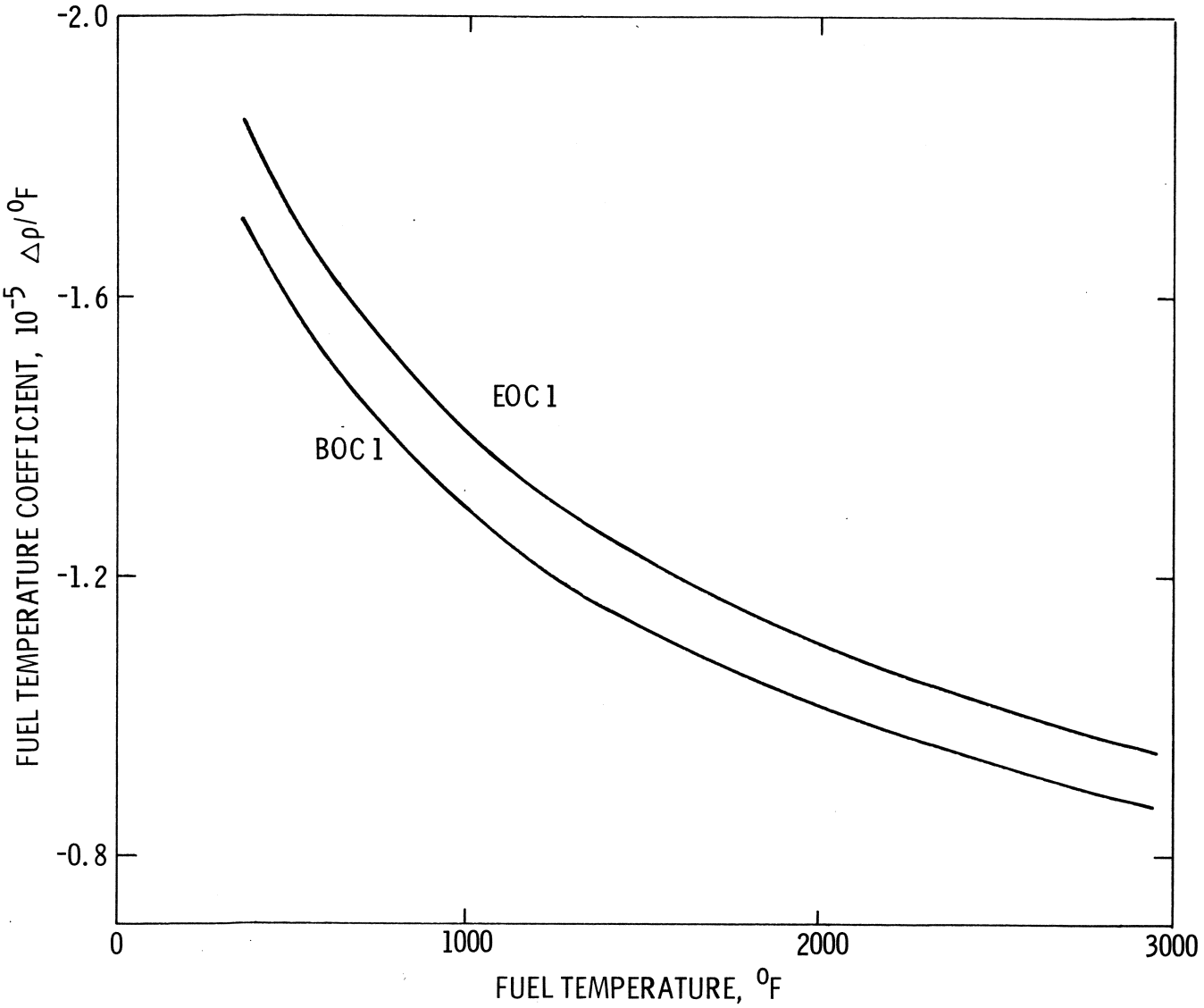
LOUISIANA POWER & LIGHT CO. Waterford Steam Electric Station	F_R^N VS. TIME FOR A LOAD FOLLOWING TRANSIENT (SHEET 2 OF 3)	Figure 4.3–32



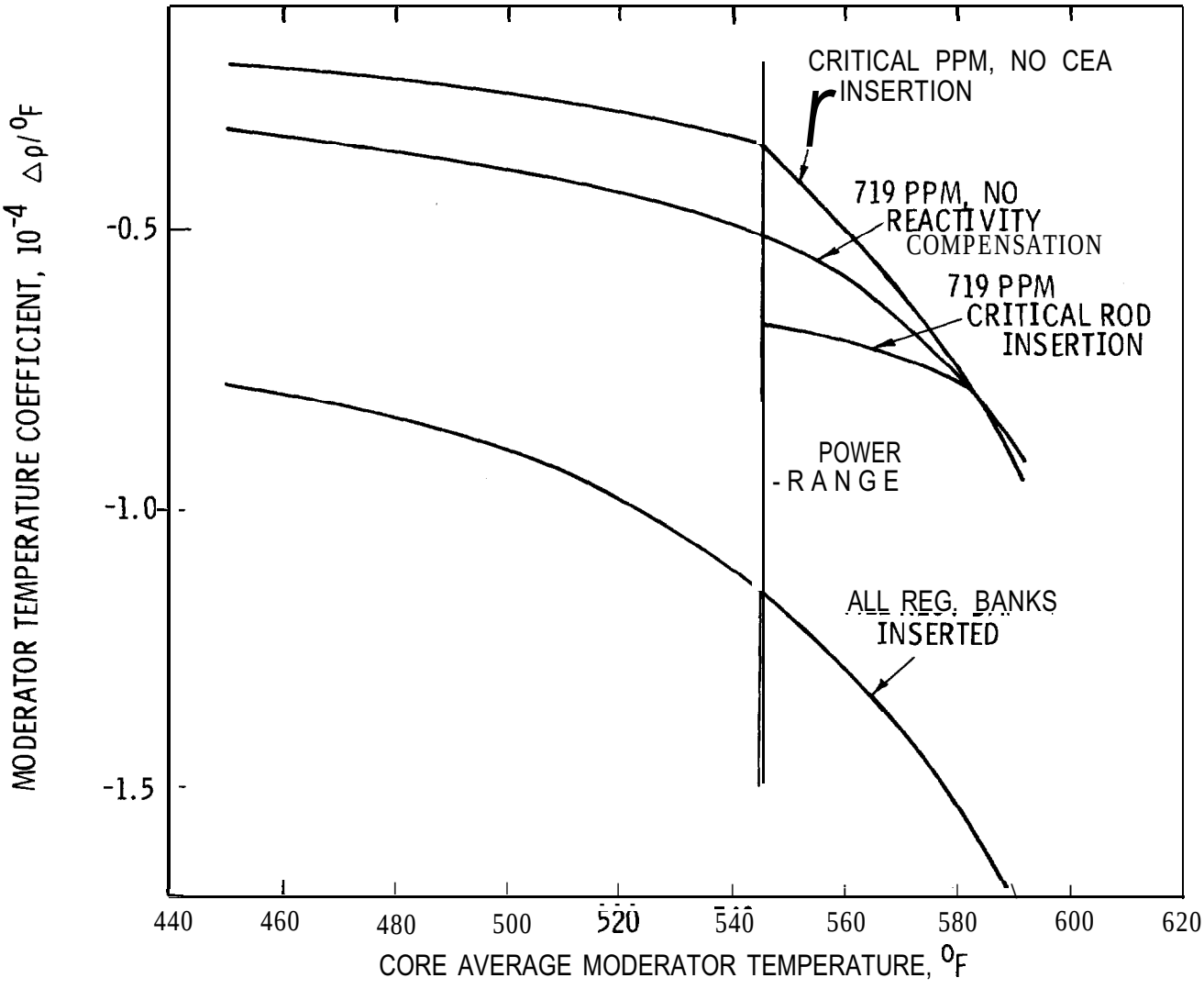
LOUISIANA POWER & LIGHT CO. Waterford Steam Electric Station	F_R^N VS. TIME FOR A LOAD FOLLOWING TRANSIENT (SHEET 3 OF 3)	Figure 4.3–32



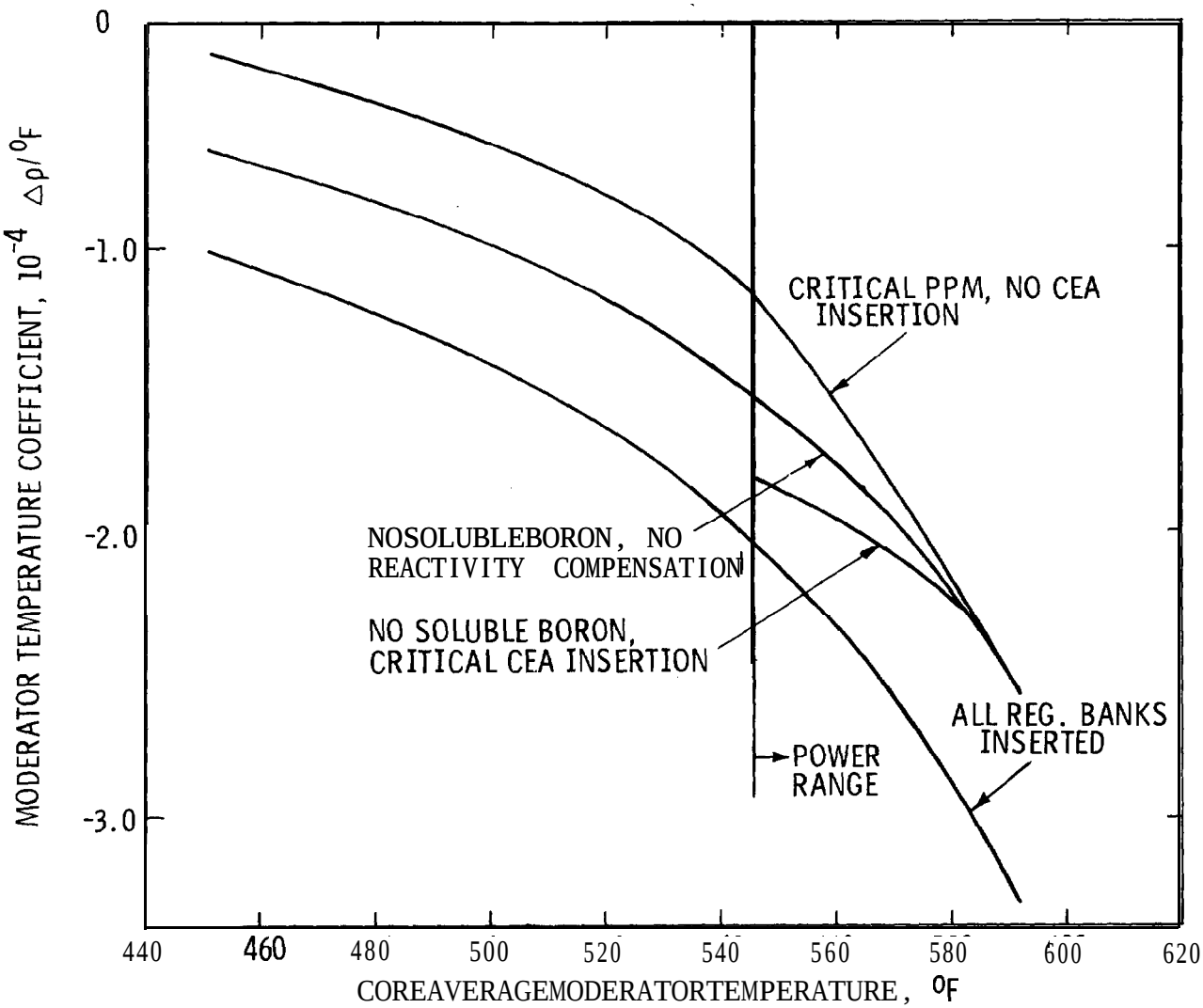
LOUISIANA POWER & LIGHT CO. Waterford Steam Electric Station	NORMALIZED POWER DISTRIBUTION WITHIN TYPICAL UNSHIMMED ASSEMBLY	Figure 4.3-33



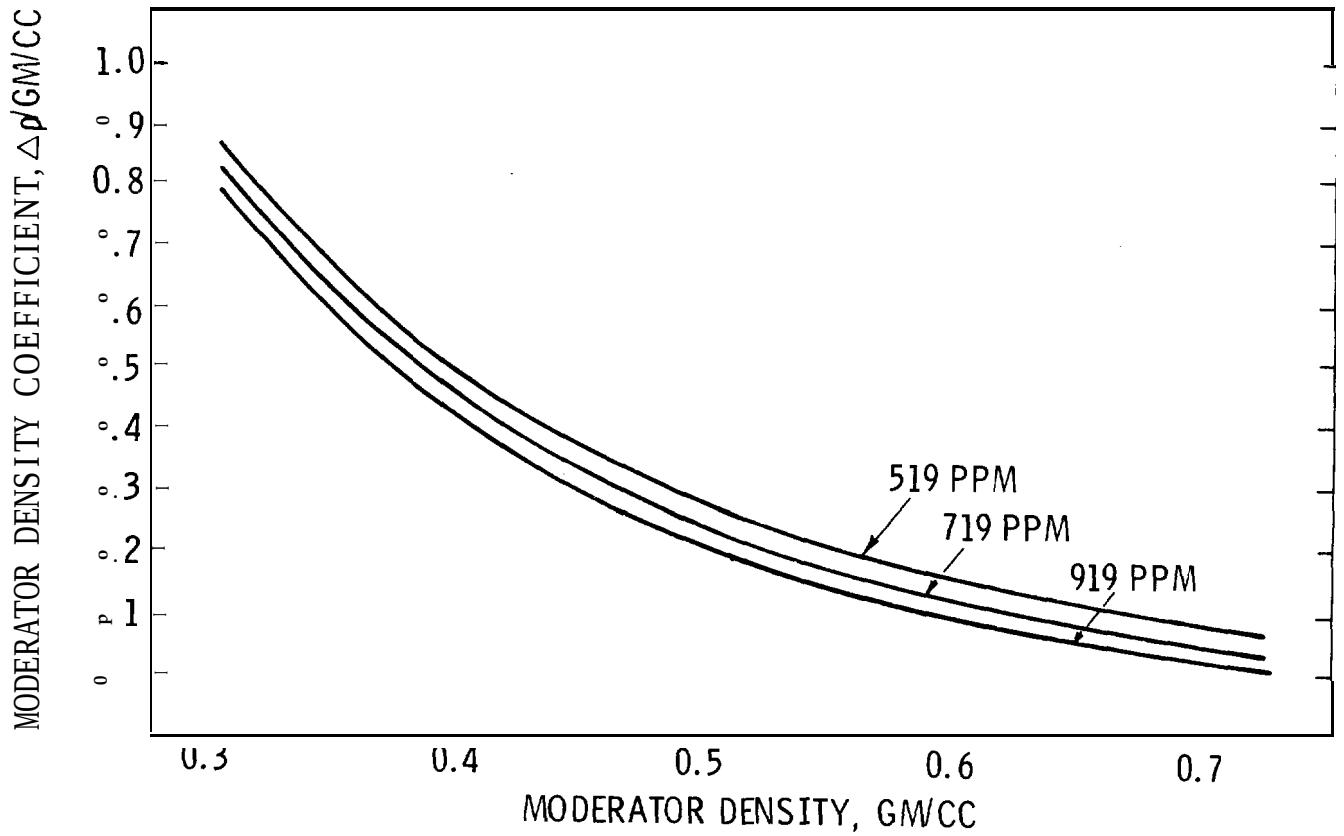
LOUISIANA POWER & LIGHT CO. Waterford Steam Electric Station	FUEL TEMPERATURE COEFFICIENT VS. EFFECTIVE FUEL TEMPERATURE	Figure 4.3-34



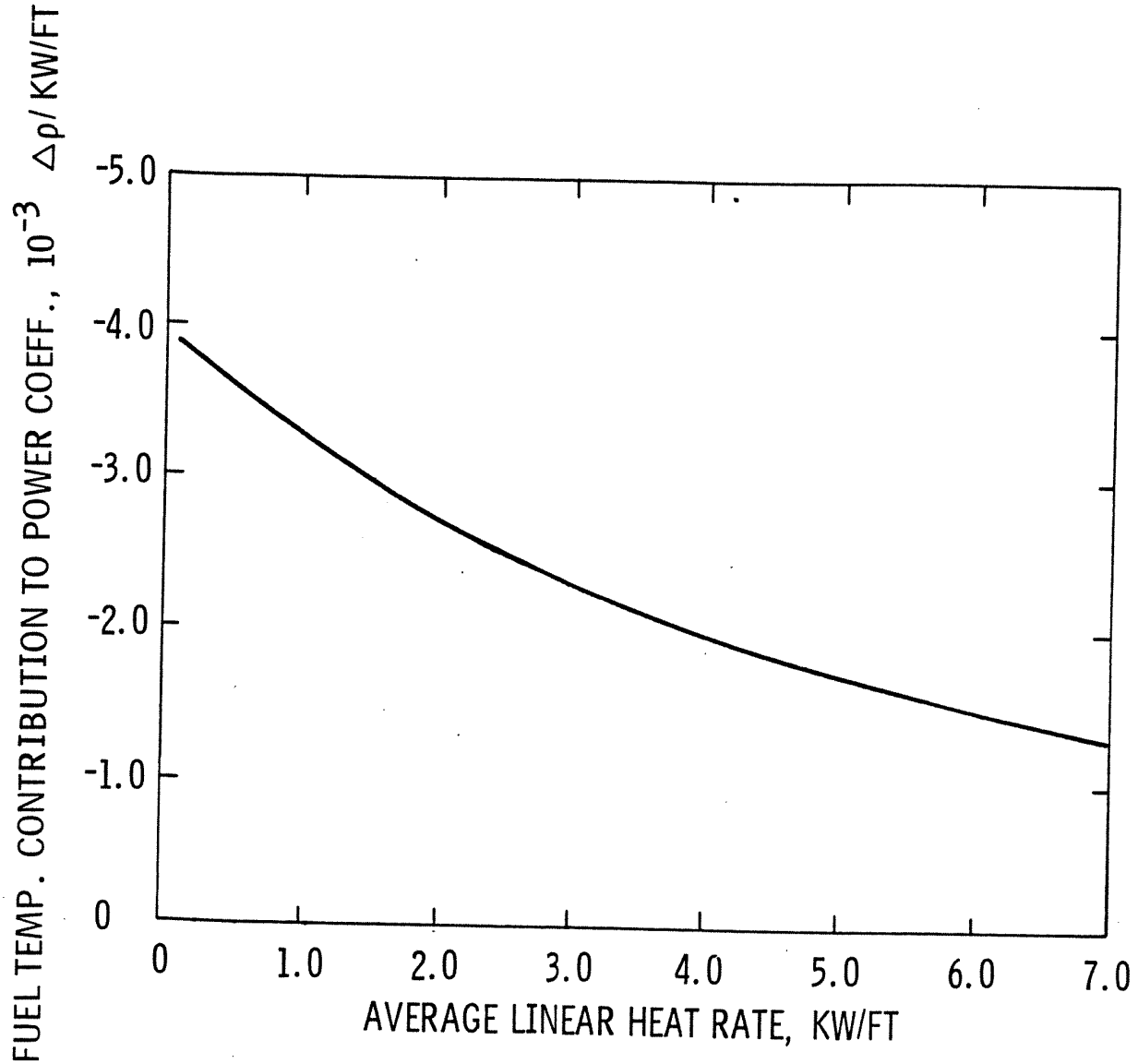
LOUISIANA POWER & LIGHT CO. Waterford Steam Electric Station	**MODERATOR TEMPERATURE COEFFICIENT VS. MODERATOR TEMPERATURE AT BOC1**	Figure 4.3-35



LOUISIANA POWER & LIGHT CO. Waterford Steam Electric Station	**MODERATOR TEMPERATURE COEFFICIENT VS. MODERATOR TEMPERATURE AT EOC1**	Figure 4.3-36



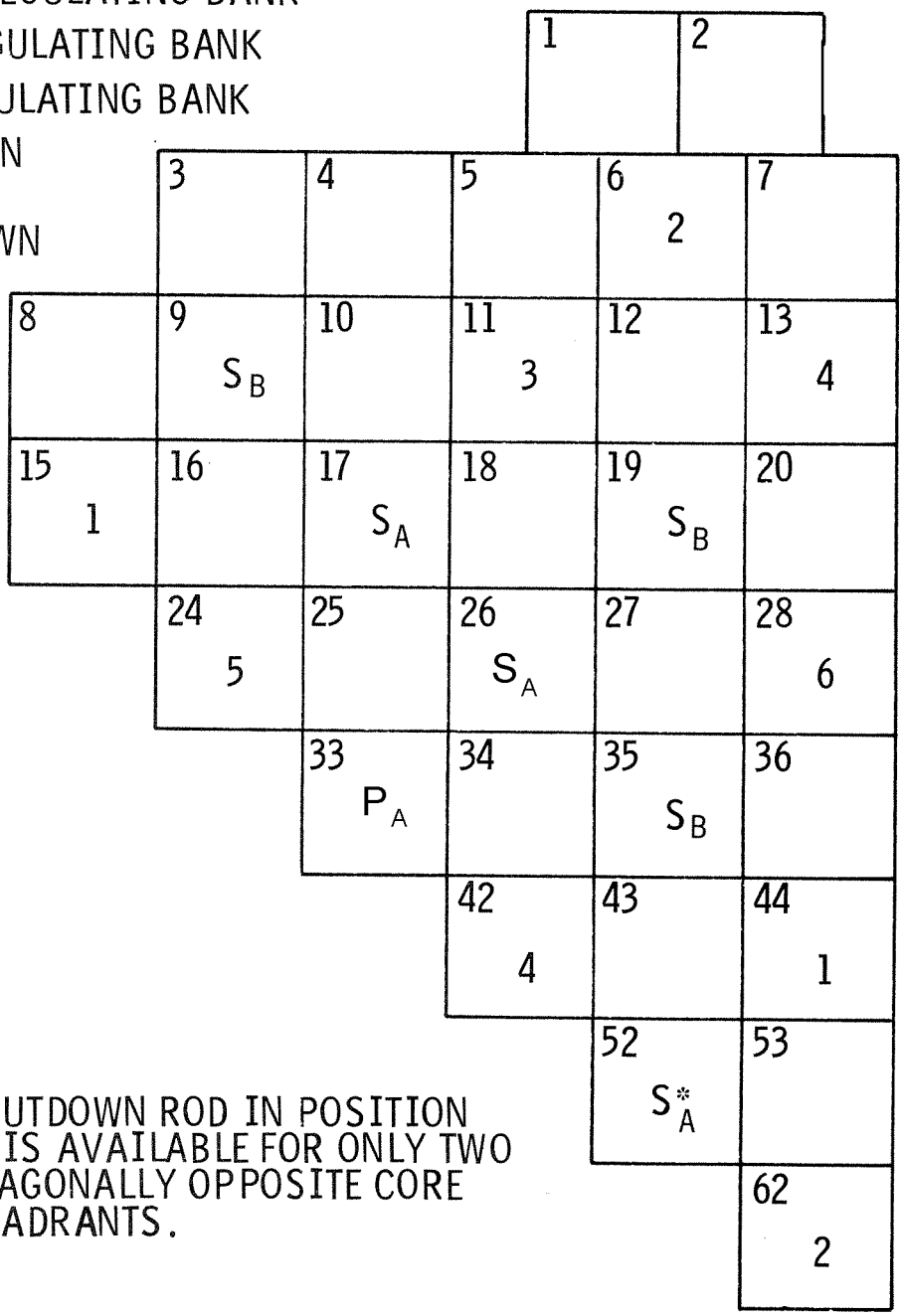
LOUISIANA POWER & LIGHT CO. Waterford Steam Electric Station	MODERATOR DENSITY COEFFICIENT VS. DENSITY	Figure 4.3-37



Revision 11 (05/01)

Waterford Steam Electric Station #3	FUEL TEMPERATURE CONTRIBUTION TO POWER COEFFICIENT AT EOC VS. LINEAR HEAT RATE	Figure 4.3-38

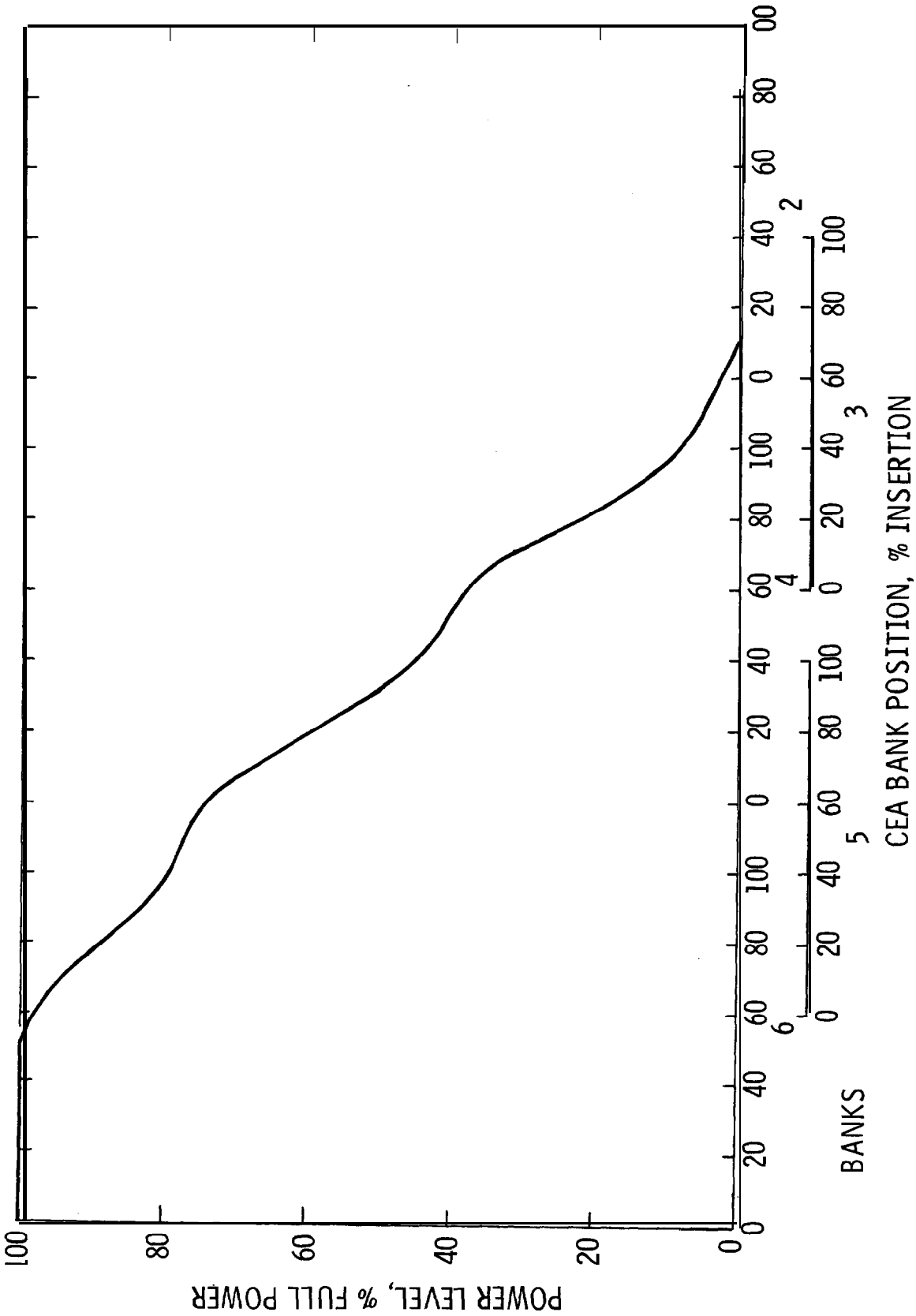
P - REGULATING BANK P
6 - LEAD REGULATING BANK
5 - SECOND REGULATING BANK
4 - THIRD REGULATING BANK
3 - FOURTH REGULATING BANK
2 - FIFTH REGULATING BANK
1 - LAST REGULATING BANK
S_B - SHUTDOWN BANK B
S_A - SHUTDOWN BANK A



*SHUTDOWN ROD IN POSITION 52 IS AVAILABLE FOR ONLY TWO DIAGONALLY OPPOSITE CORE QUADRANTS.

Revision 12 (10/02)

LOUISIANA POWER & LIGHT CO. Waterford Steam Electric Station	CEA BANK IDENTIFICATION	Figure 4.3-39



LOUISIANA POWER & LIGHT CO. Waterford Steam Electric Station	TYPICAL POWER DEPENDENT CEA INSERTION LIMIT	Figure 4.3-40

LOUISIANA POWER & LIGHT CO.
Waterford Steam Electric Station

INTEGRAL WORTH VS. WITHDRAWAL AT ZERO POWER, EOC CONDITIONS

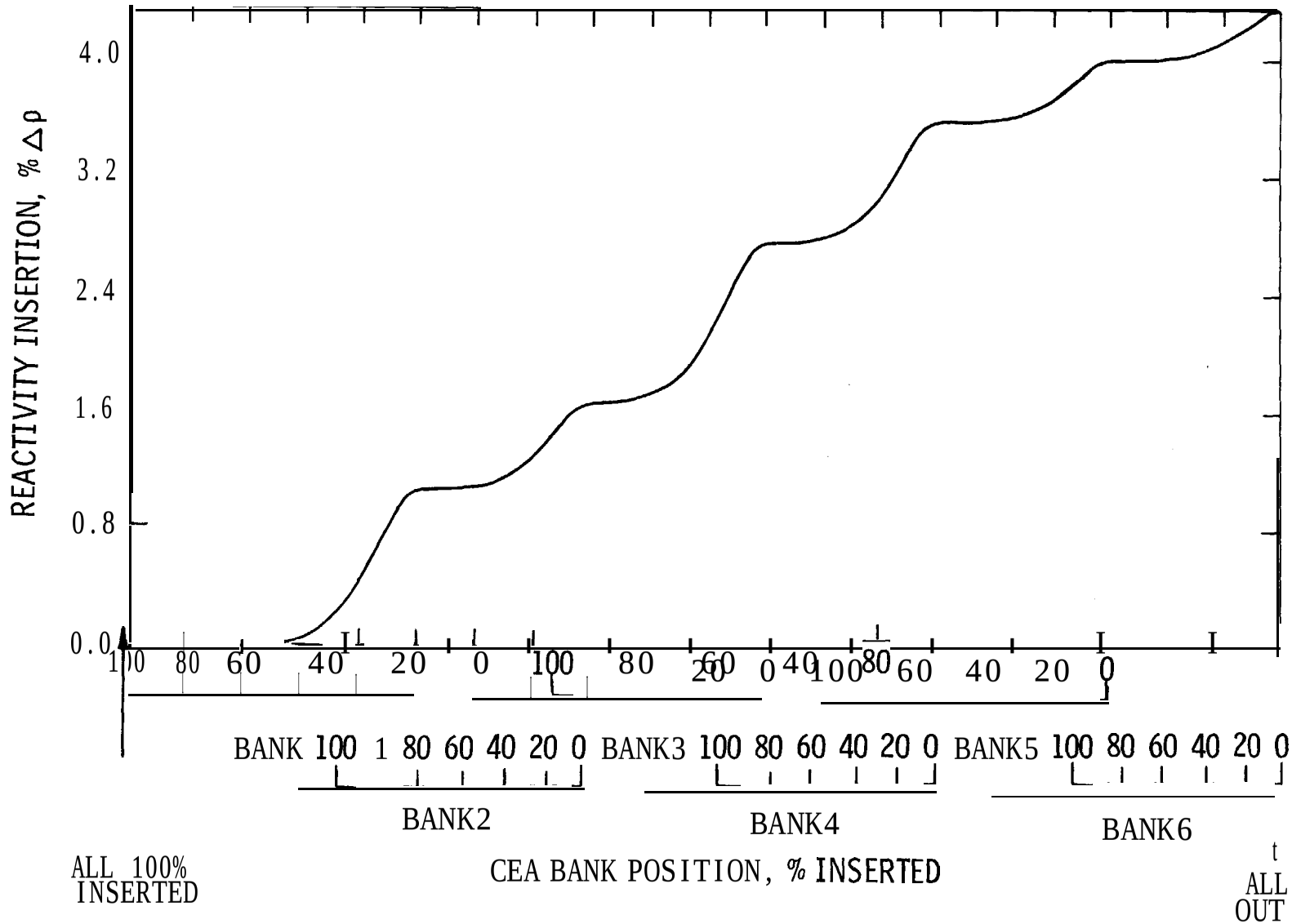
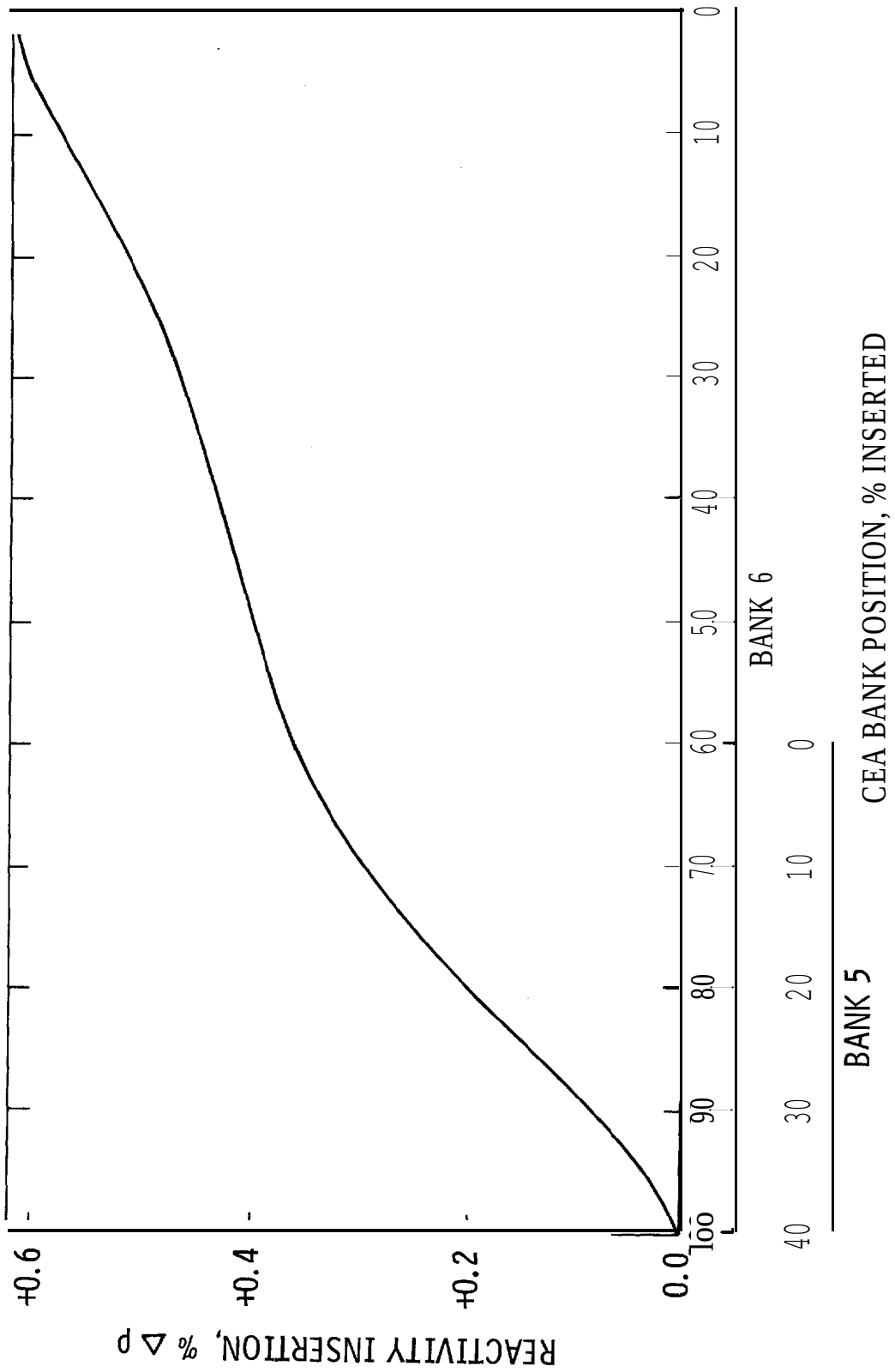
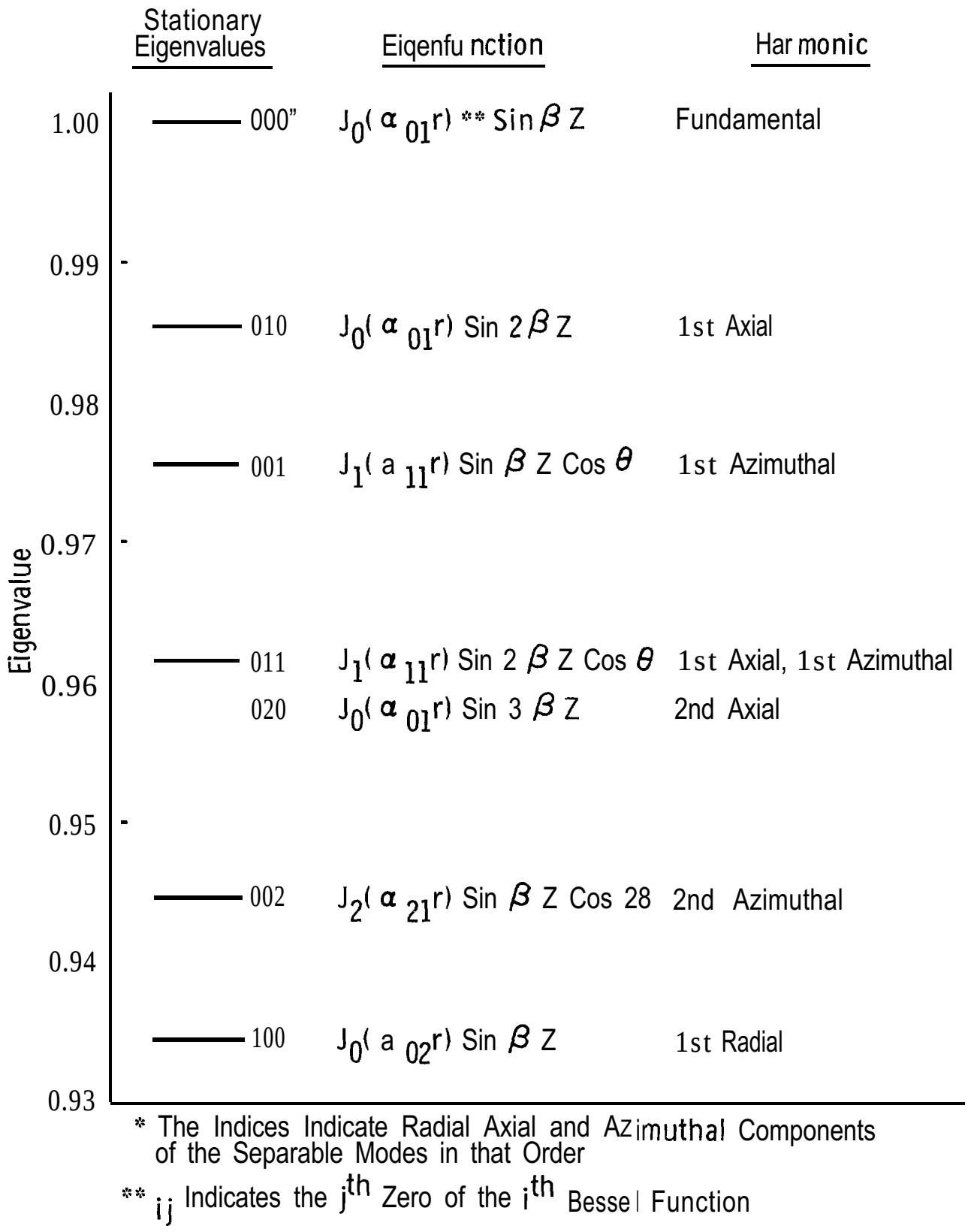


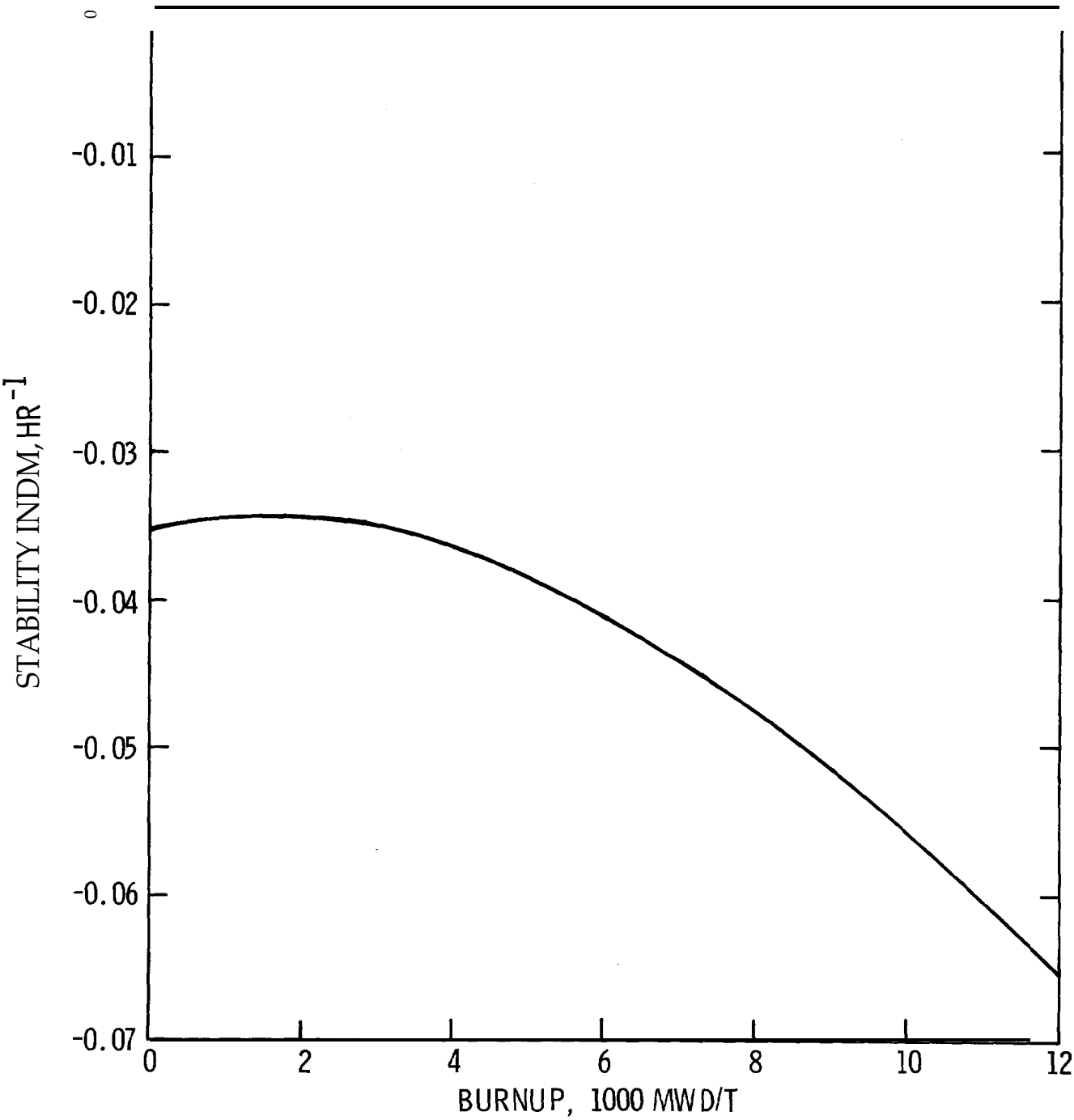
Figure 4.3-41



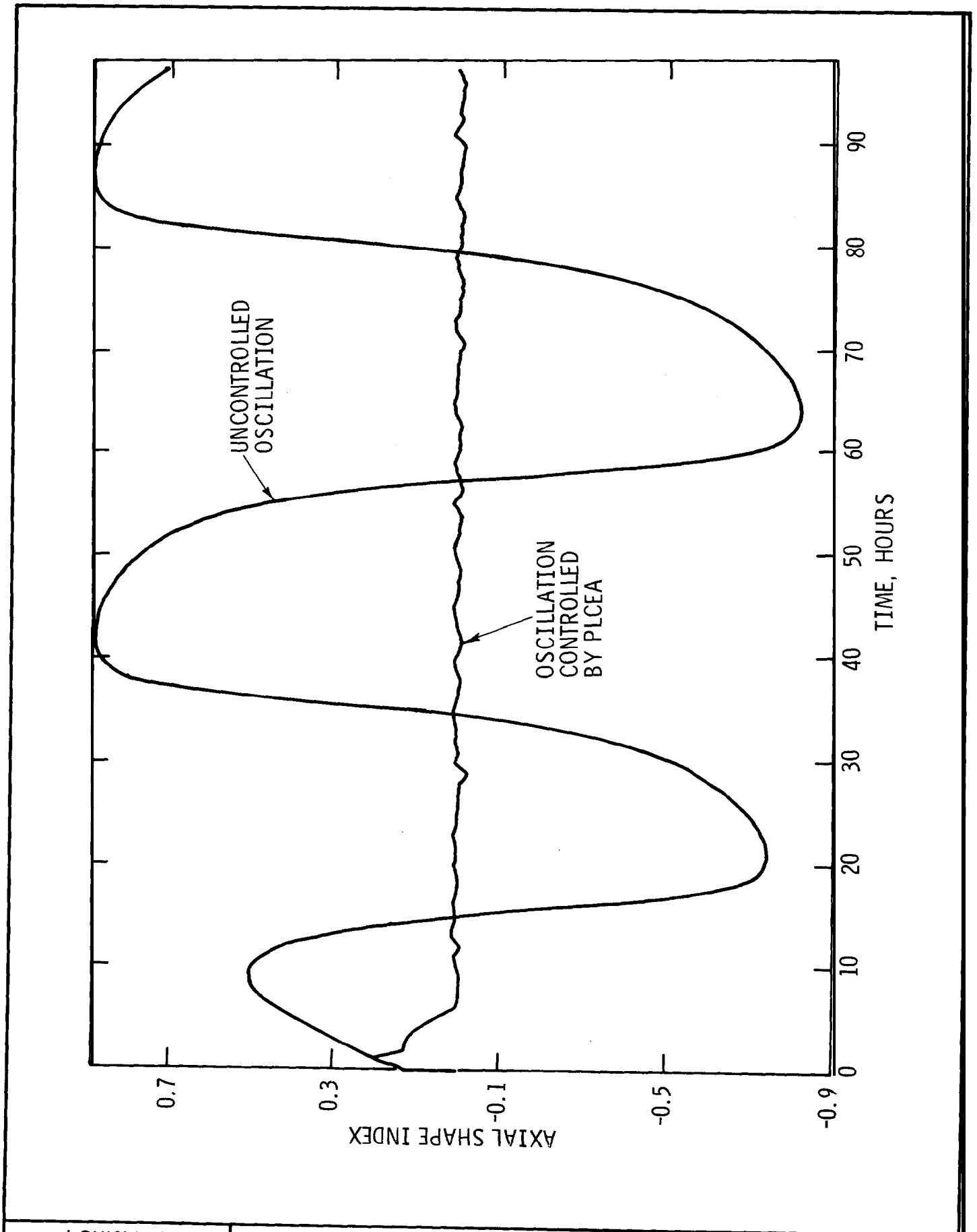
LOUISIANA POWER & LIGHT CO. Waterford Steam Electric Station	INTEGRAL WORTH VS. WITHDRAWAL AT FULL POWER EOC, EQUILIBRIUM XENON CONDITIONS	Figure 4.3-42



LOUISIANA POWER & LIGHT CO. Waterford Steam Electric Station	REACTIVITY DIFFERENCE BETWEEN FUNDAMENTAL AND EXCITED STATES OF A BARE CYLINDRICAL REACTOR	Figure 4.3-43



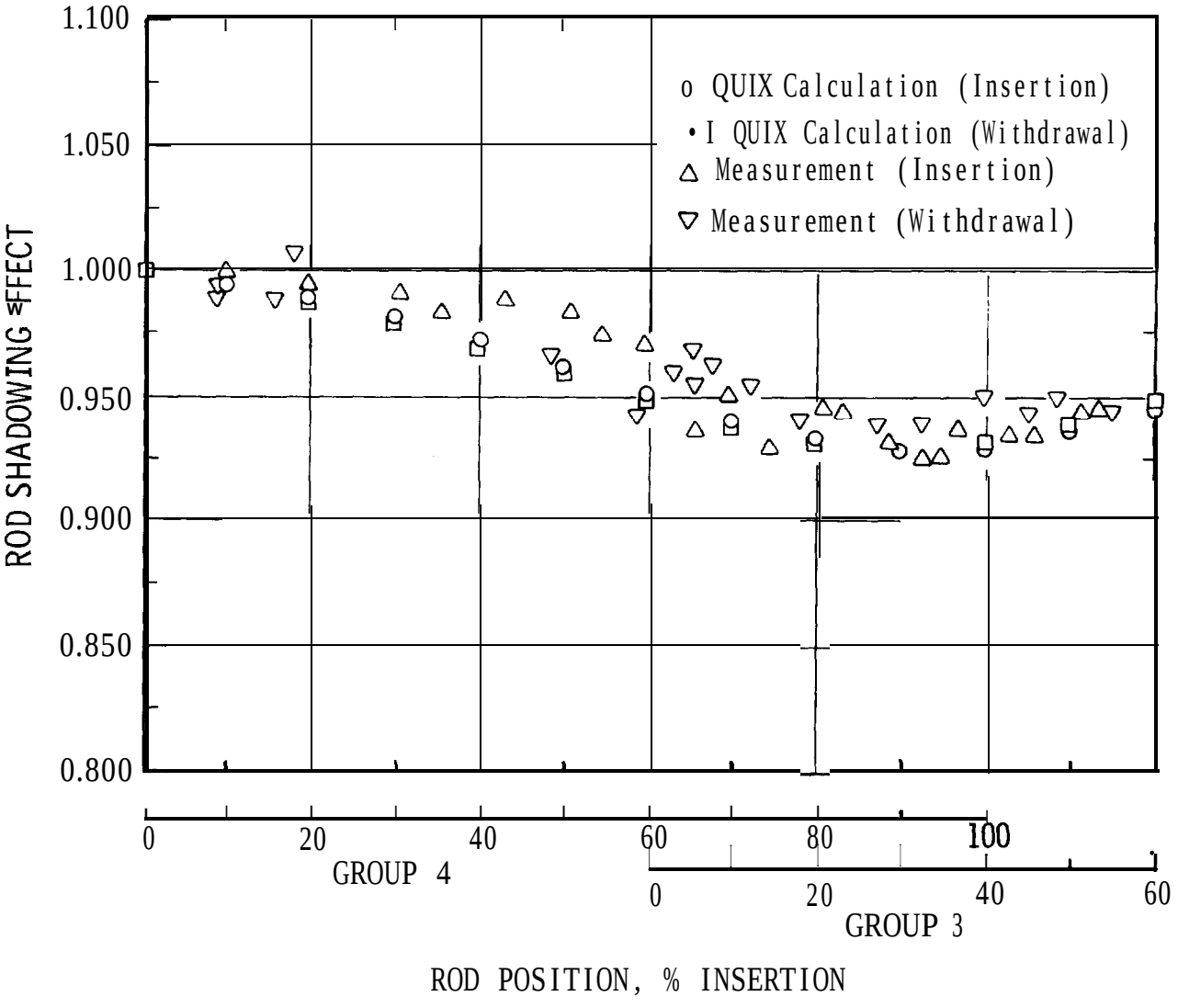
LOUISIANA POWER & LIGHT CO. Waterford Steam Electric Station	EXPECTED VARIATION OF THE AZIMUTHAL STABILITY INDEX	Figure 4.3-44



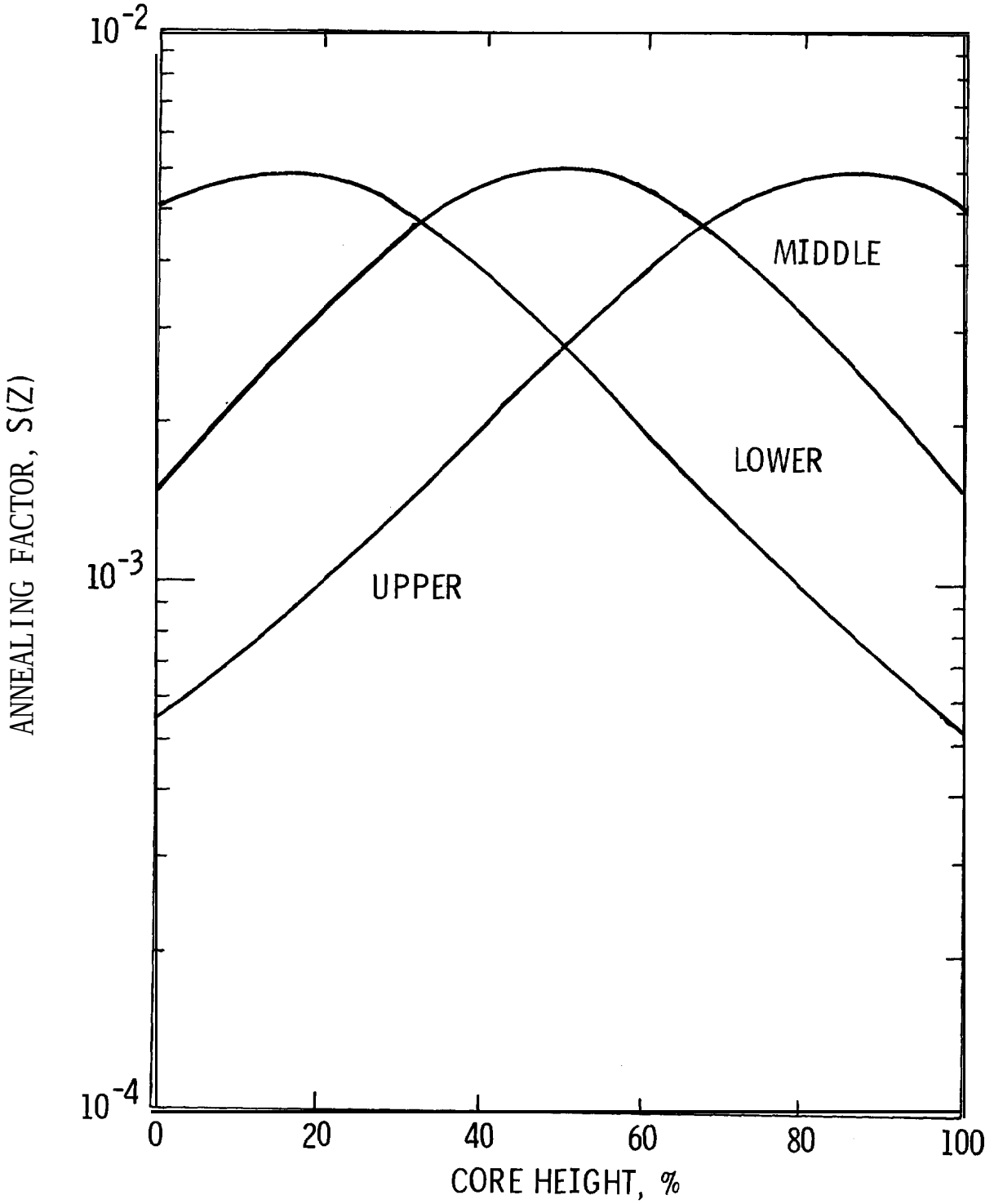
LOUISIANA
POWER & LIGHT CO.
Waterford Steam
Electric Station

STABILI TY INDEX

Figure
4.3-45

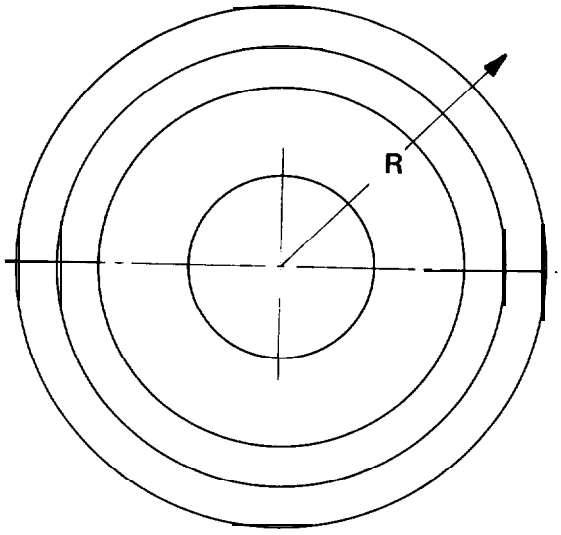


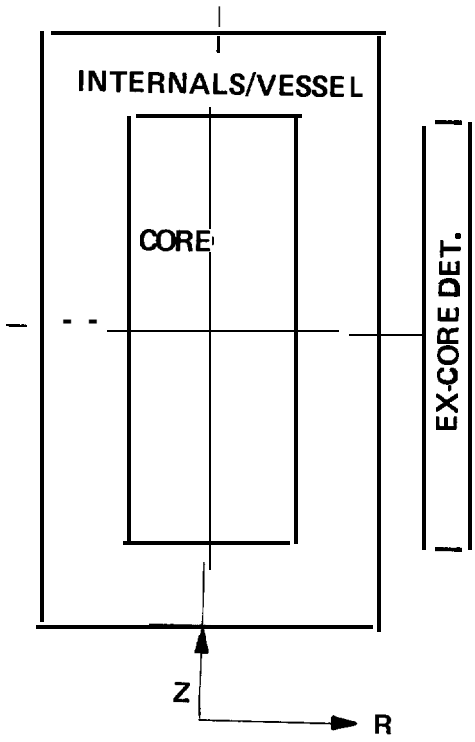
LOUISIANA POWER & LIGHT CO. Waterford Steam Electric Station	**ROD SHADOWING EFFECT VS. ROD POSITION FOR ROD INSERTION AND WITHDRAWAL TRANSIENTS AT PALISADES**	Figure 4.3-46



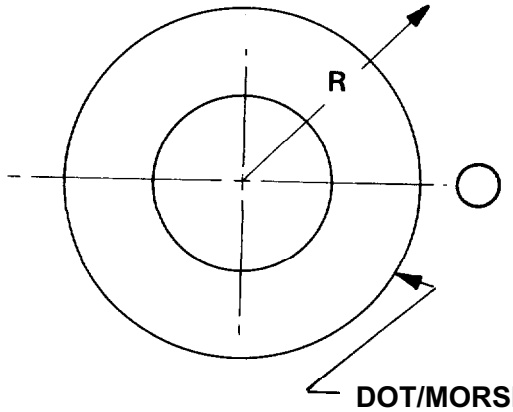
LOUISIANA POWER & LIGHT CO. Waterford Steam Electric Station	TYPICAL THREE-SUBCHANNEL ANNEALING	Figure 4.3-47

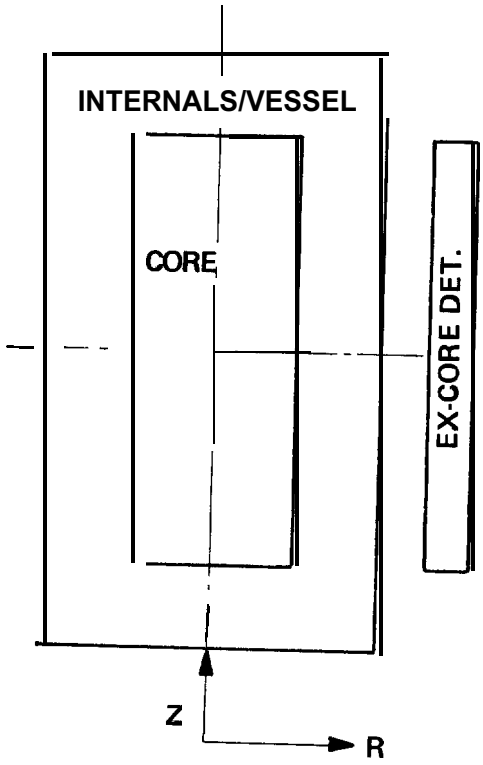
GEOMETRY WITH AZIMUTHAL SYMMETRY



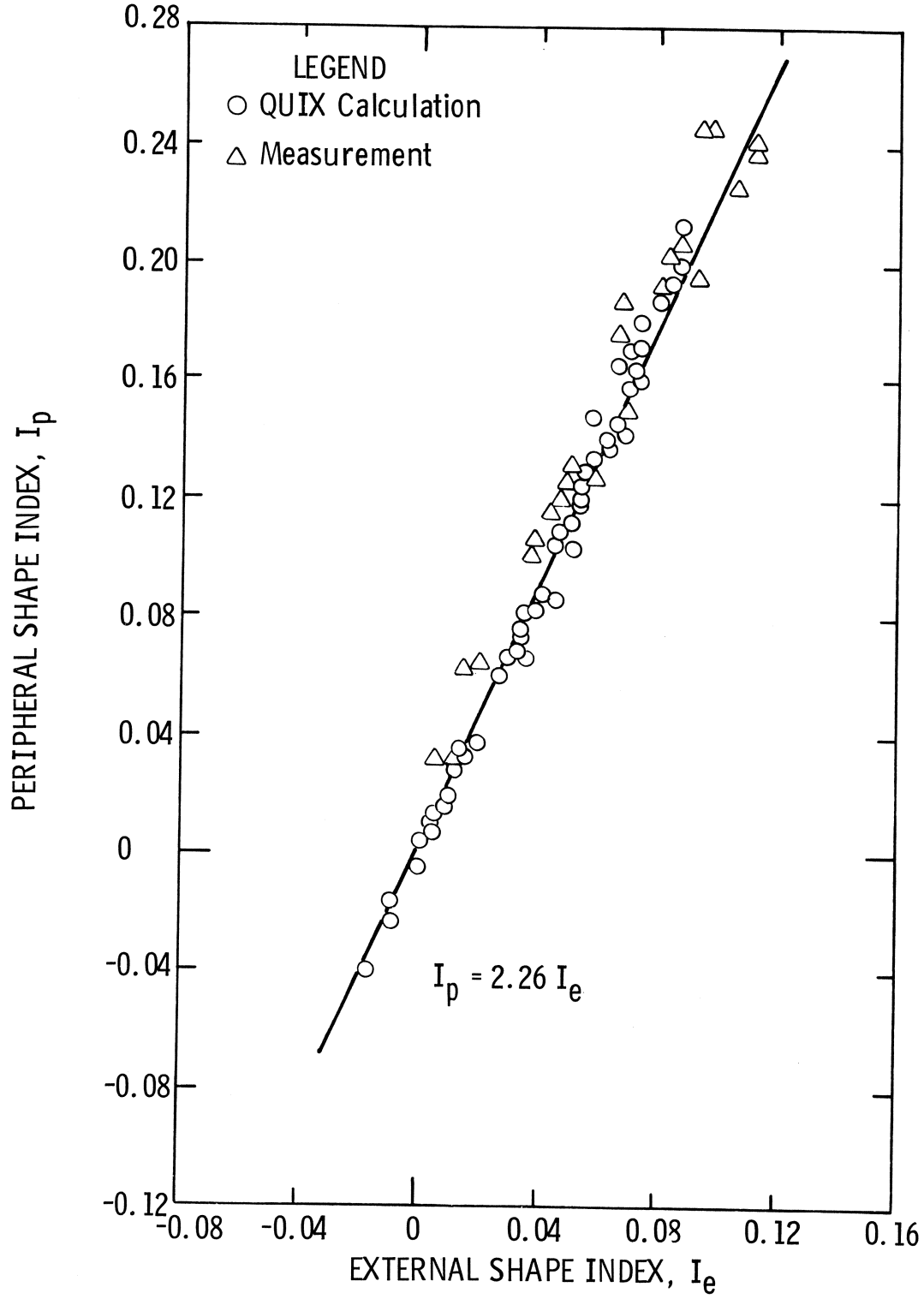


GEOMETRY WITH PARTIAL AZIMUTHAL SYMMETRY

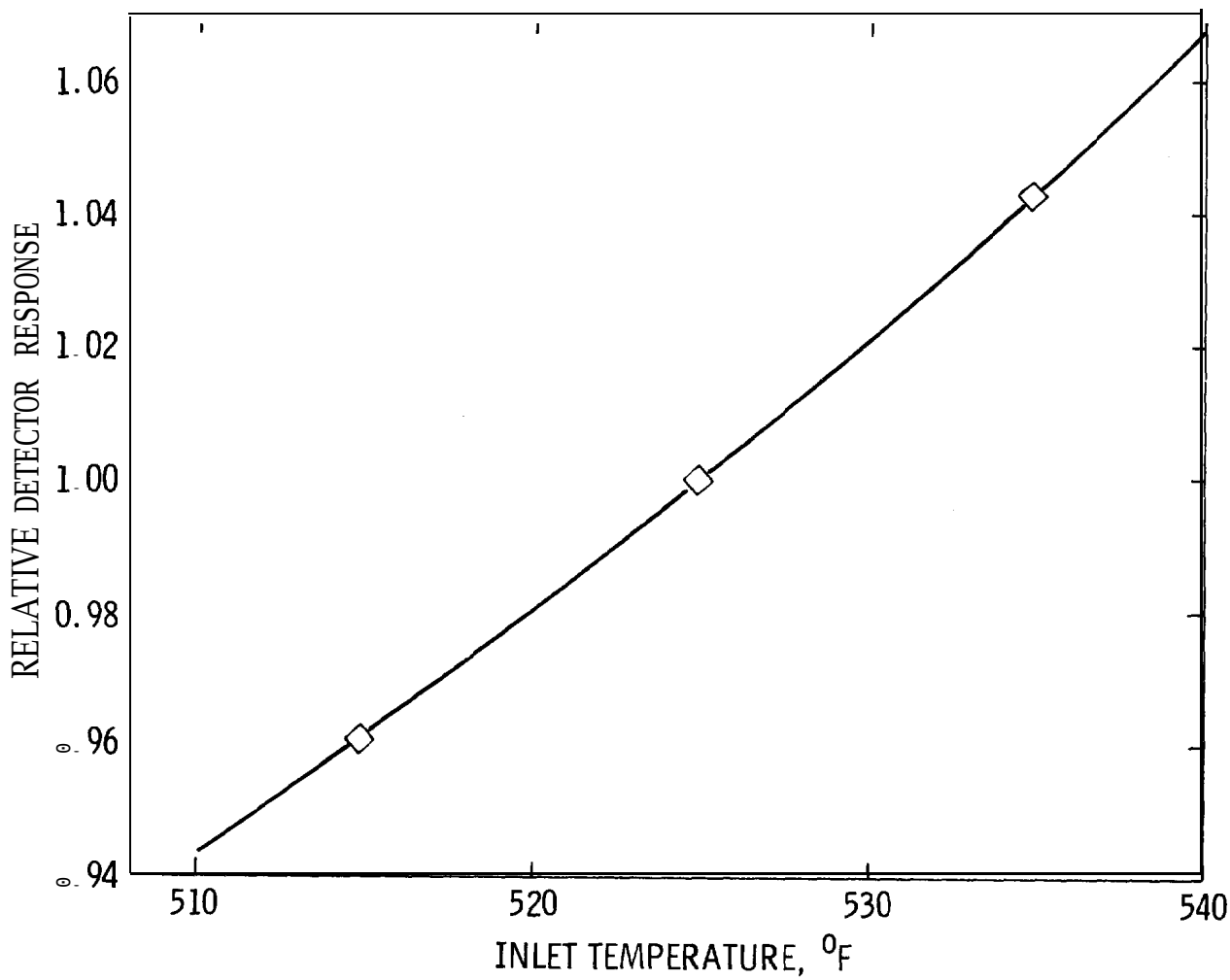




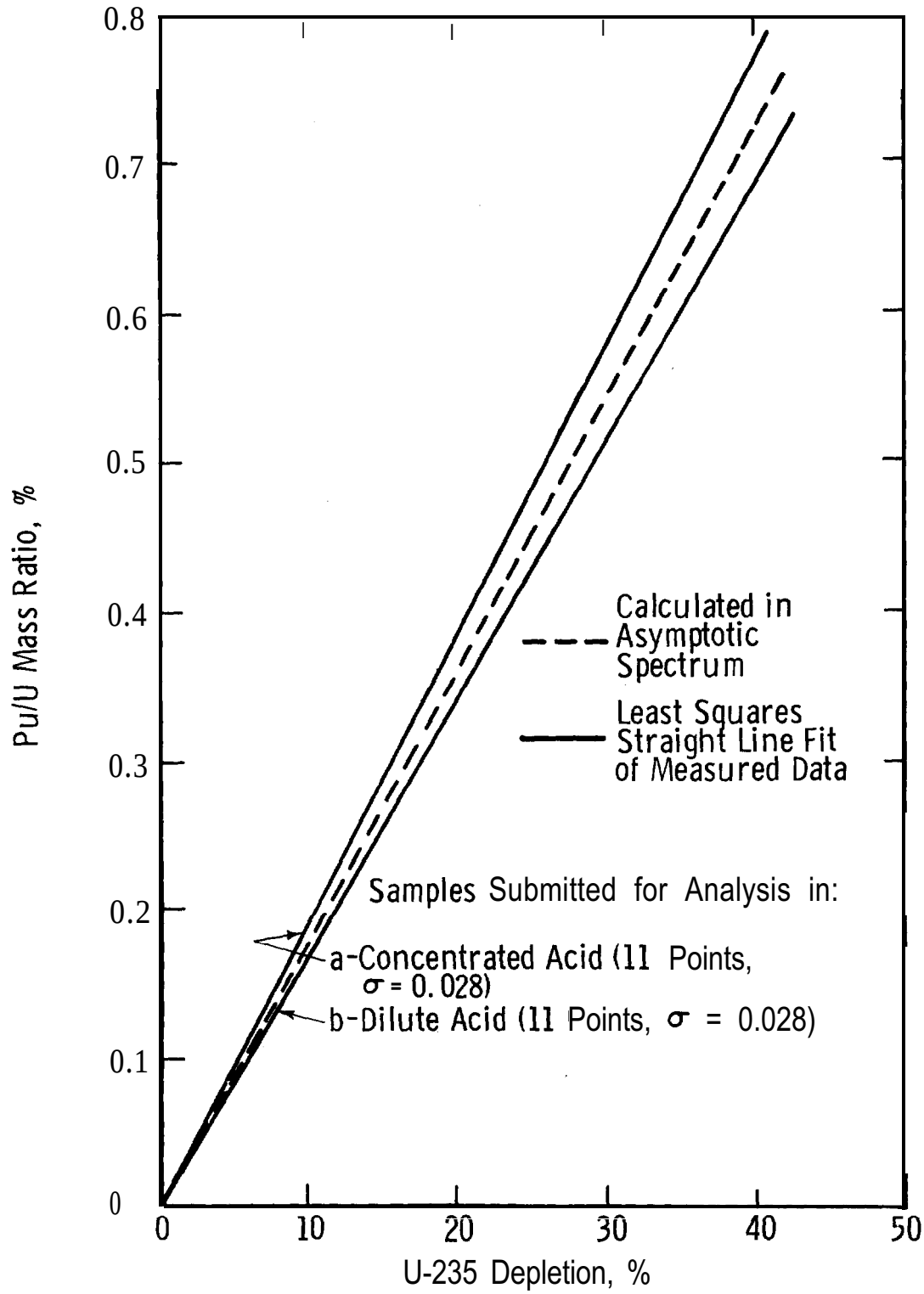
LOUISIANA POWER & LIGHT CO. Waterford Steam Electric Station	GEOMETRY LAYOUTS	Figure 4.3-48



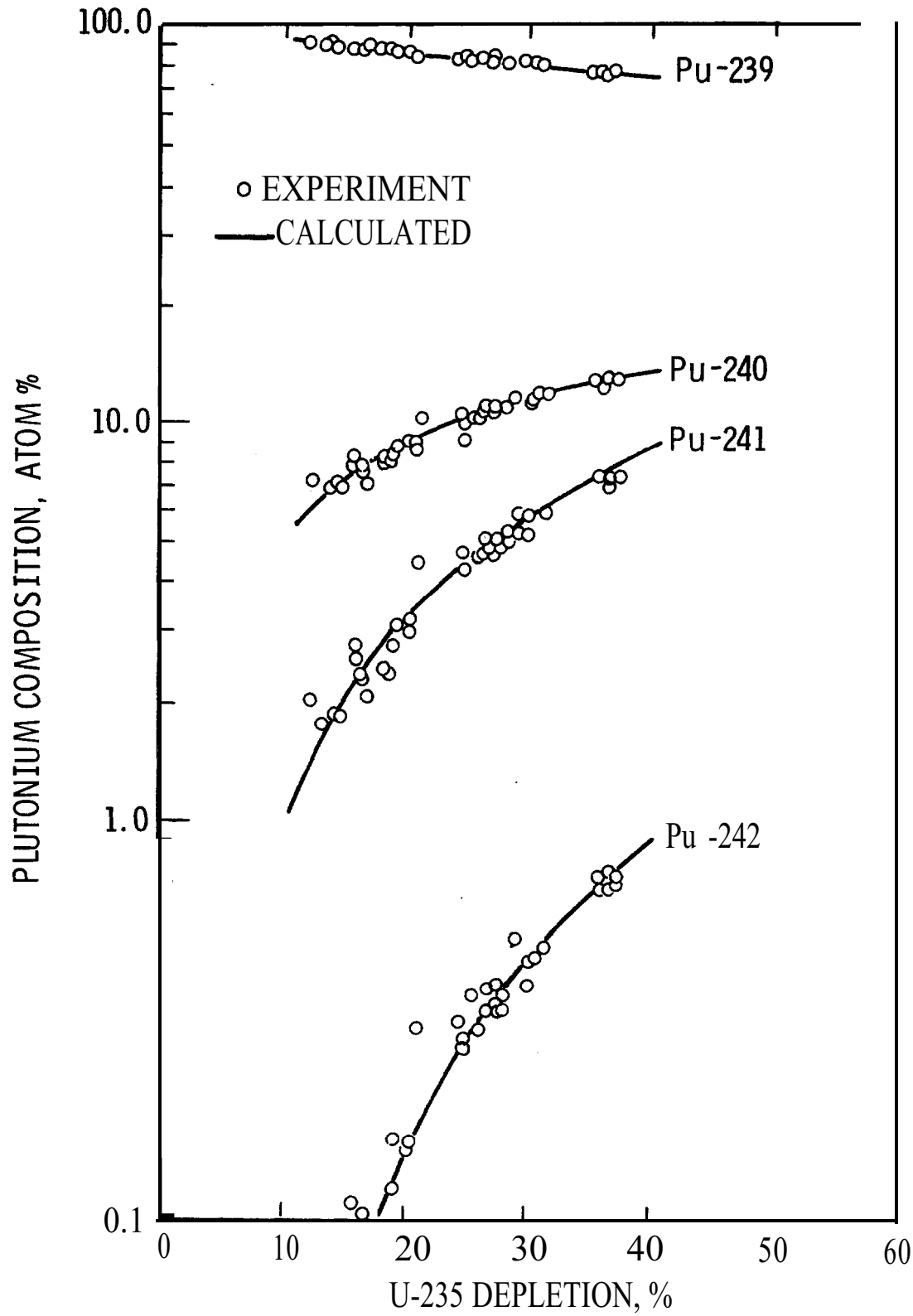
LOUISIANA POWER & LIGHT CO. Waterford Steam Electric Station	COMPARISON OF MEASURED AND CALCULATED SHAPE ANNEALING CORRECTION FOR PALISADES	Figure 4.3-49



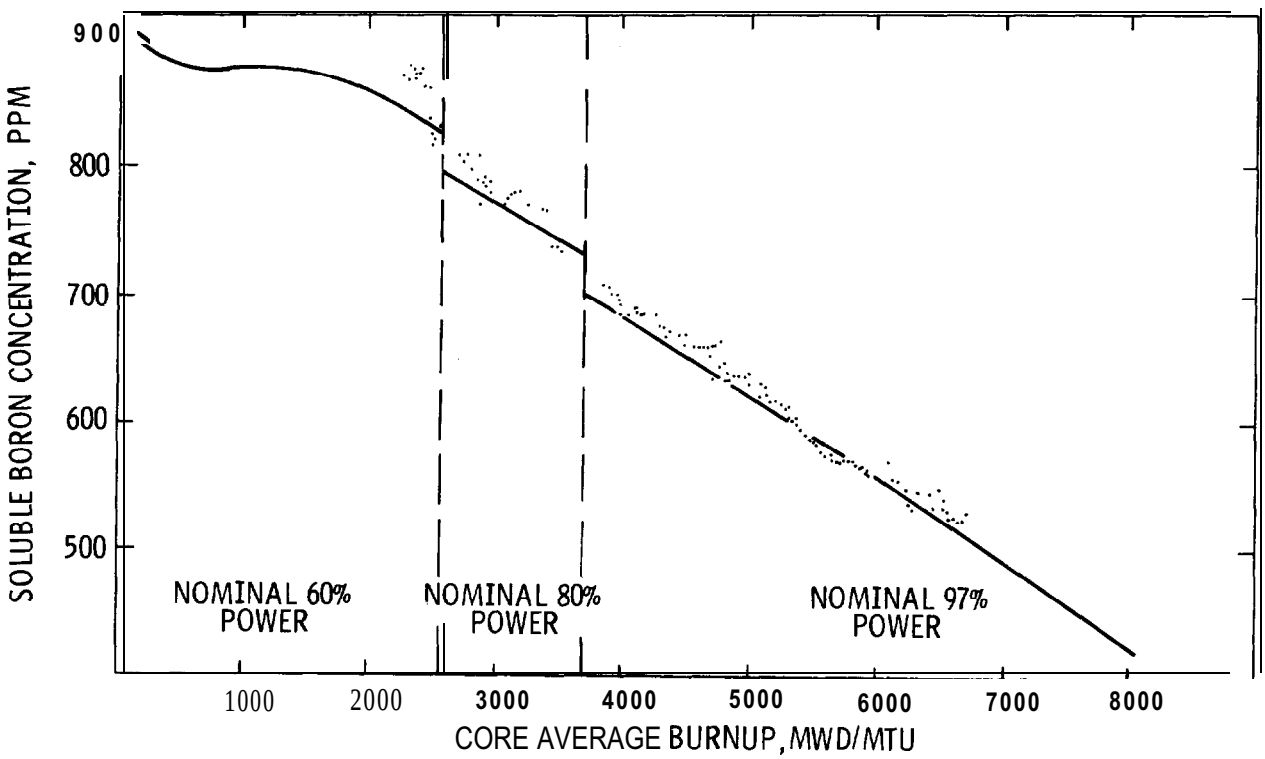
LOUISIANA POWER & LIGHT CO. Waterford Steam Electric Station	TYPICAL TEMPERATURE DEFECT VS. REACTOR INLET TEMPERATURE	Figure 4.3-50



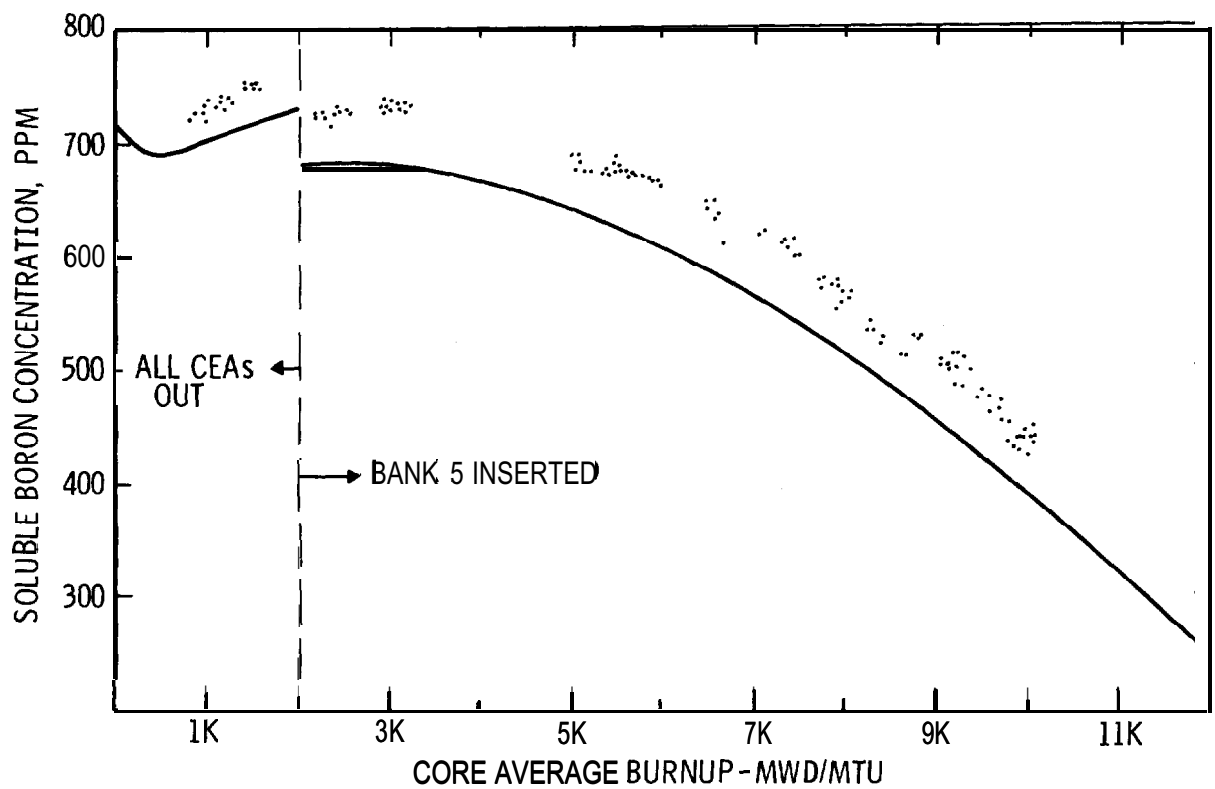
LOUISIANA POWER & LIGHT CO. Waterford Steam Electric Station	**COMPARISON OF CALCULATED AND MEASURED PLUTONIUM TO URANIUM MASS RATIO IN THE ASYMPTOTIC NEUTRON SPECTRUM FOR YANKEE**	**Figure** 4.3-51



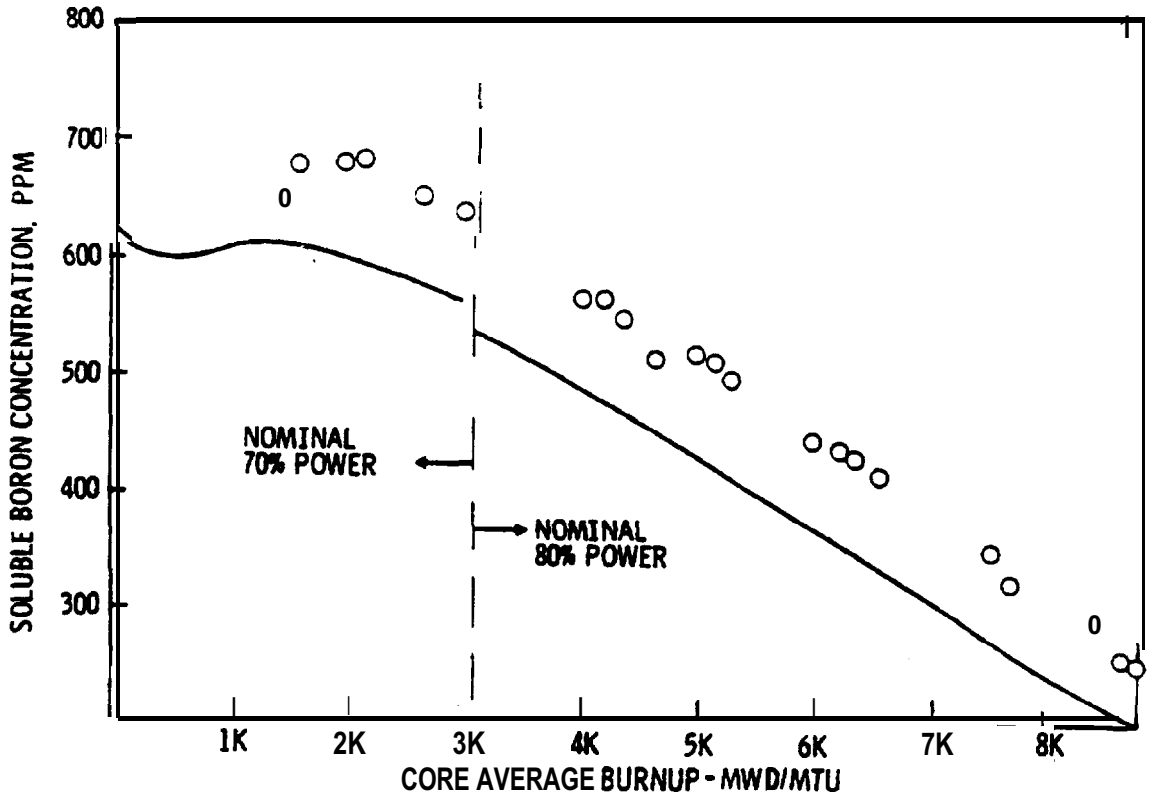
LOUISIANA POWER & LIGHT CO. Waterford Steam Electric Station	**PLUTONIUM ISOTOPIC COMPOSITION VS. FUEL DEPLETION IN THE ASYMPTOTIC SPECTRUM FOR YANKEE**	Figure 4.3-52



LOUISIANA POWER & LIGHT CO. Waterford Steam Electric Station	CRITICAL BORON-REACTIVITY DEPLETION OF PALISADES	Figure 4.3-53



LOUISIANA POWER & LIGHT CO. Waterford Steam Electric Station	CRITICAL BORON FOR MAINE YANKEE	Figure 4.3-54



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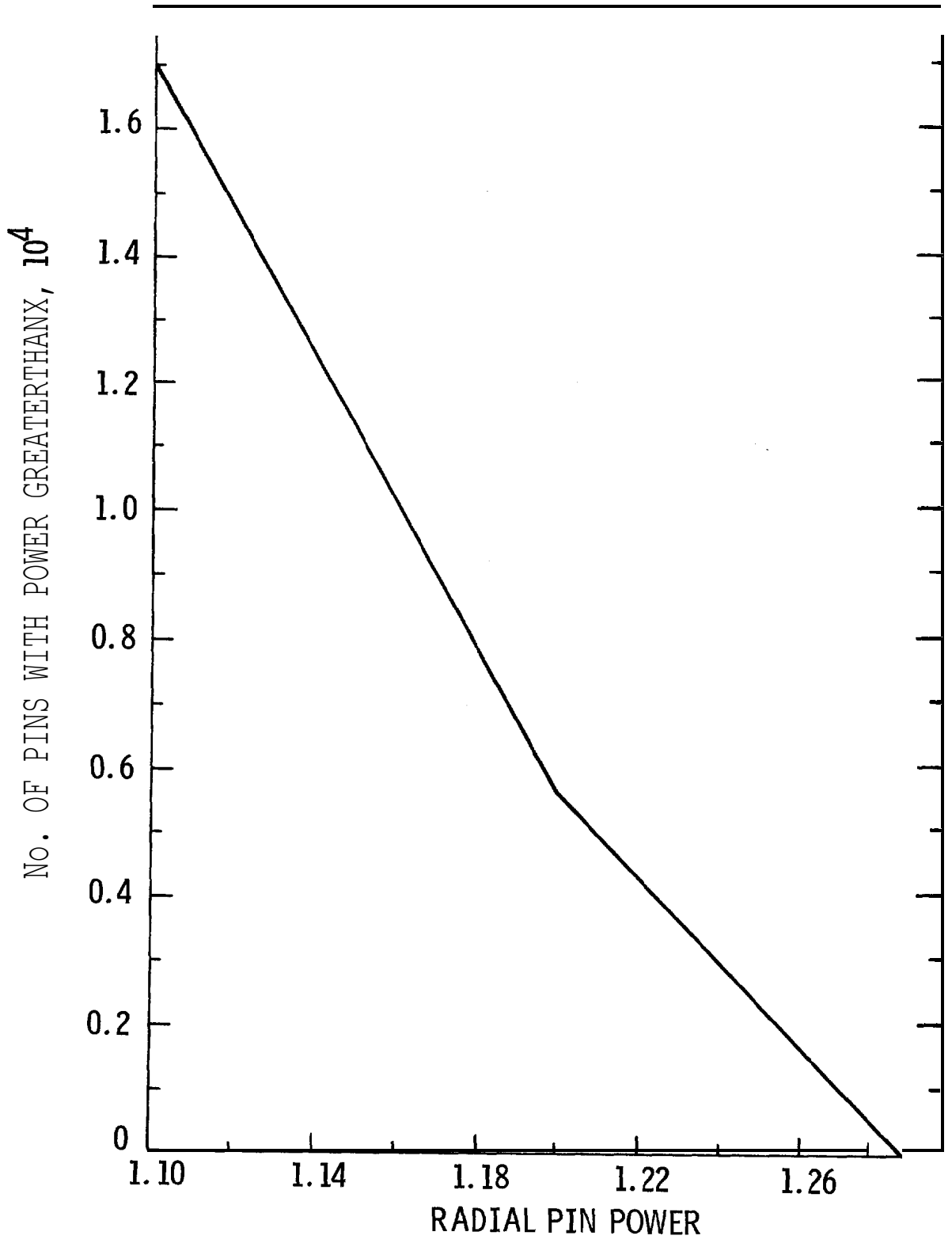
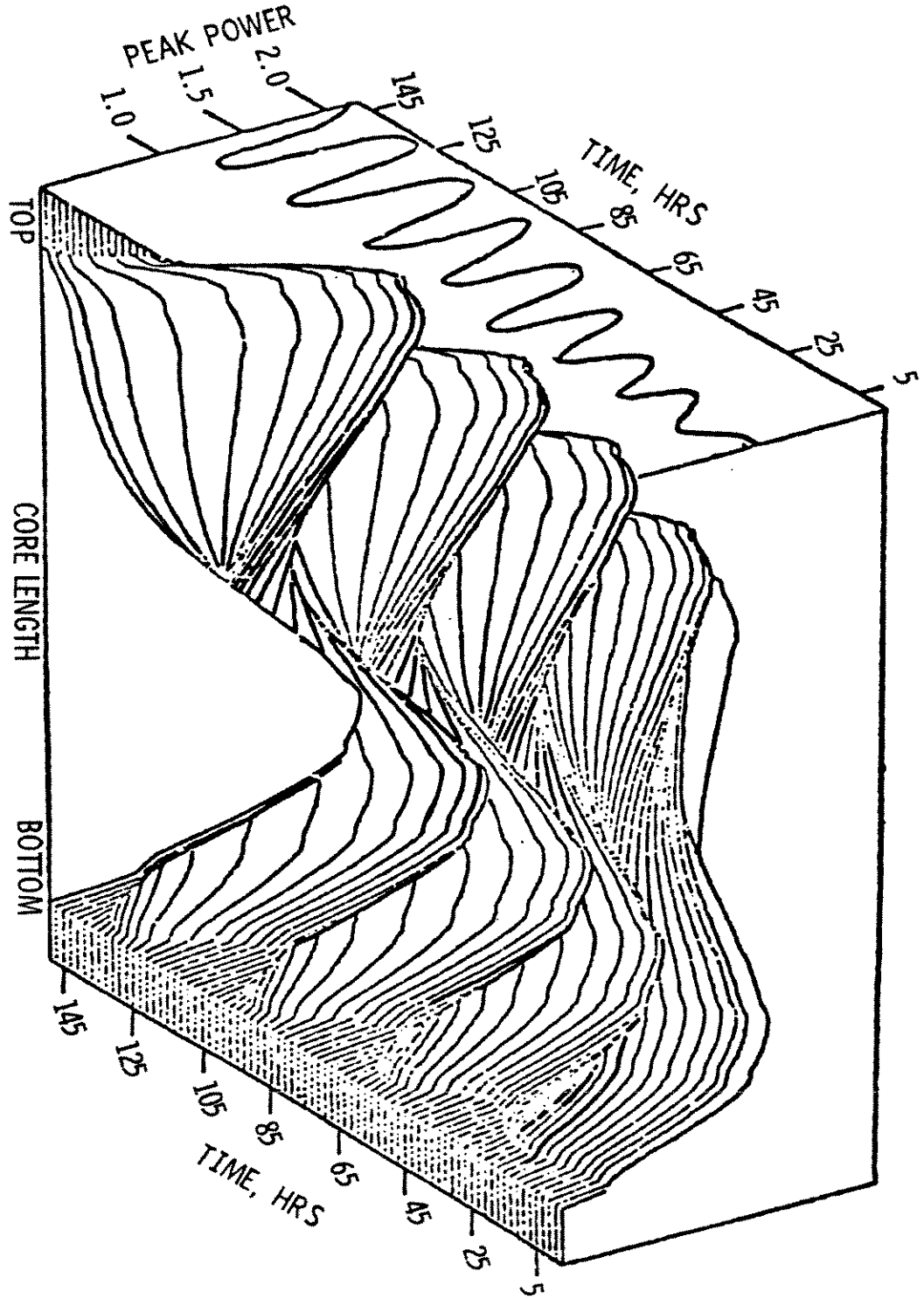
Waterford Steam Electric Station •3	CRITICAL BORON FOR FORT CALHOUN	Figure 4.3-5,5



LOUISIANA POWER & LIGHT CO. Waterford Steam Electric Station	LIMITING INTEGRAL RADIAL PIN POWER DISTRIBUTION	Figure 4.3-56



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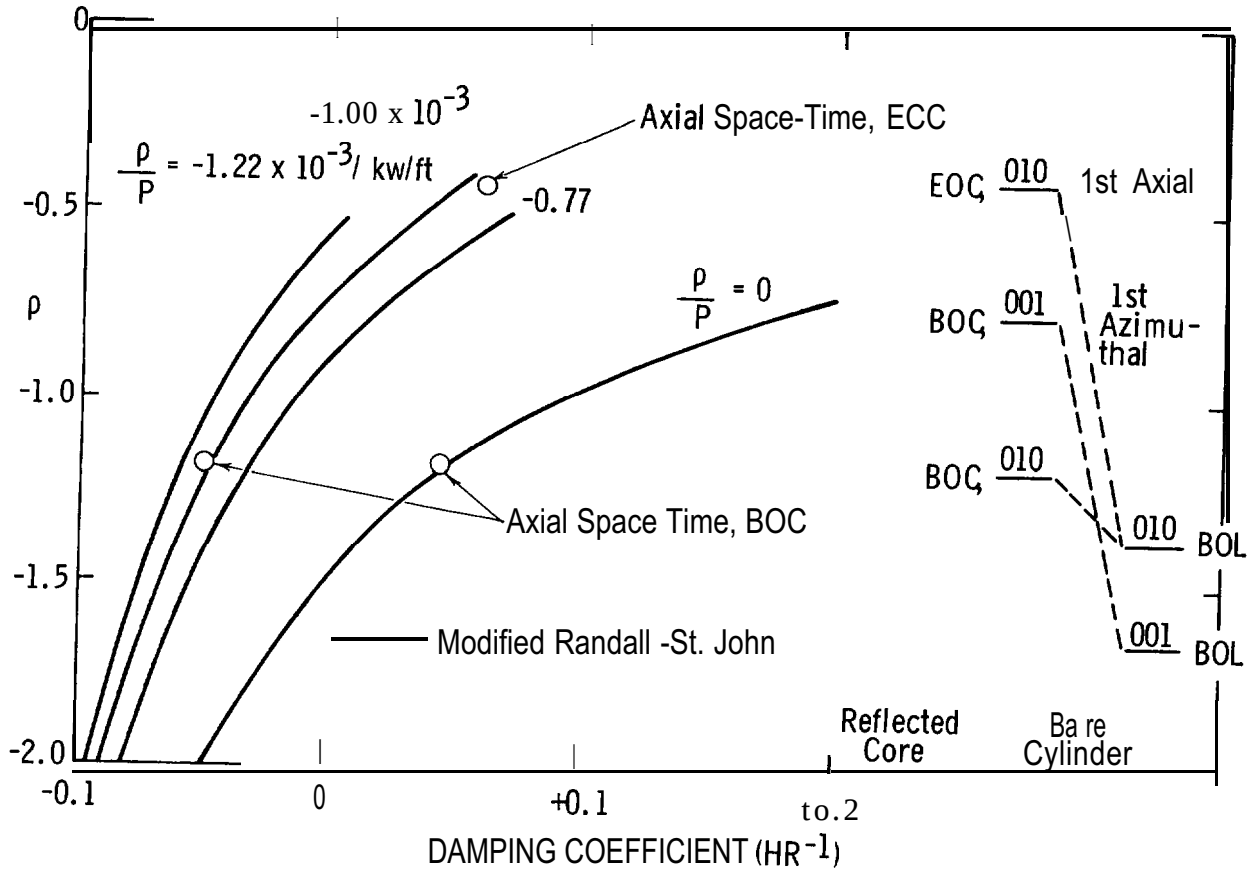
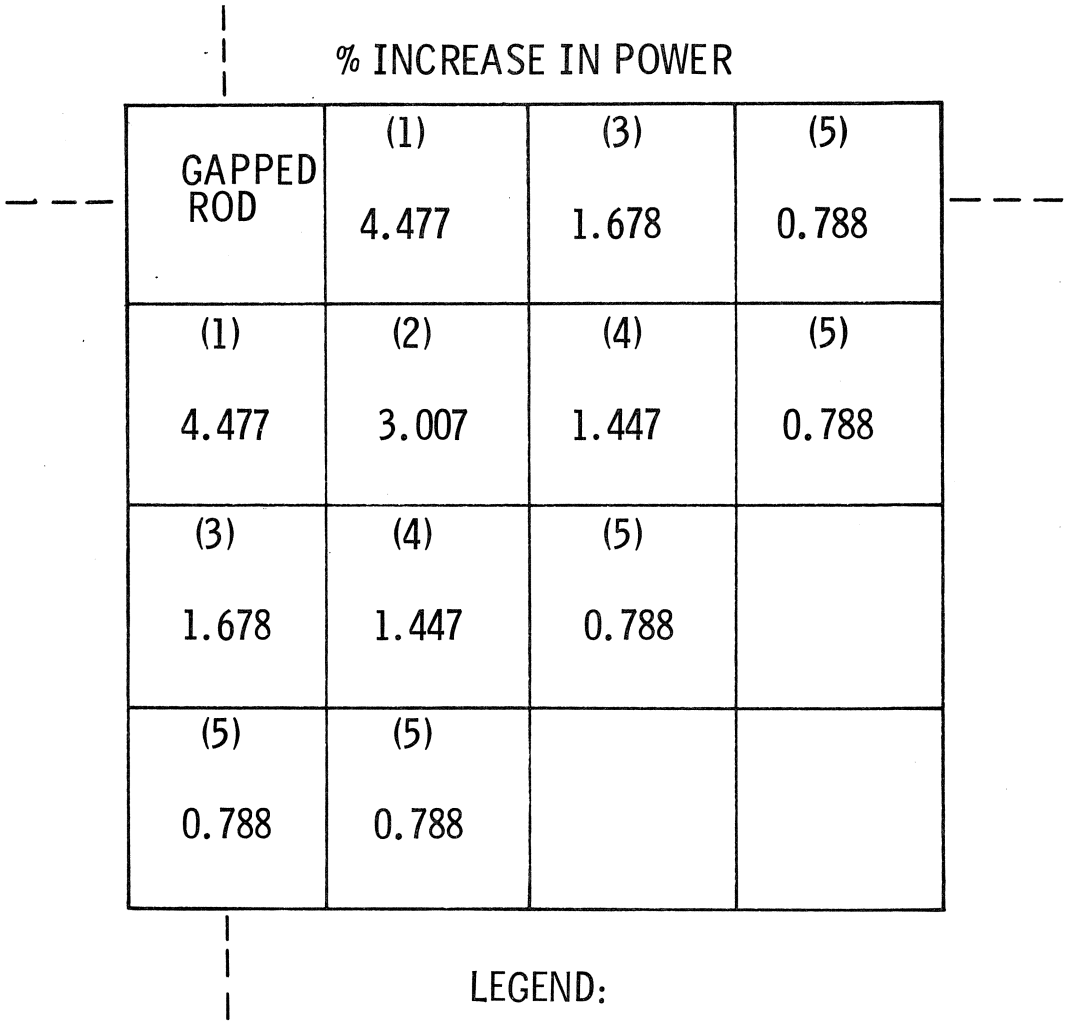
Waterford Steam Electric Station #3	A DIVERGENT AXIAL OSCILLATION IN AN EOC CORE WITH REDUCED POWER FEEDBACK ($\alpha = 0.96 \times 10^{-4}$ $\Delta\rho$(KW/FT)	Figure 4.3-57



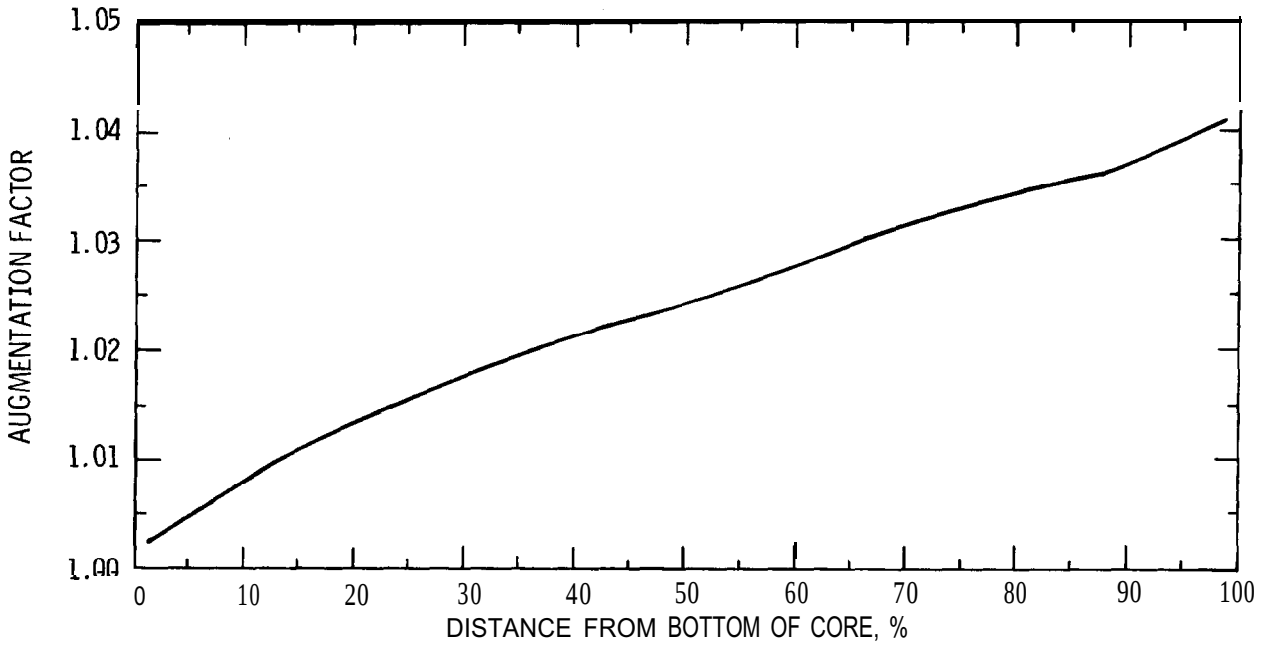
LOUISIANA POWER & LIGHT CO.
Waterford Steam Electric Station

DAMPING COEFFICIENT VS. REACTIVITY DIFFERENCE BETWEEN FUNDAMENTAL AND EXCITED STATE

Figure 4.3-58



LOUISIANA POWER & LIGHT CO. Waterford Steam Electric Station	LIMITING SINGLE GAP POWER PEAKING AND ASSOCIATED ROD LOCATION RELATIVE TO THE GAP LOCATION	Figure 4.3-59



LOUISIANA
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Electric Station

AUGMENTATION FACTOR

Figure
4.3-60