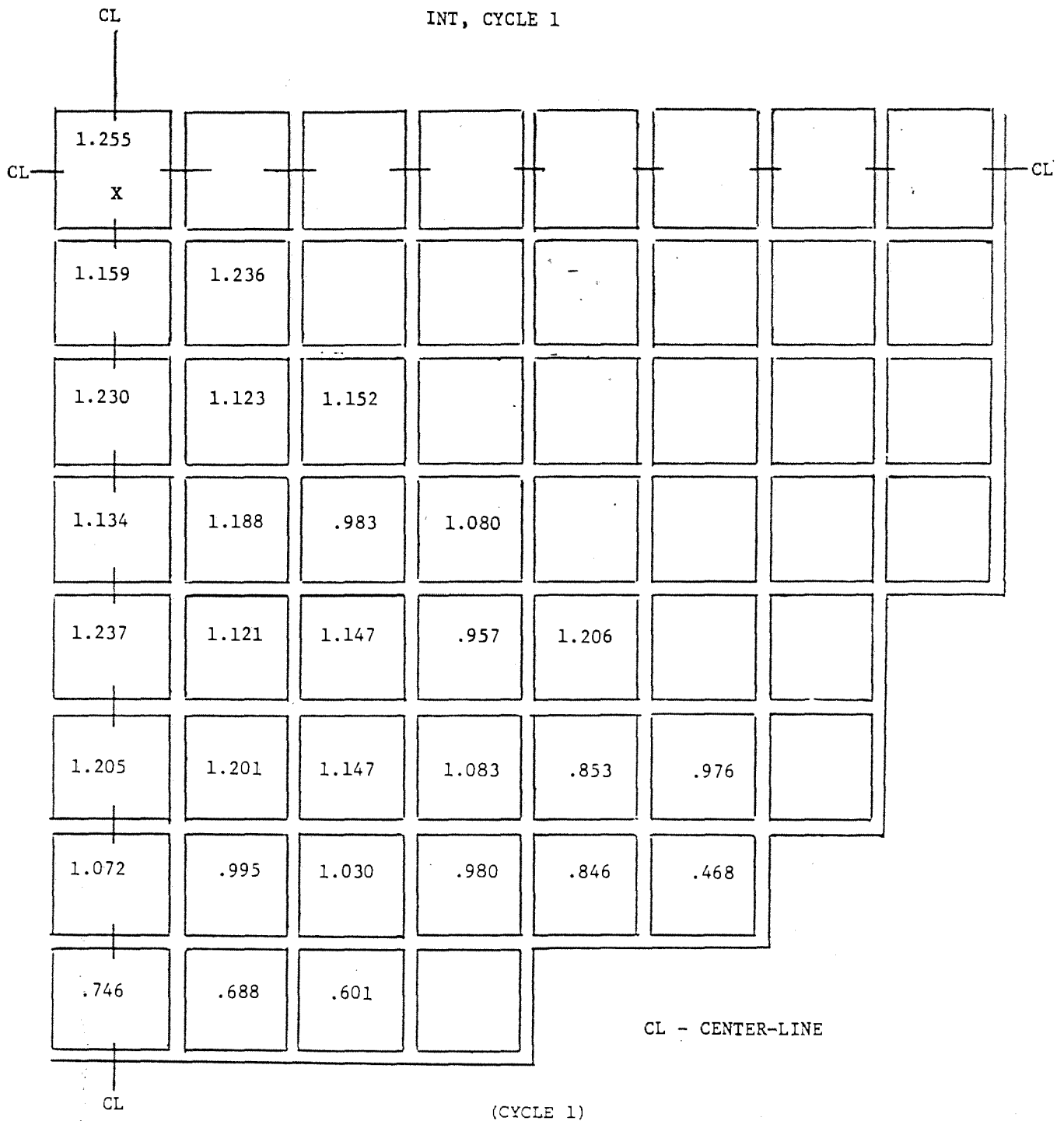


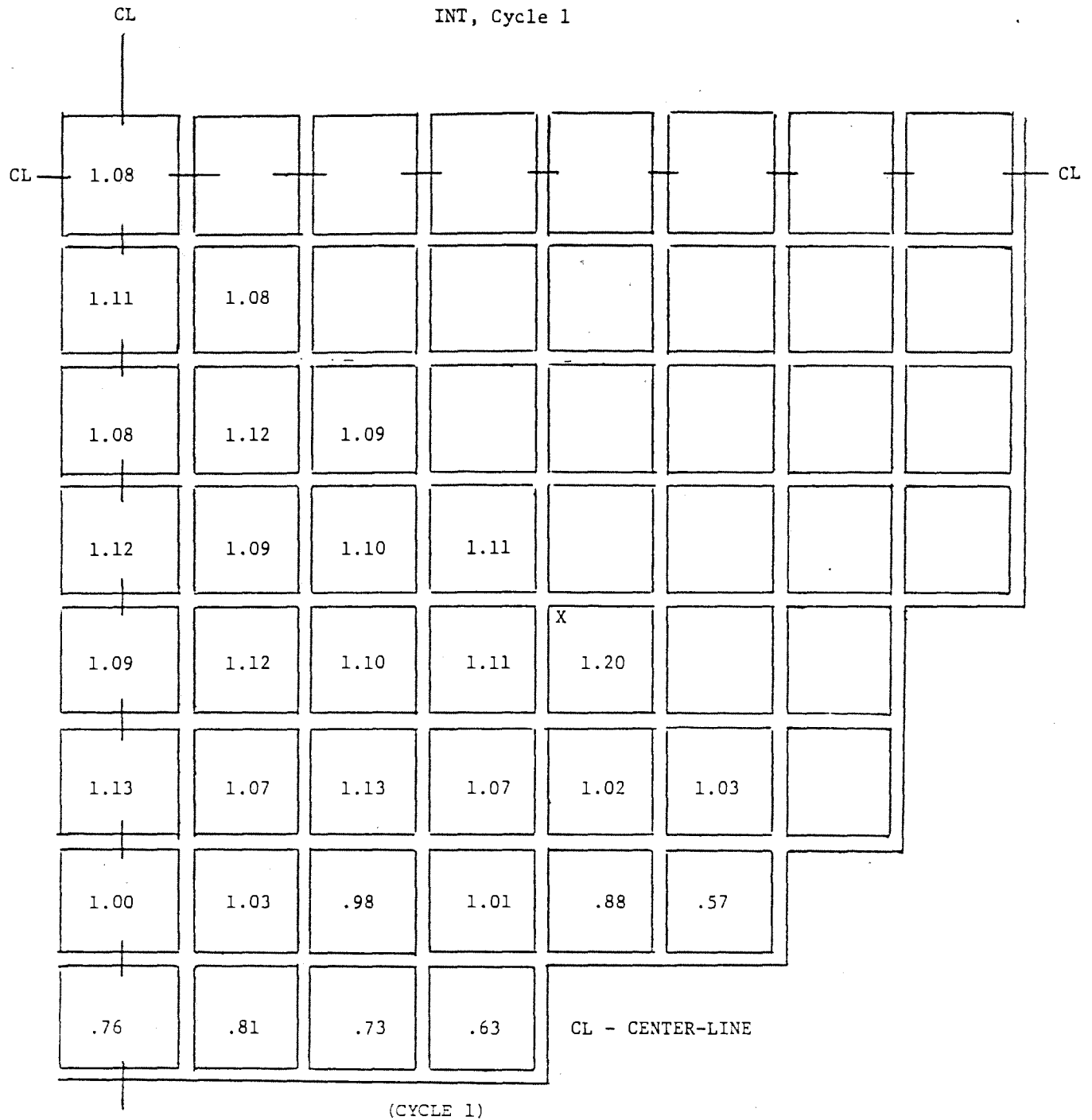
GROUP	SYMBOL	NUMBER OF ROD CLUSTERS
S1	□	8
S2	◇	8
S3	◻	4
S4	⊞	4
C1	▽	8
C2	△	4
C3	⬡	8
C4	◯	9
PL	◯	8 (Removed)
(Part Length)		61

INDIAN POINT 3	FSAR UPDATE
ROD CLUSTER CONTROL BANKS	
REV. 0	JULY, 1982
FIGURE NO. 3.2-1	



$F_N^H = 1.35$ at (x), HFP, NO XENON
 ΔH

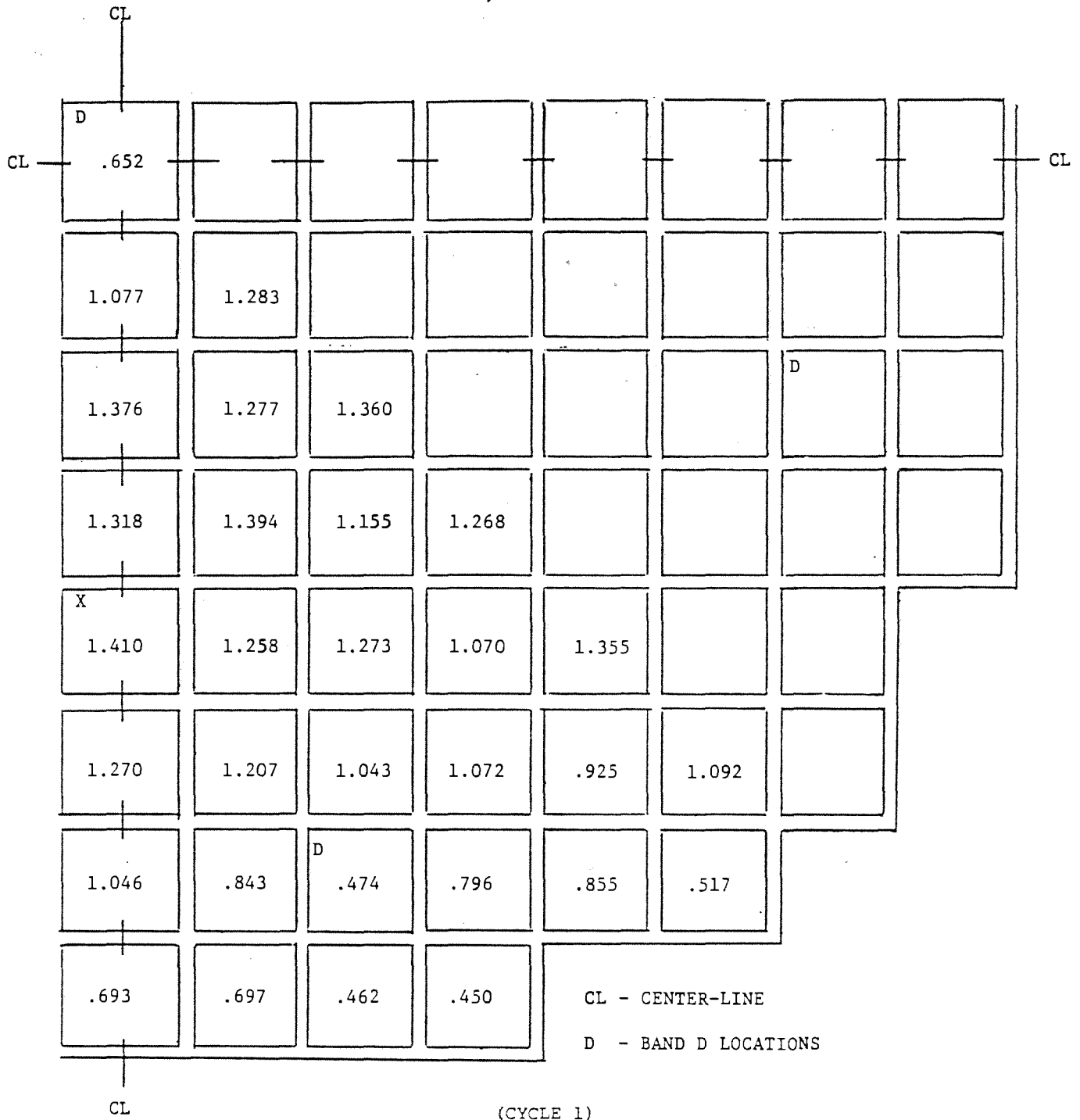
INDIAN POINT 3		FSAR UPDATE
ASSEMBLYWISE AVERAGE POWER DISTRIBUTION BEGINNING OF LIFE, UNRODDED CORE (CYCLE 1)		
REV. 0	JULY, 1982	FIGURE NO. 3.2-2



$F_{\Delta H}^N = 1.30$ at (x), HFP

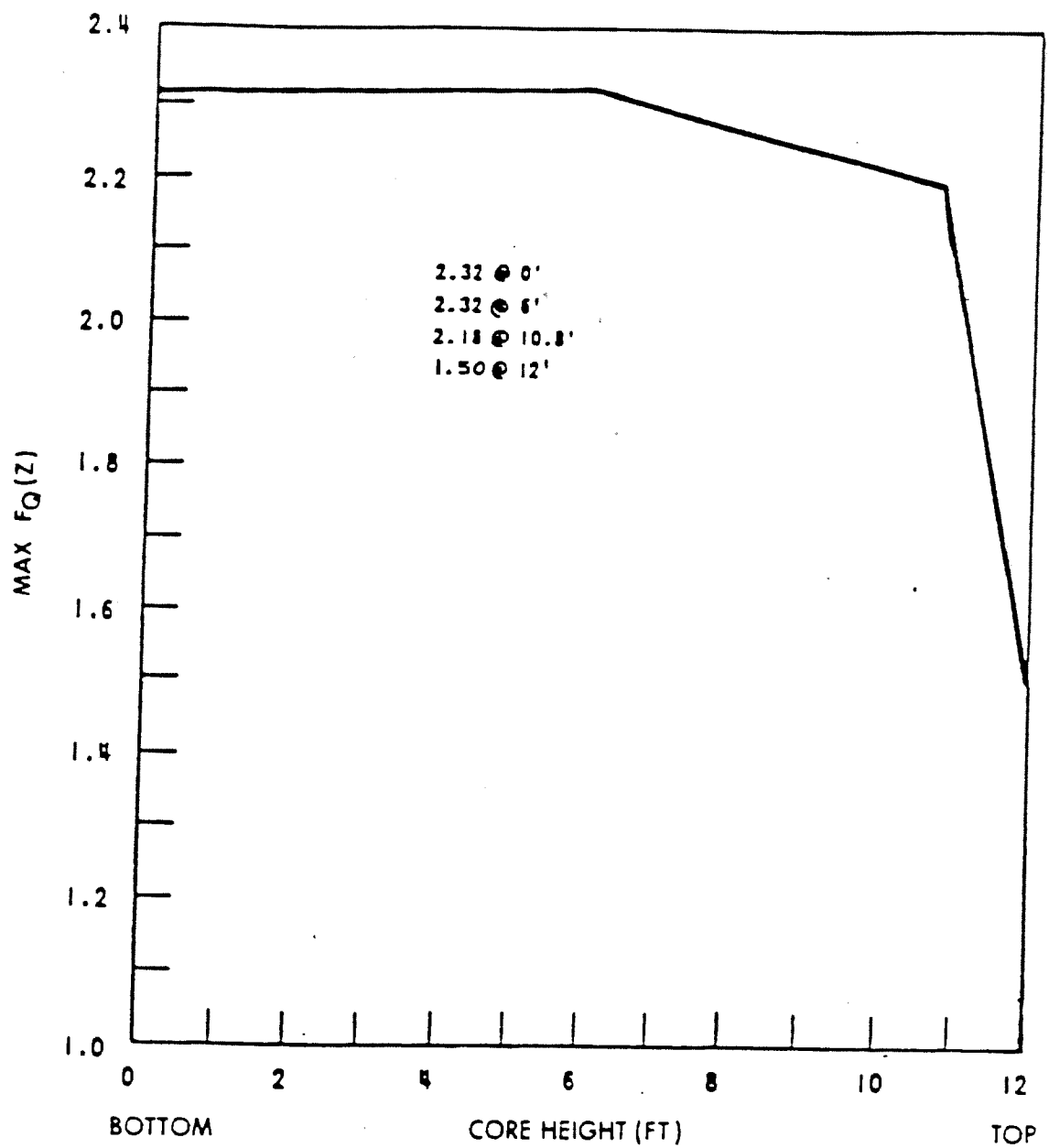
INDIAN POINT 3		FSAR UPDATE
ASSEMBLYWISE AVERAGE POWER DISTRIBUTION END OF LIFE, UNRODDED CORE (CYCLE 1)		
REV. 0	JULY, 1982	FIGURE NO. 3.2-3

INT, CYCLE 1



$F_{\Delta H}^N = 1.52$ at (x), Equilibrium Xenon

INDIAN POINT 3		FSAR UPDATE
ASSEMBLYWISE AVERAGE POWER DISTRIBUTION BEGINNING OF LIFE, BANK D INSERTED (CYCLE 1)		
REV. 0	JULY, 1982	FIGURE NO. 3.2-4

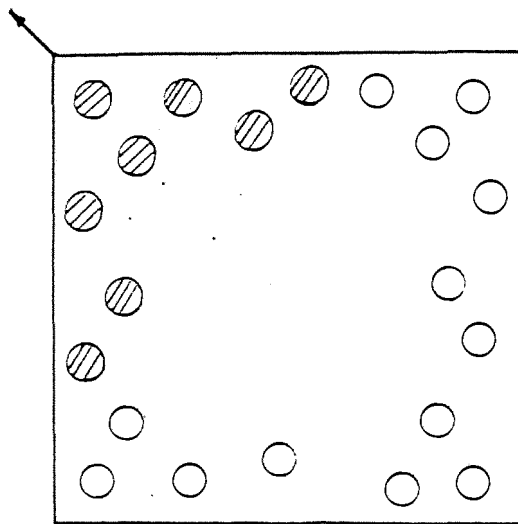


INDIAN POINT 3 FSAR UPDATE	
MAX $F_Q(Z)$ VS. AXIAL HEIGHT DURING NORMAL OPERATION (CYCLE 1)	
REV. 1, JULY 1990	FIGURE NO. 3.2-5

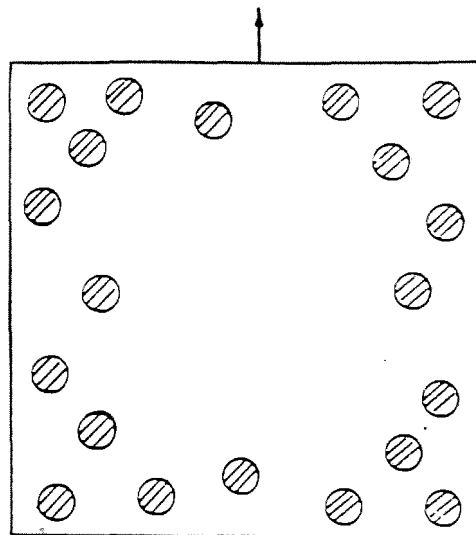
				9		9		9					
		8		12		20		20		12		8	
	8		20		12		12		12		20		8
		20		20		16		16		20		20	
	12		20		16		16		16		20		12
9		12		16		20		20		16		12	9
	20		16		20		16		20		16		20
9		12		16		16		16		16		12	9
	19 15		16		20		16		20		16		19 15
9		12		16		20		20		16		12	9
	12		20		16		16		16		20		12
		20		20		16		16		20		20	
	8		20		12		12		12		20		8
		8		12		20		20		12		8	
				9		9		9					

[1434 total 2 source rods (s)]

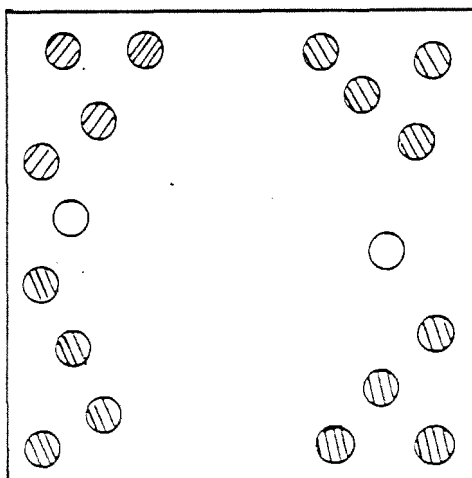
INDIAN POINT 3		FSAR UPDATE
DISTRIBUTION OF BURNABLE POISON RODS (CYCLE 1)		
REV. 0	JULY, 1982	FIGURE NO. 3.2-6



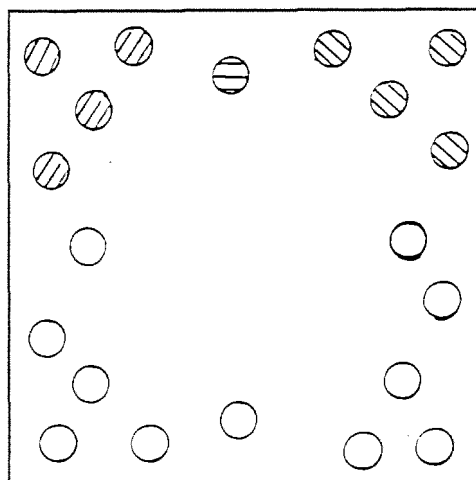
8 RODS



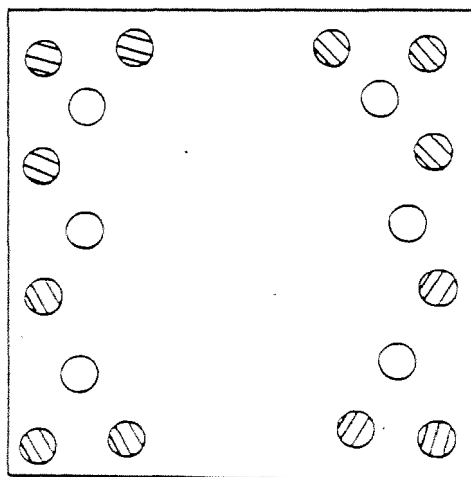
20 RODS



16 RODS

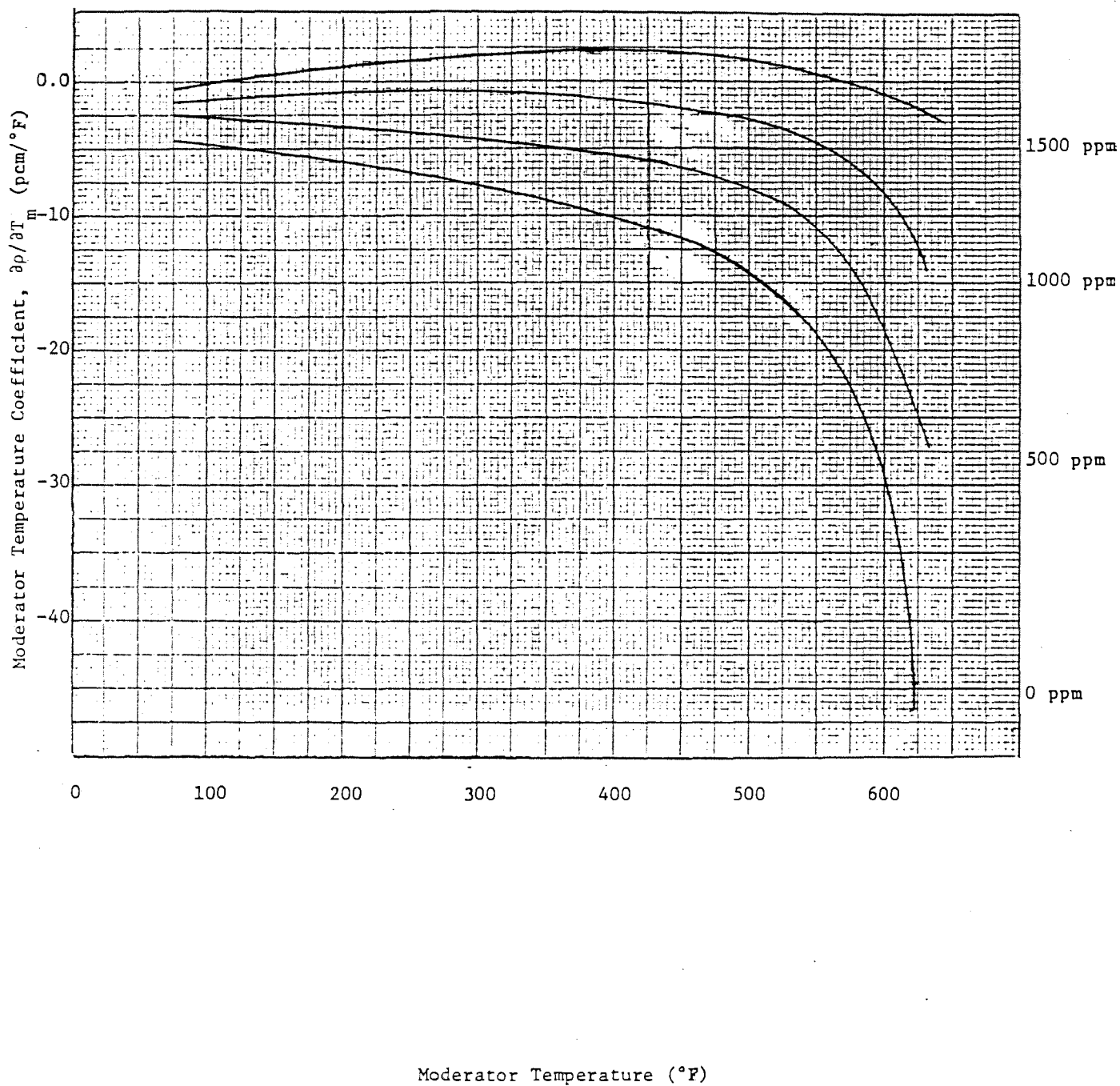


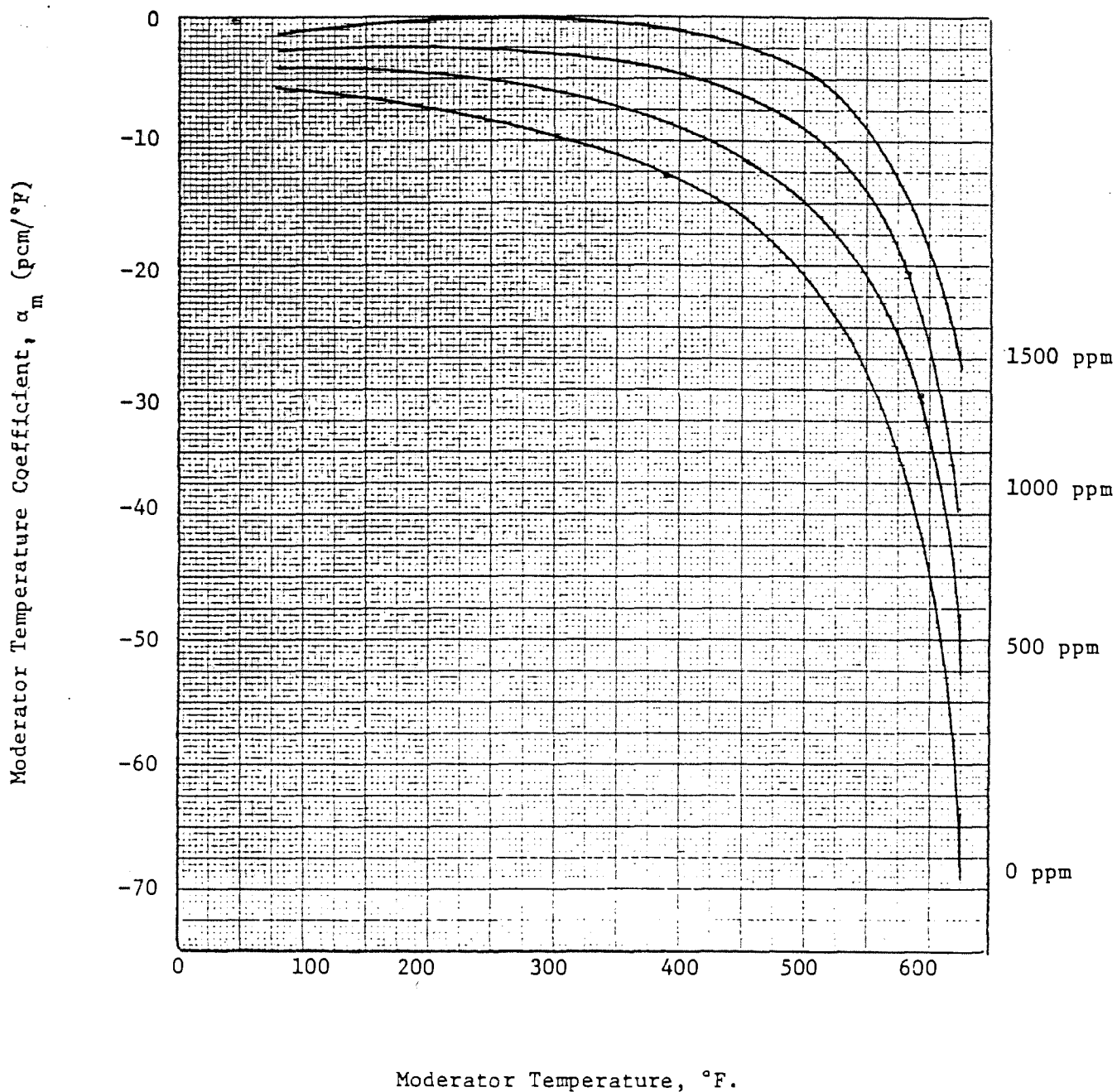
9 RODS



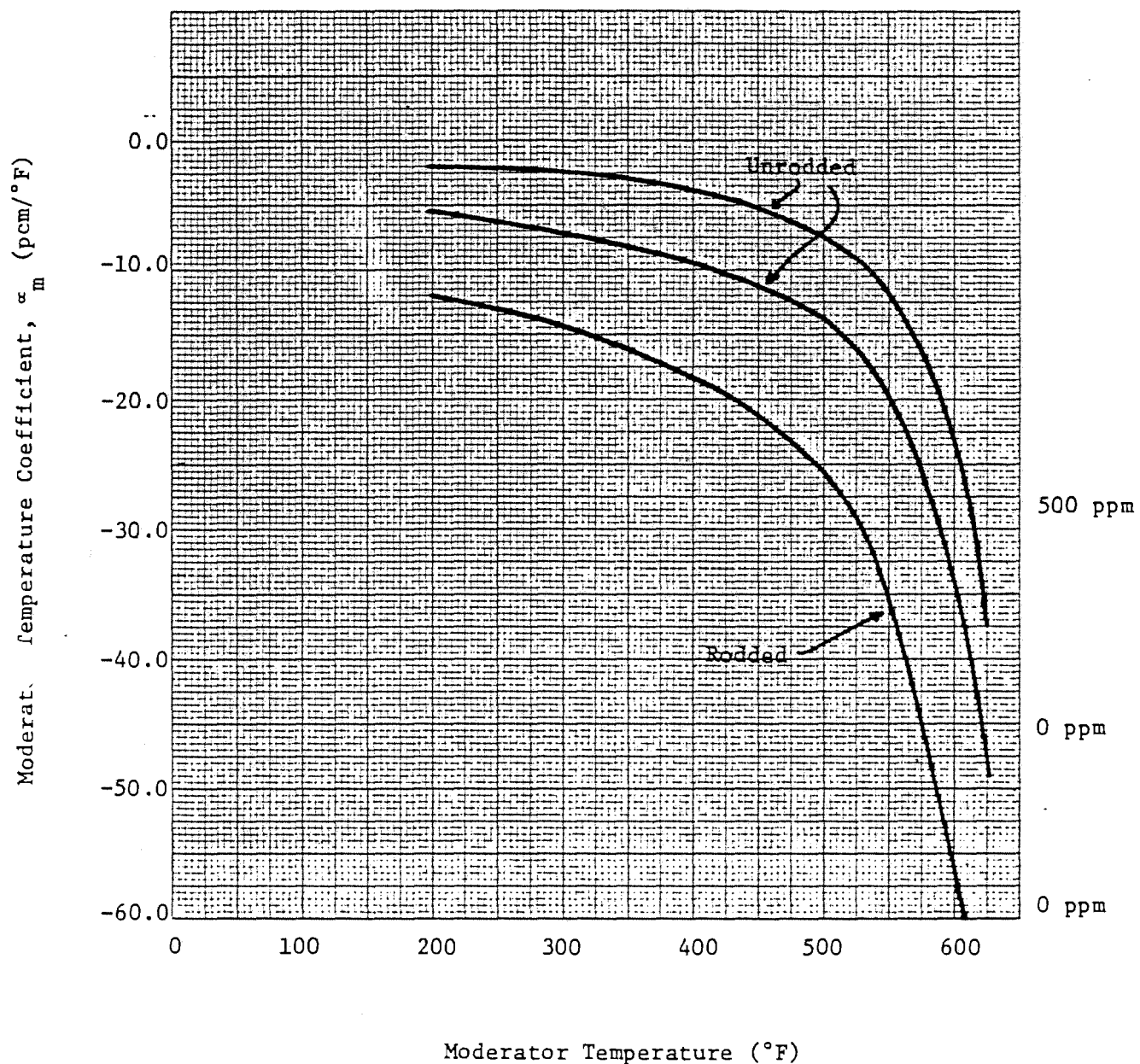
12 RODS

INDIAN POINT 3		FSAR UPDATE
ARRANGEMENT OF BURNABLE POISON RODS (CYCLE 1)		
REV. 0	JULY, 1982	FIGURE NO. 3.2-7

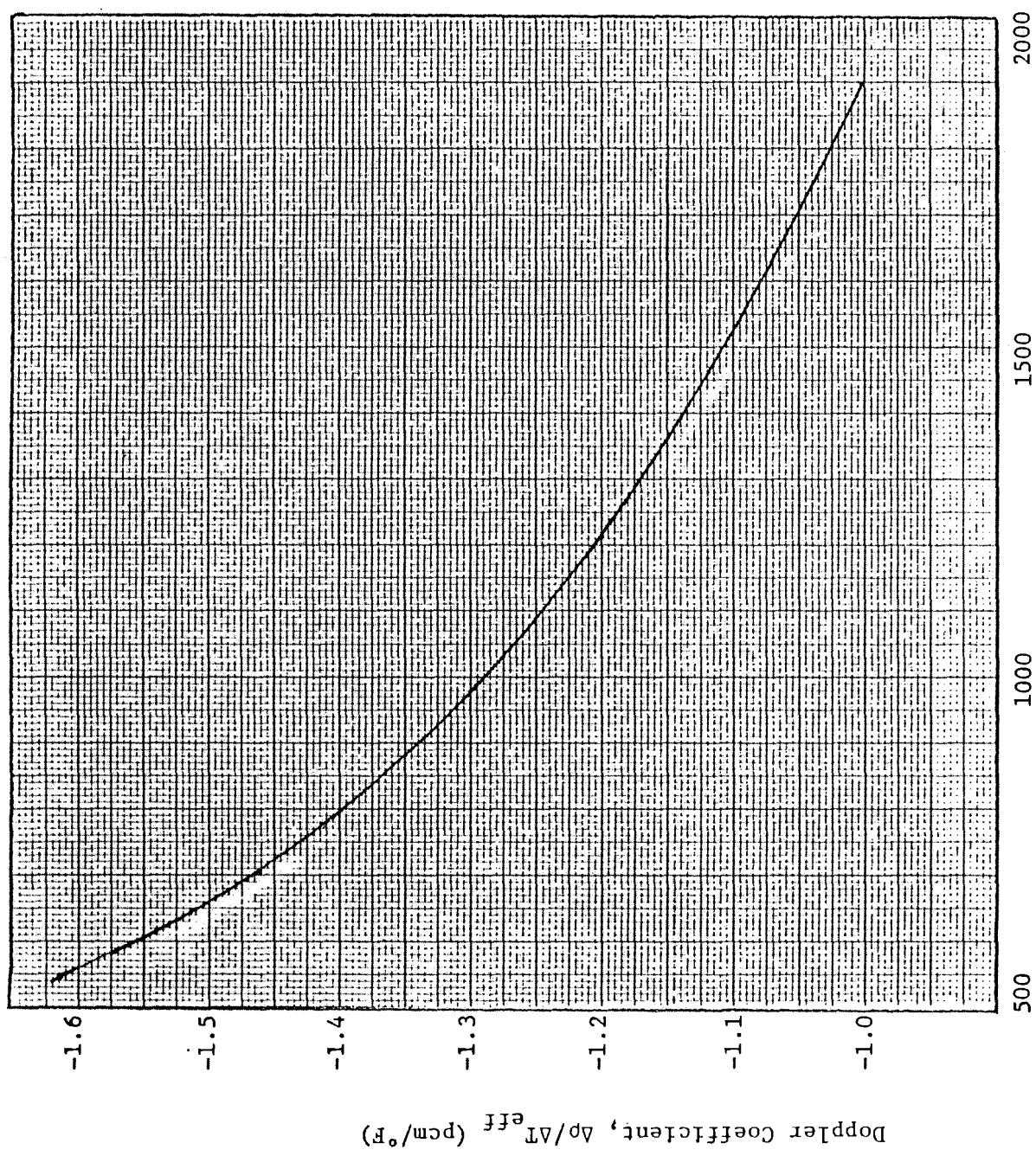




INDIAN POINT 3		FSAR UPDATE
MODERATOR TEMPERATURE COEFFICIENT VS. MODERATOR TEMPERATURE, BOL, CYCLE 1 CONTROL RODS PRESENT		
REV. 0	JULY, 1982	FIGURE NO. 3.2-9



INDIAN POINT 3		FSAR UPDATE
MODERATOR TEMPERATURE COEFFICIENT VS. MODERATOR TEMPERATURE, EOL, CYCLE 1		
REV. 0	JULY, 1982	FIGURE NO. 3.2-10



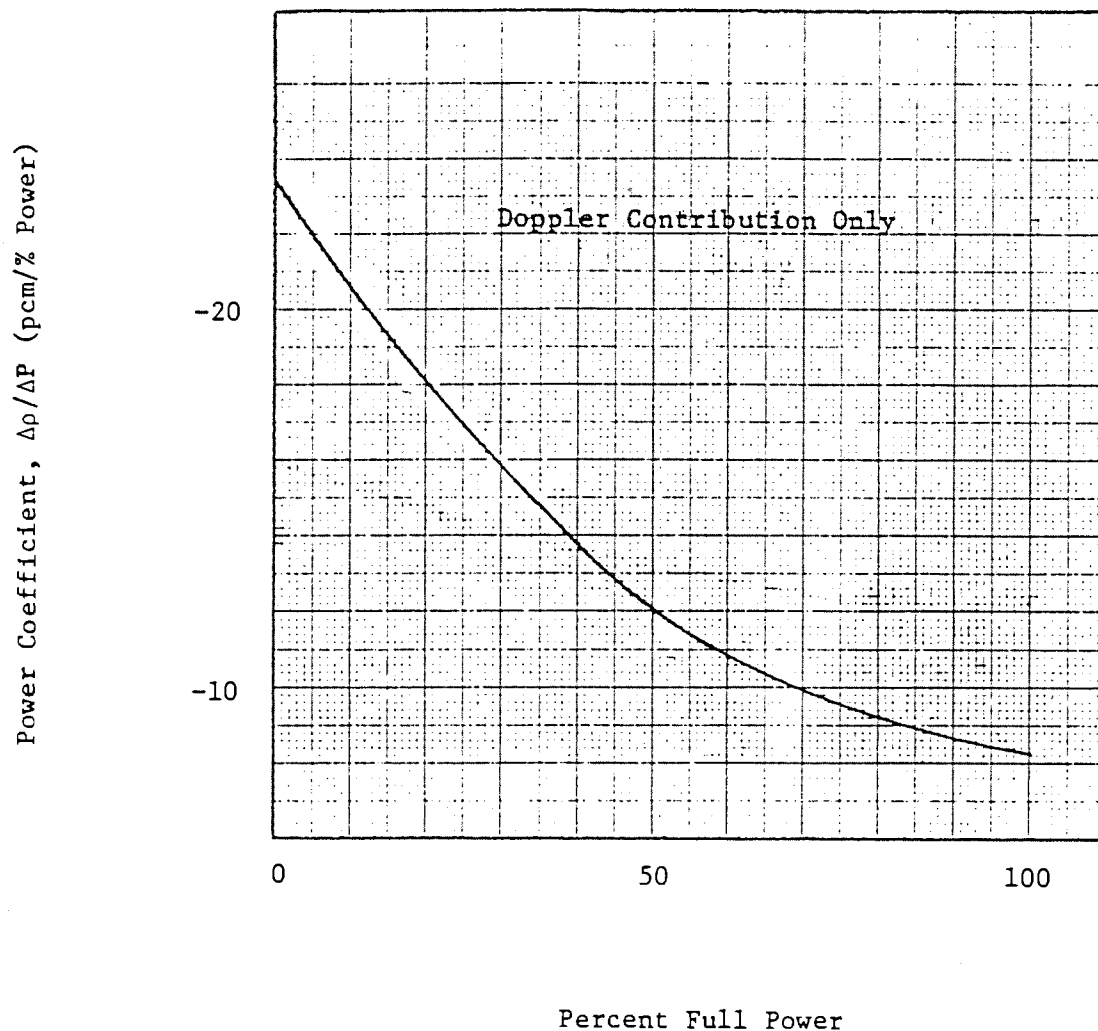
BOL, cycle 1

$T_m = 574^\circ\text{F}$

Avg. Enrichment = 2.8

Resonance Effective Temperature ($^\circ\text{F}$)

INDIAN POINT 3		FSAR UPDATE
DOPPLER COEFFICIENT VS. RESONANCE EFFECTIVE TEMPERATURE		
REV. 0	JULY, 1982	FIGURE NO. 3.2-11



BOL, cycle 1

$T_m = 547^\circ\text{F}$

Avg. Enrichment = 2.8

INDIAN POINT 3

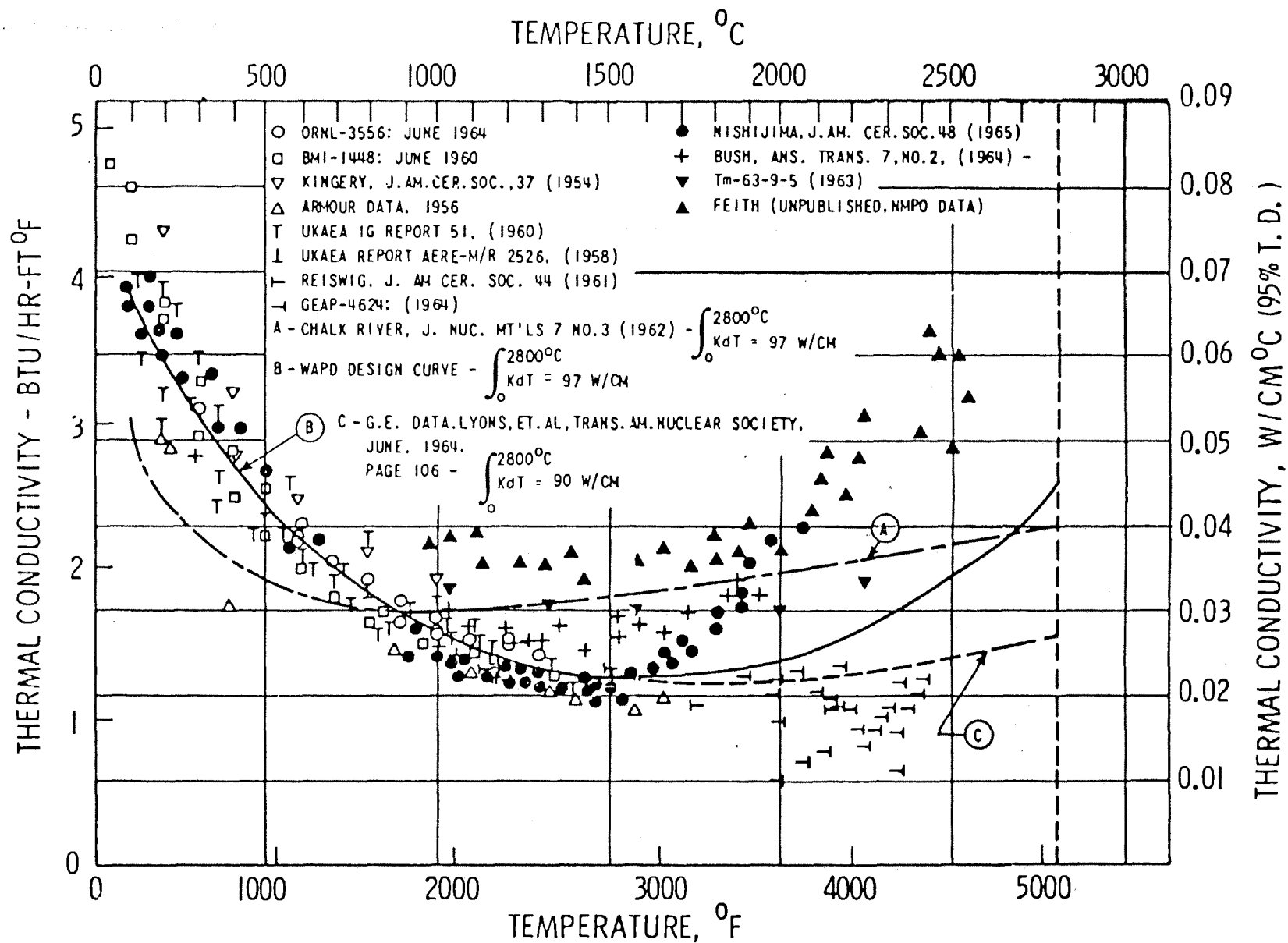
FSAR UPDATE

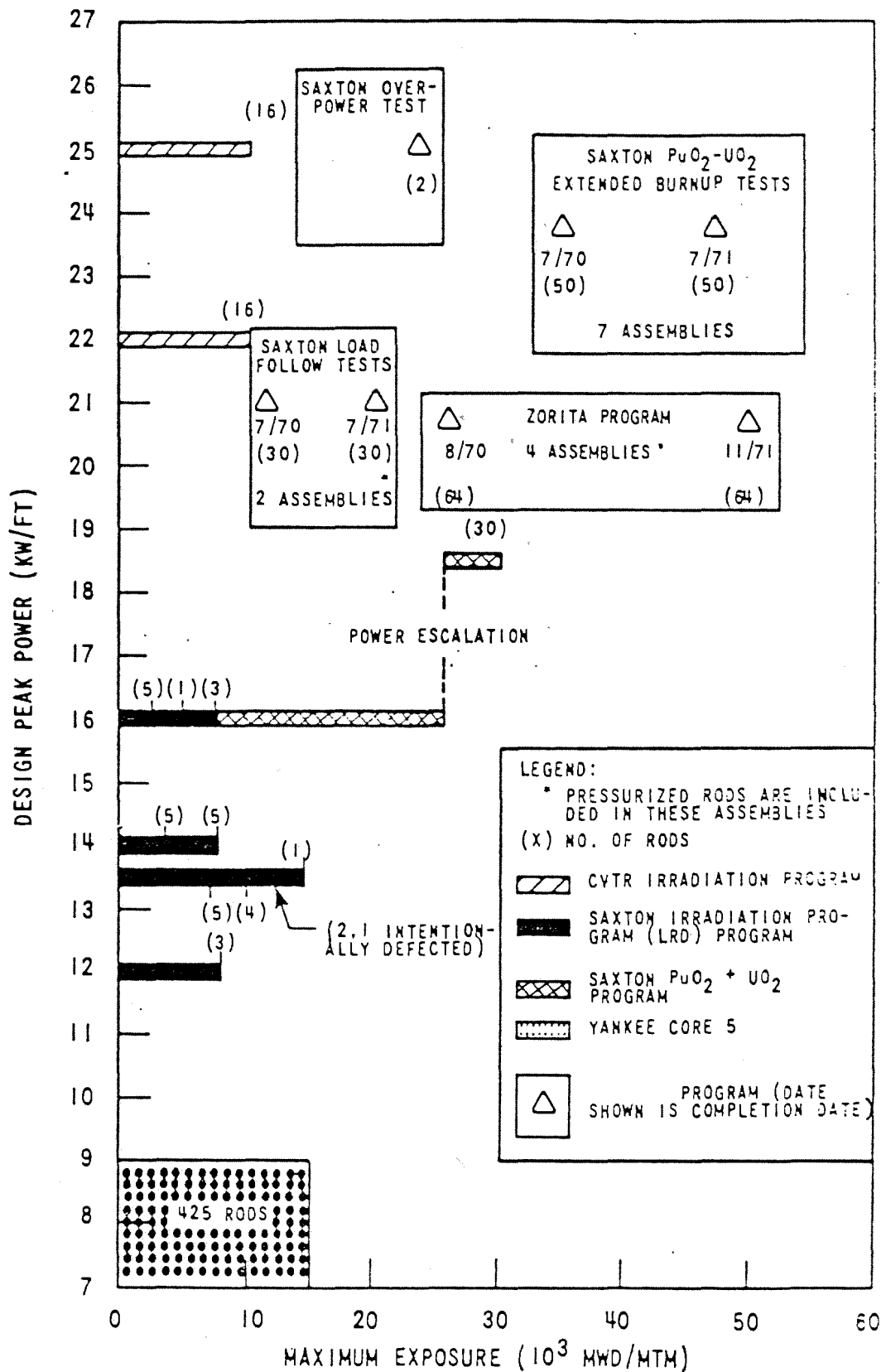
DOPPLER CONTRIBUTIONS TO THE
POWER COEFFICIENT VS. POWER LEVEL

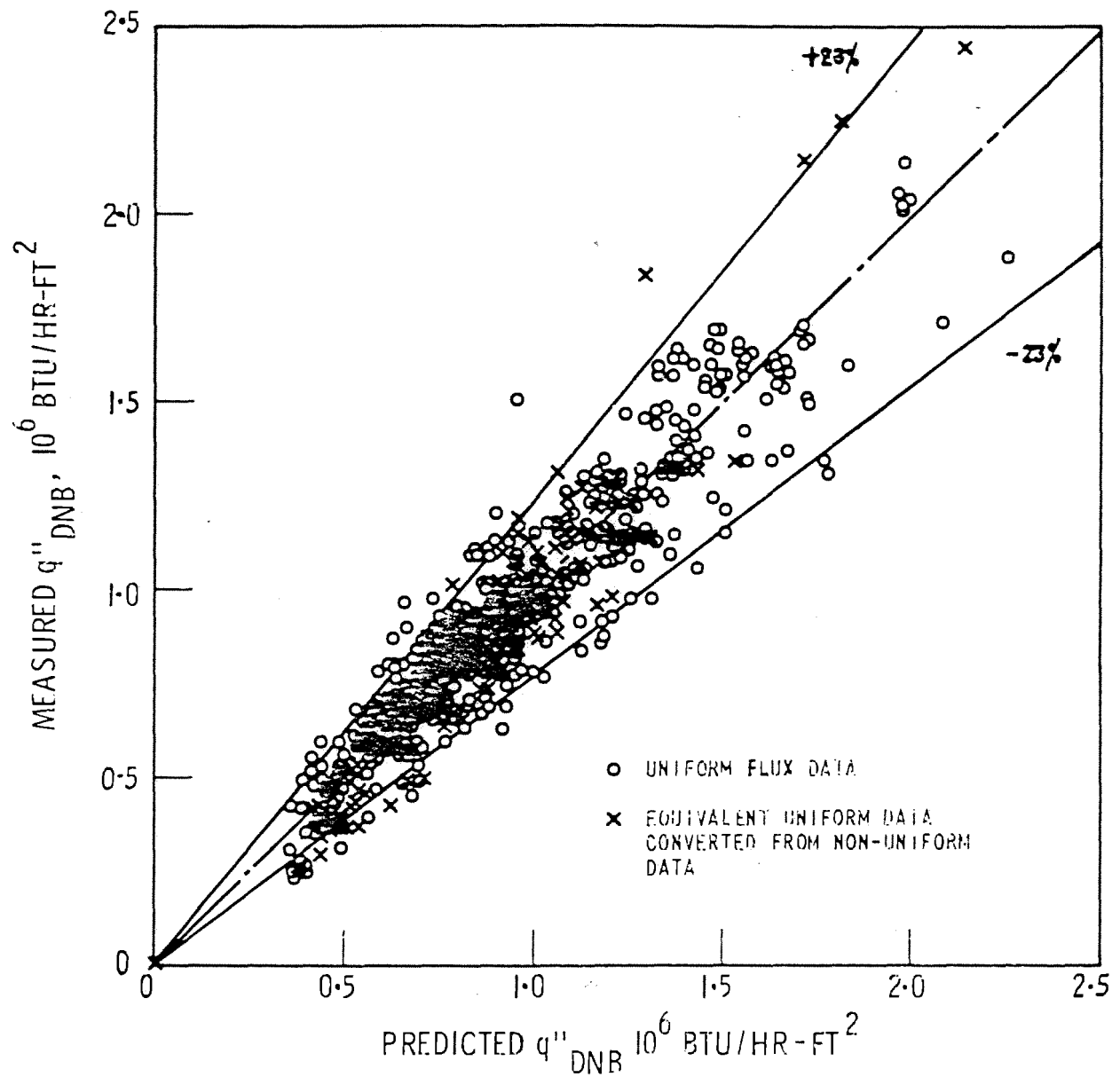
REV. 0

JULY, 1982

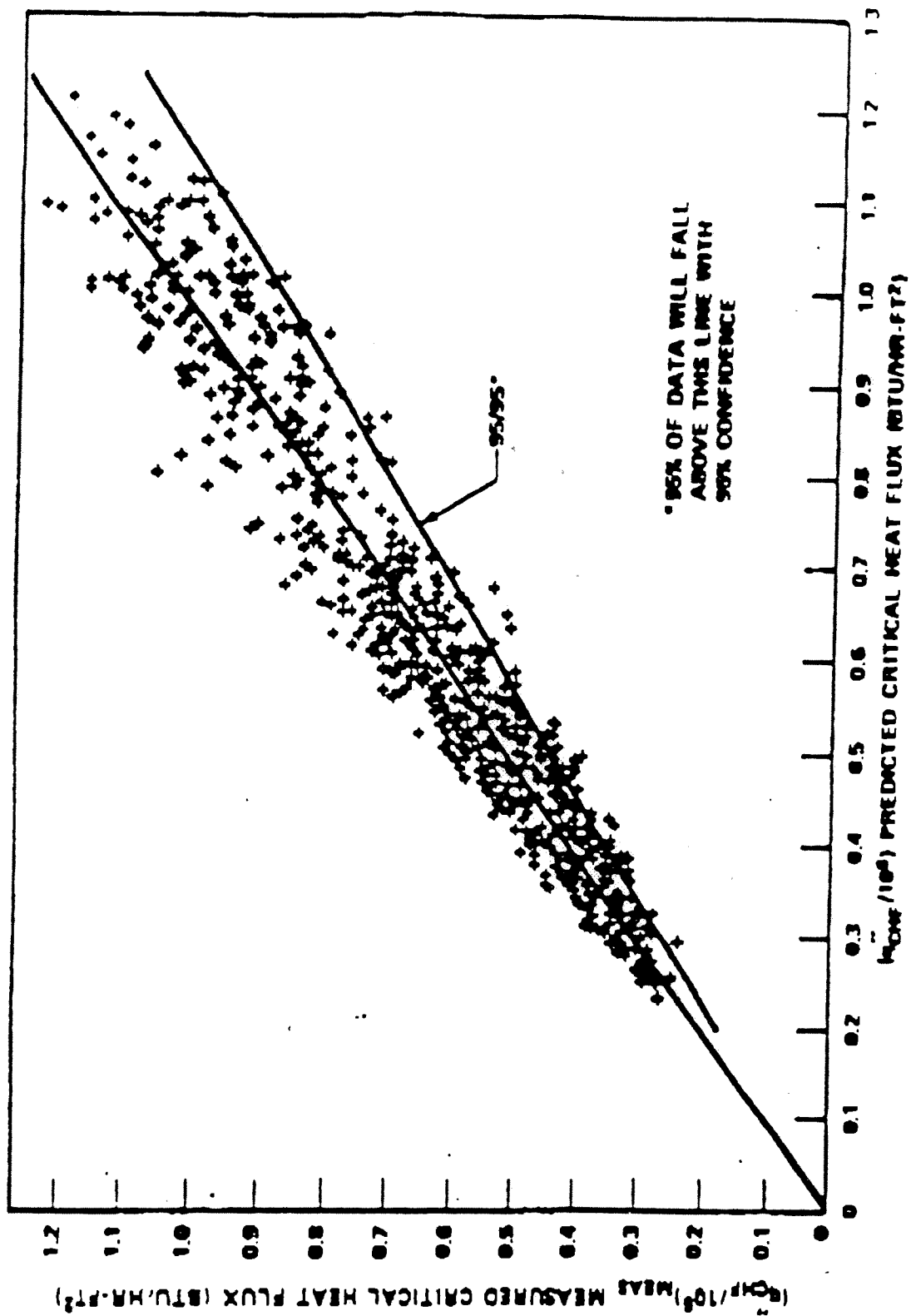
FIGURE NO. 3.2-12



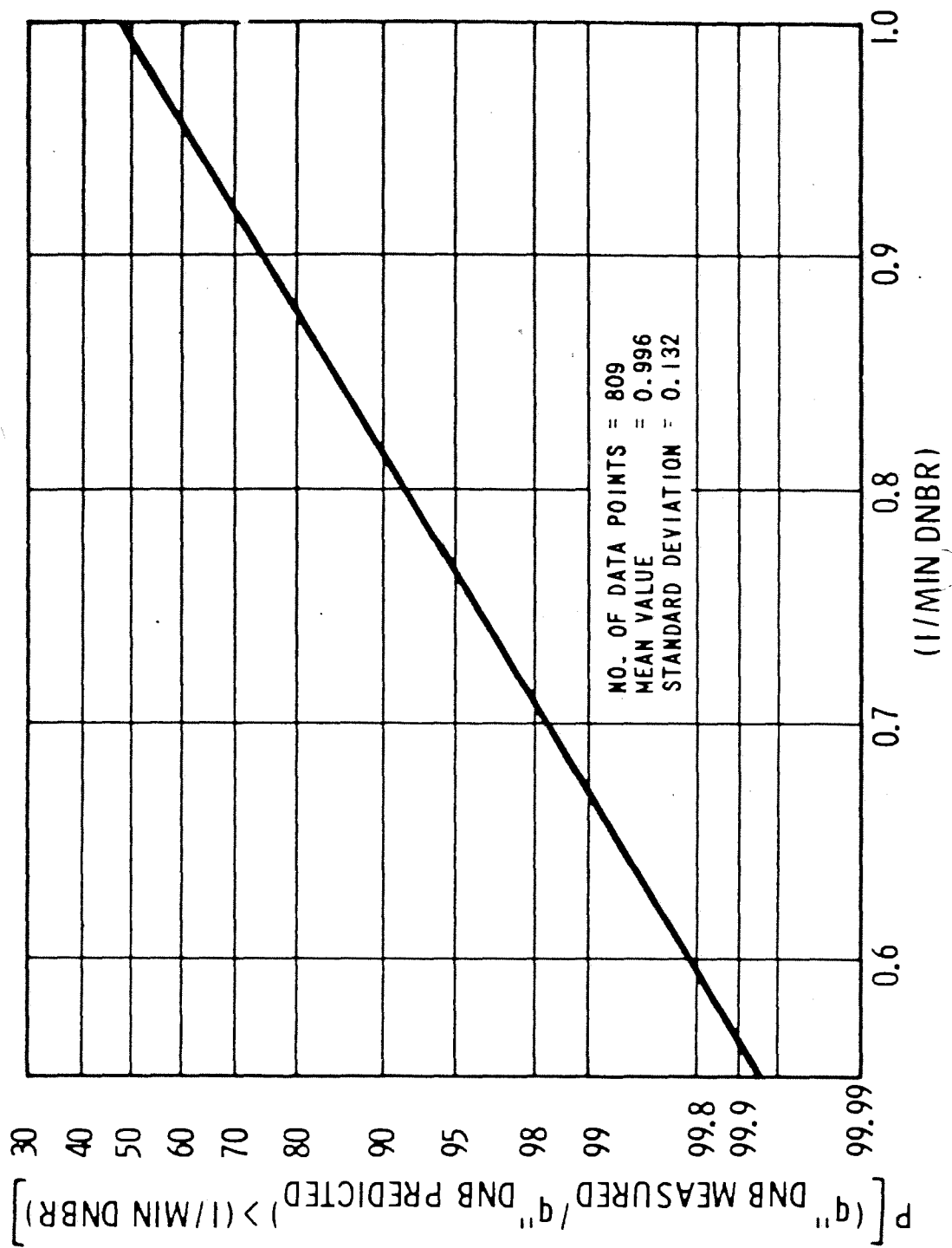




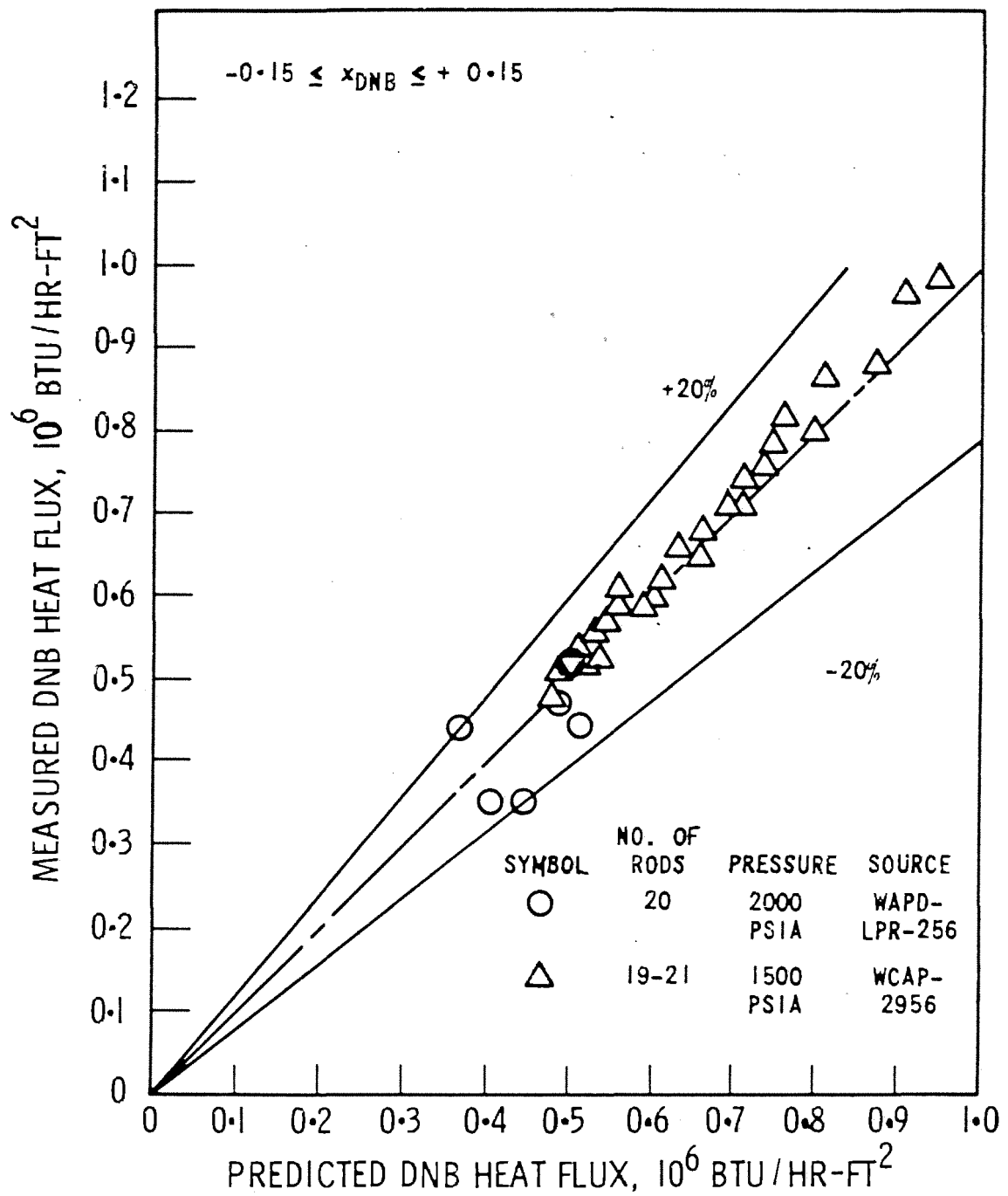
INDIAN POINT 3		FSAR UPDATE
COMPARISON OF W-3 PREDICTION AND UNIFORM FLUX DATA		
REV. 0	JULY, 1982	FIGURE NO. 3.2-15



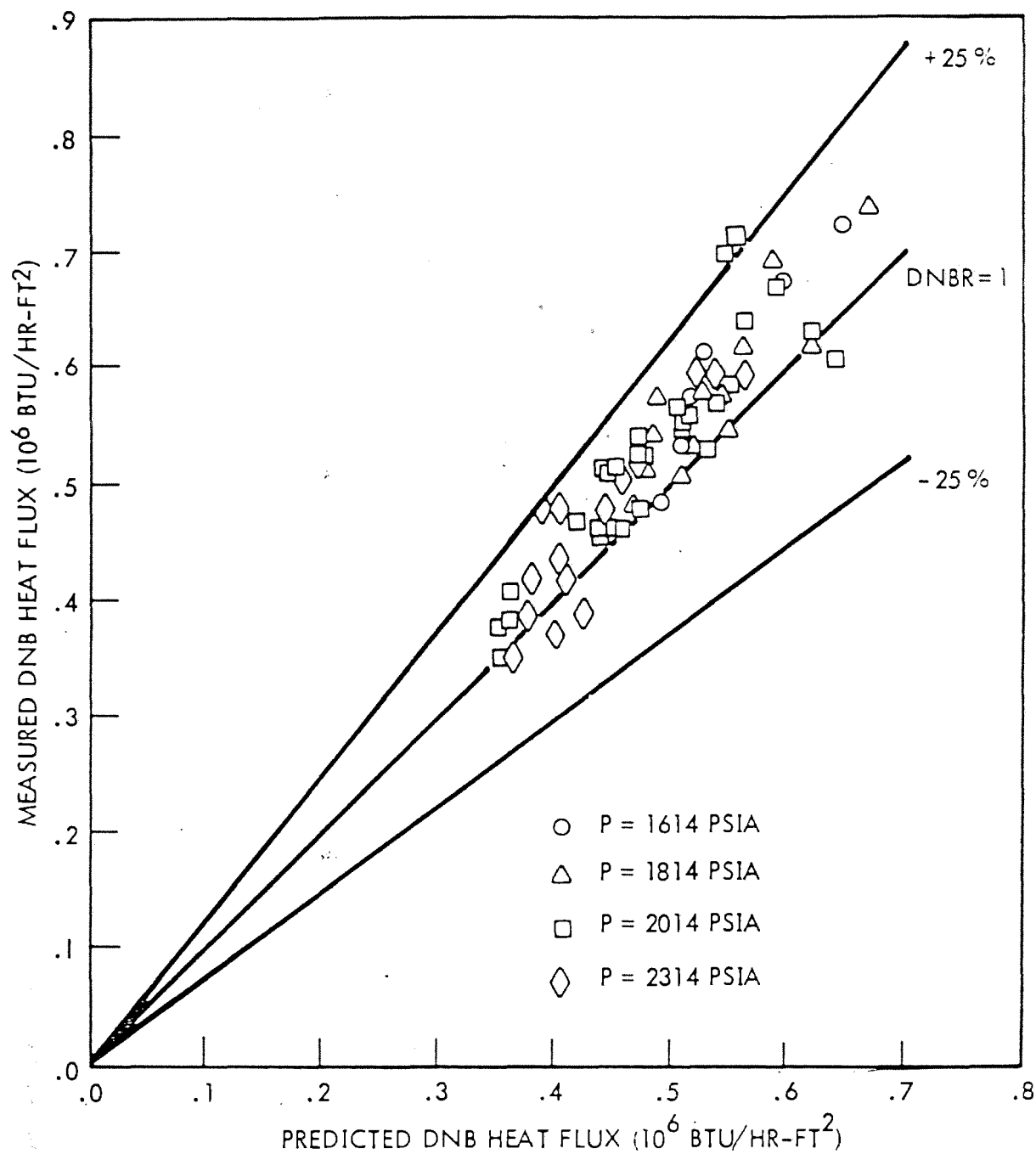
INDIAN POINT 3	FSAR UPDATE
MEASURED VERSUS PREDICTED CRITICAL HEAT FLUX WRB-1 CORRELATION	
REV. 0, JULY 1990	FIGURE NO. 3.2-15A



INDIAN POINT 3		FSAR UPDATE
W-3 CORRELATION PROBABILITY DISTRIBUTION CURVE		
REV. 0	JULY, 1982	FIGURE NO. 3.2-16



INDIAN POINT 3		FSAR UPDATE
COMPARISON OF W-3 CORRELATION WITH ROD BUNDLE DNB DATA (SIMPLE GRID WITHOUT MIXING VANE)		
REV. 0	JULY, 1982	FIGURE NO. 3.2-17



INDIAN POINT 3

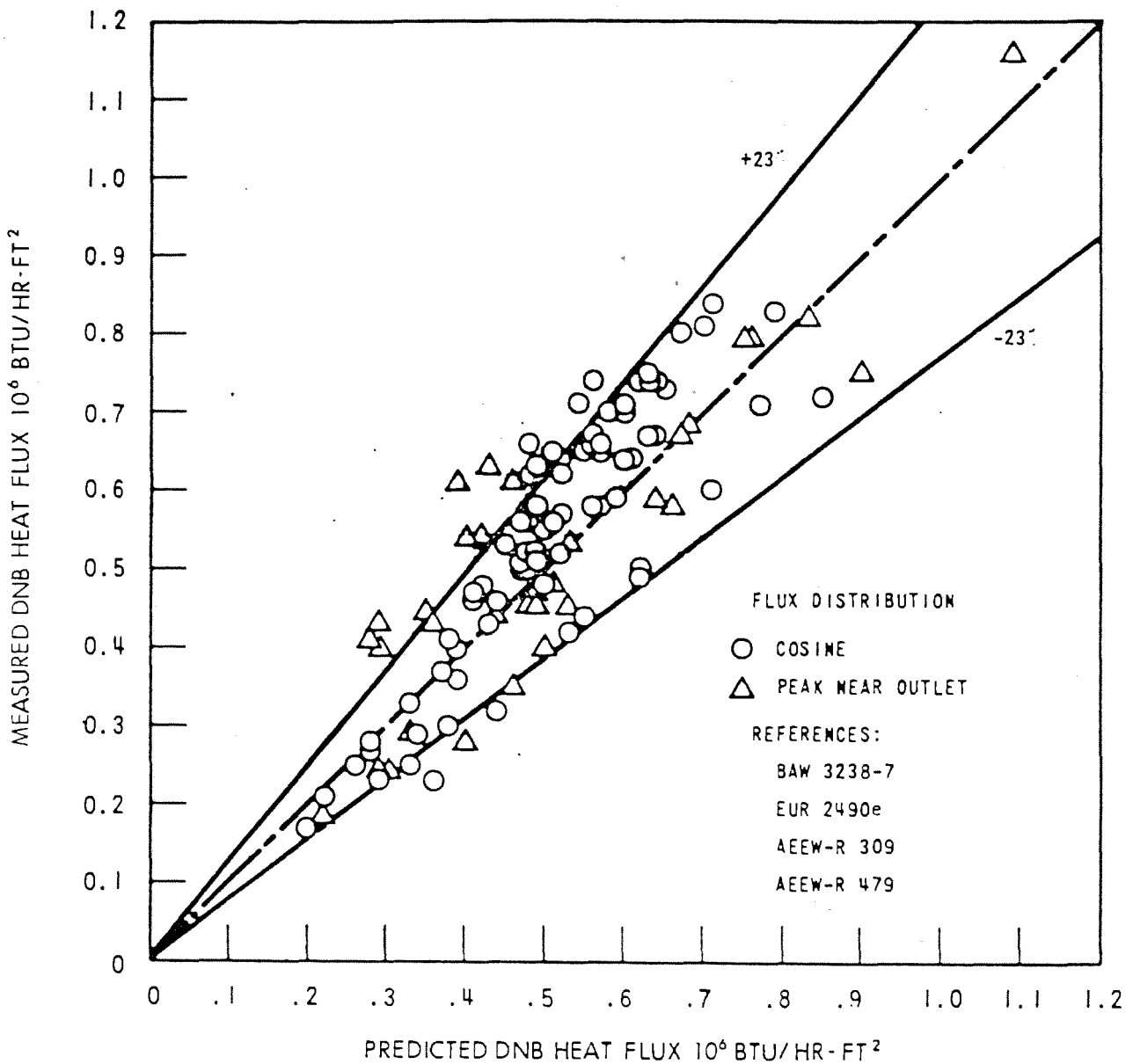
FSAR UPDATE

COMPARISON OF W-3 CORRELATION WITH
ROD BUNDLE DNB DATA (SIMPLE GRID
WITH MIXING VANE)

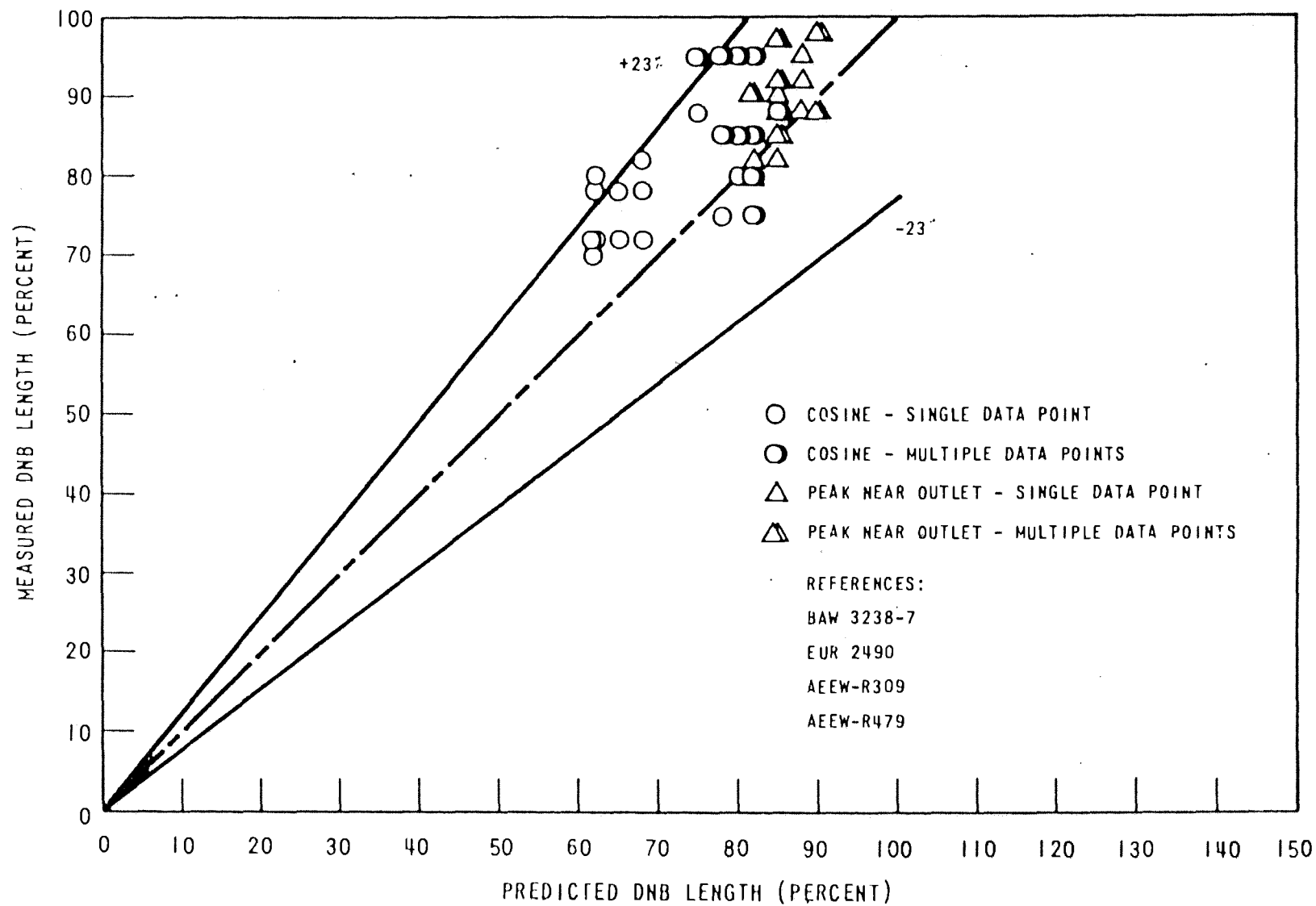
REV. 0

JULY, 1982

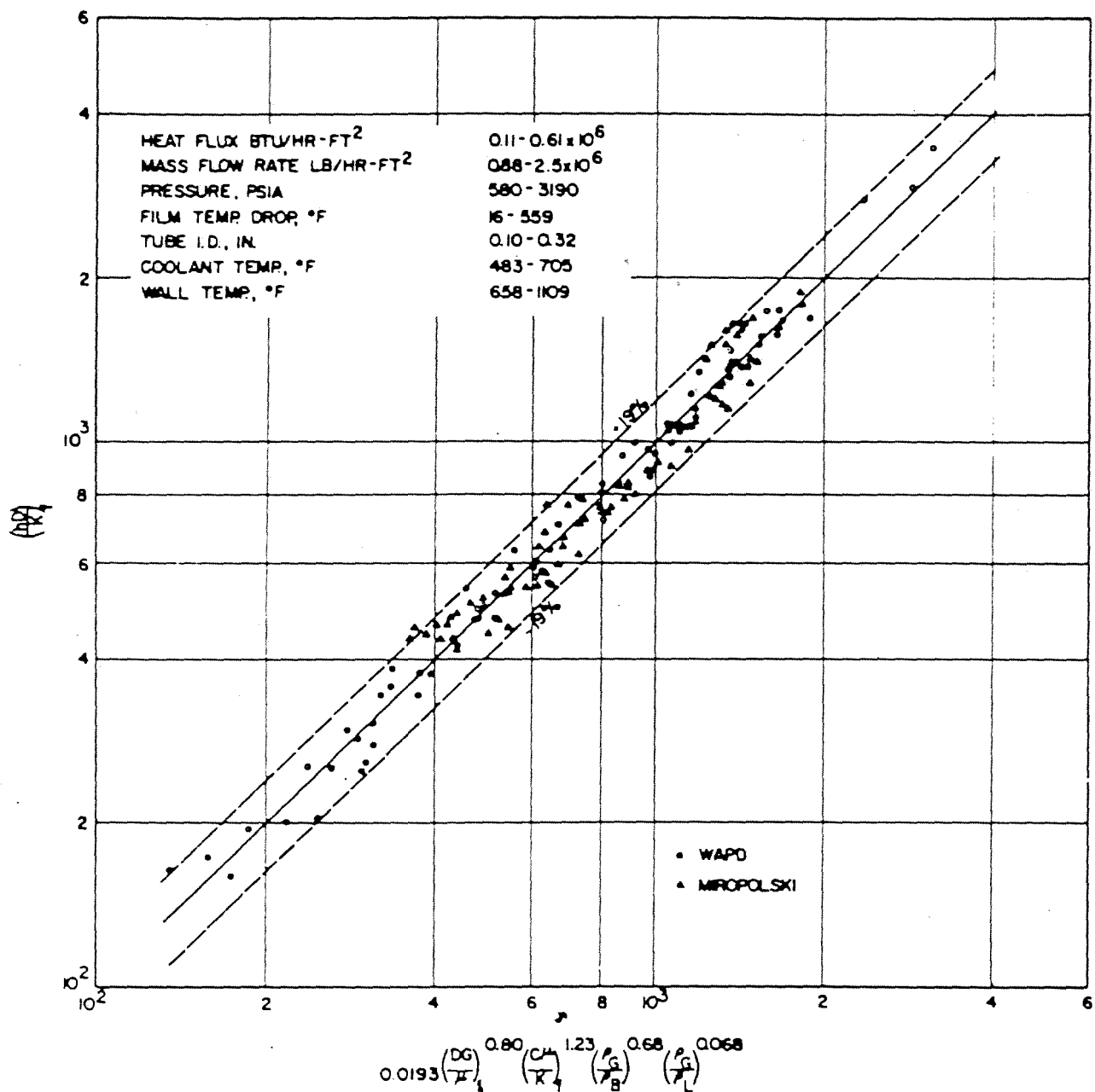
FIGURE NO. 3.2-18



INDIAN POINT 3		FSAR UPDATE
COMPARISON OF NON-UNIFORM DNB DATA WITH W-3 PREDICTIONS		
REV. 0	JULY, 1982	FIGURE NO. 3.2-19



INDIAN POINT 3	FSAR UPDATE
COMPARISON OF W-3 PREDICTION WITH MEASURED DNB LOCATION	
REV. 0	JULY, 1982
FIGURE NO. 3.2-20	



INDIAN POINT 3

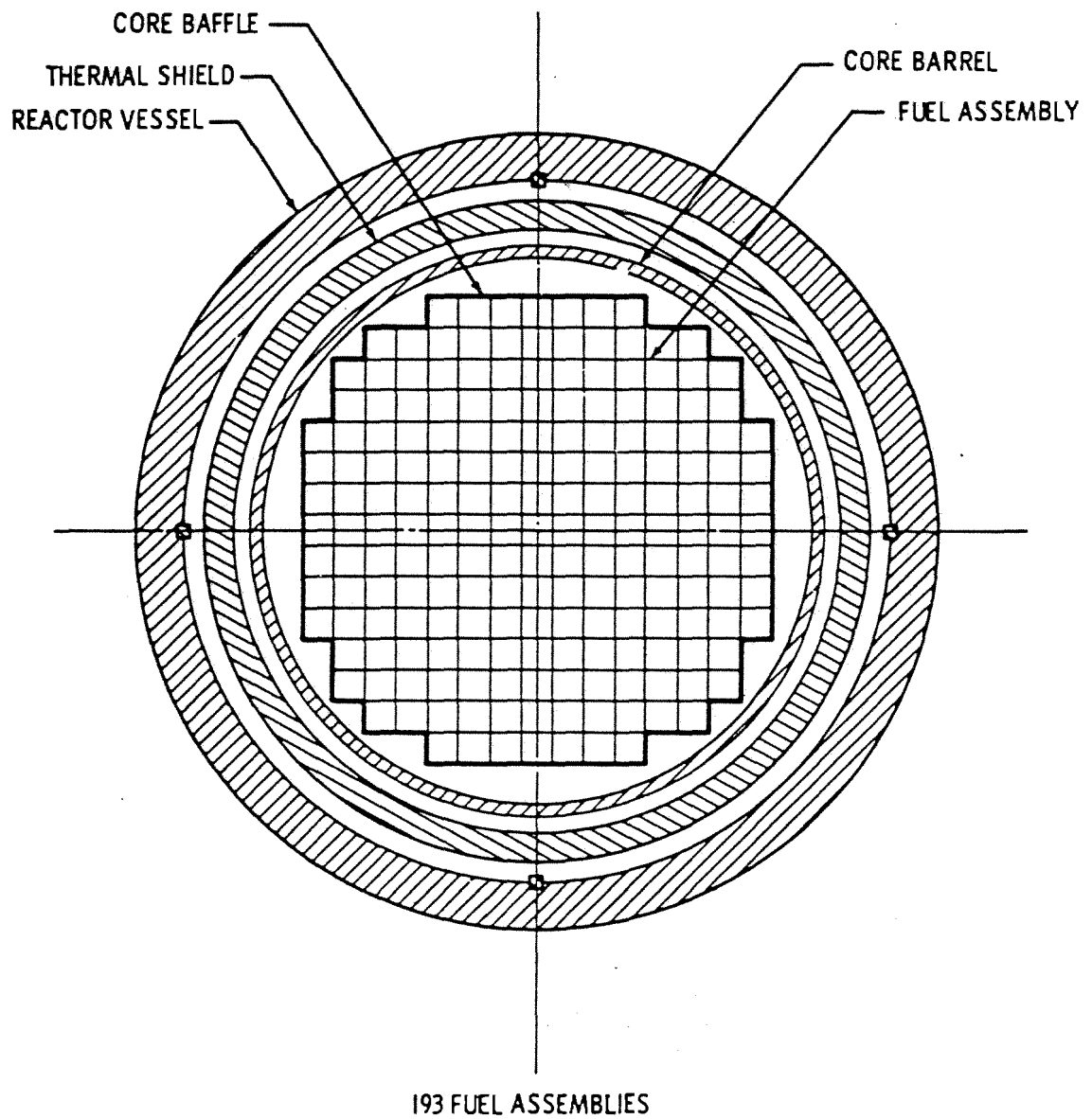
FSAR UPDATE

STABLE FILM BOILING HEAT TRANSFER
 DATA AND CORRELATION

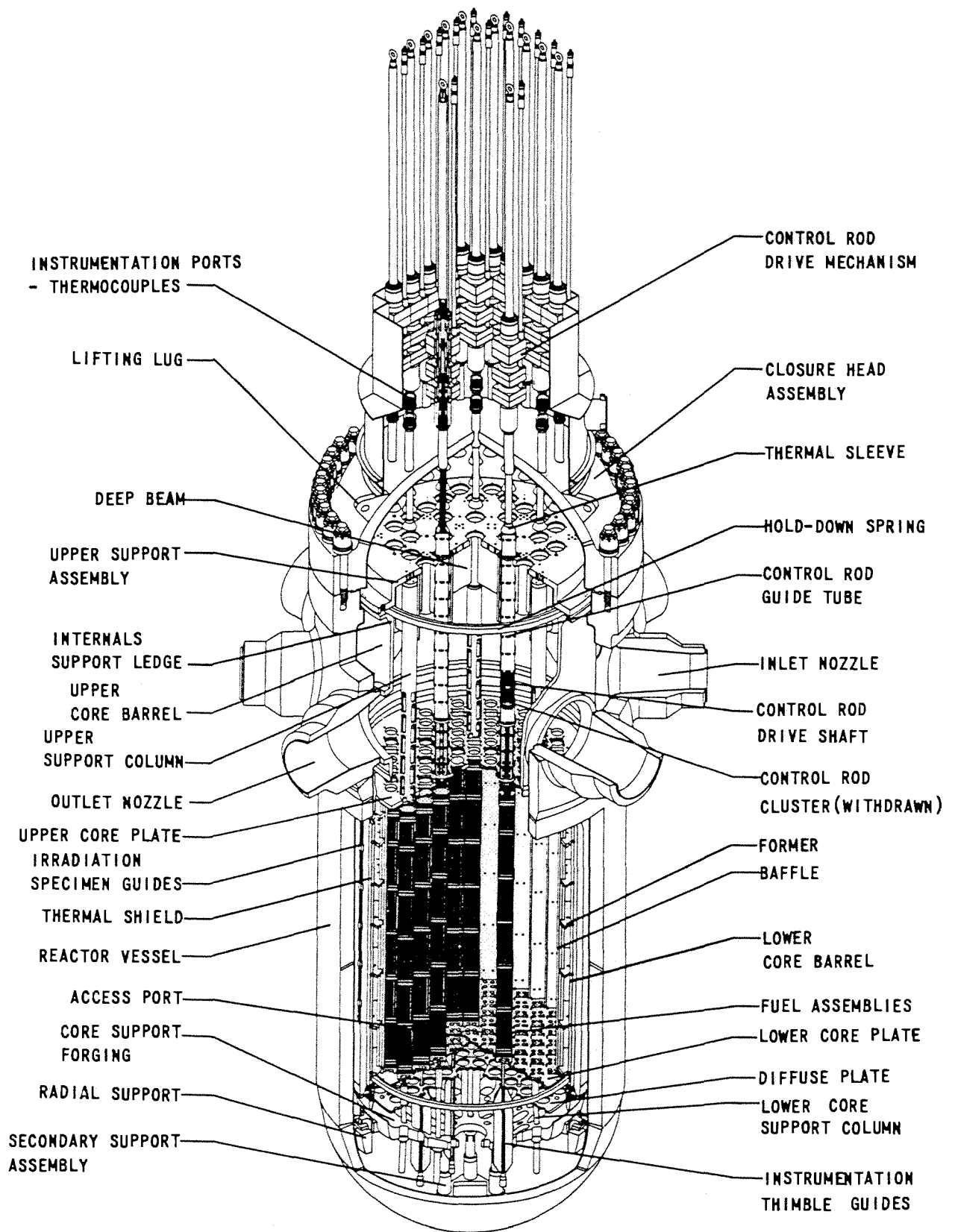
REV. 0

JULY, 1982

FIGURE NO. 3.2-21



INDIAN POINT 3		FSAR UPDATE
CORE CROSS SECTION		
REV. 0	JULY, 1982	FIGURE NO. 3.2-22



INDIAN POINT 3

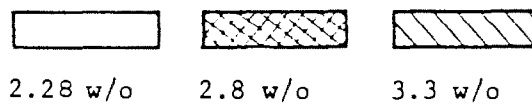
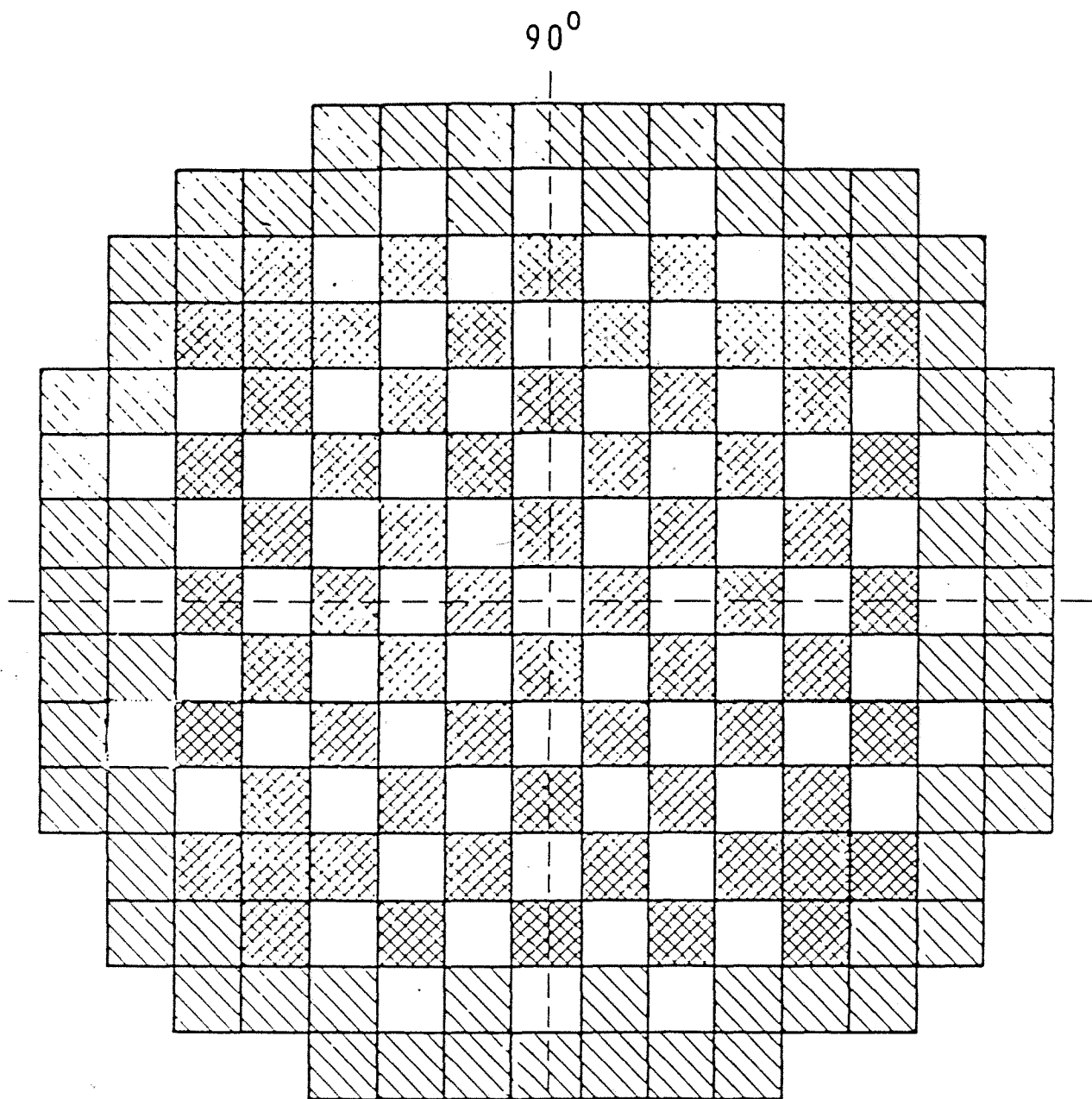
FSAR UPDATE

REACTOR VESSEL AND INTERNALS

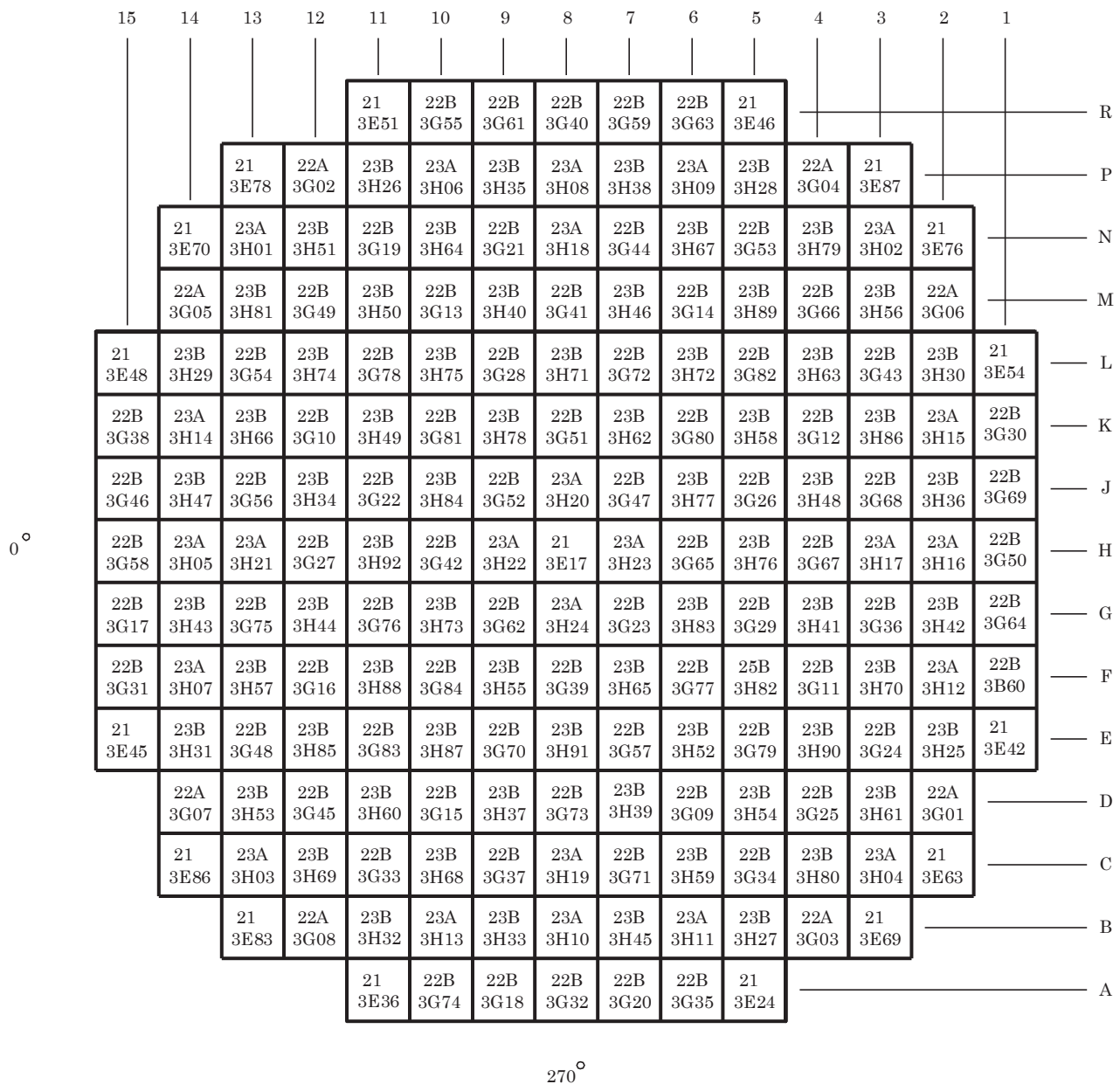
REV. 0

JULY, 1982

FIGURE NO. 3.2-23



INDIAN POINT 3		FSAR UPDATE
CORE LOADING ARRANGEMENT (FIRST CYCLE)		
REV. 0	JULY, 1982	FIGURE NO. 3.2-24



LEGEND

R	Region Identifier
ID	Fuel Assembly Identifier

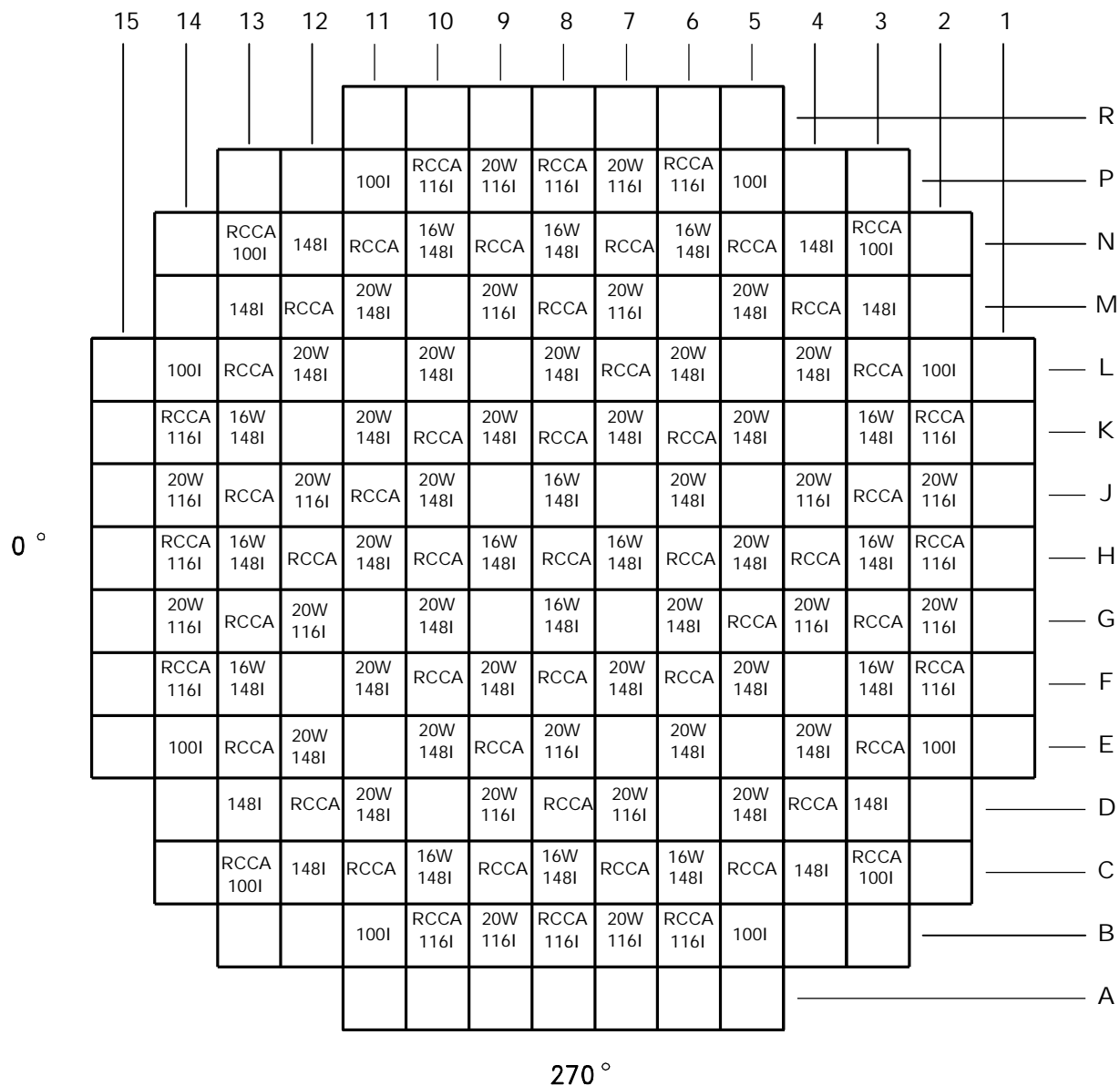
Fuel Assembly Orientation



- Reference Hole
- Core Pin Hole
- ∖ Holddown Bar

NOTE: Figures are Top View

INDIAN POINT UNIT No. 3	
CYCLE 21 REGION AND FUEL ASSEMBLY LOCATIONS	
UFSAR FIGURE 3.2-24A	REV. No. 8



LEGEND

TYPE	COMPONENT TYPE
###I	NUMBER OF FRESH IFBA RODS

Fuel Assembly Orientation



- Reference Hole
- Core Pin Hole
- ∨ Holddown Bar

NOTE: Figures are Top View

CORE COMPONENT TYPES

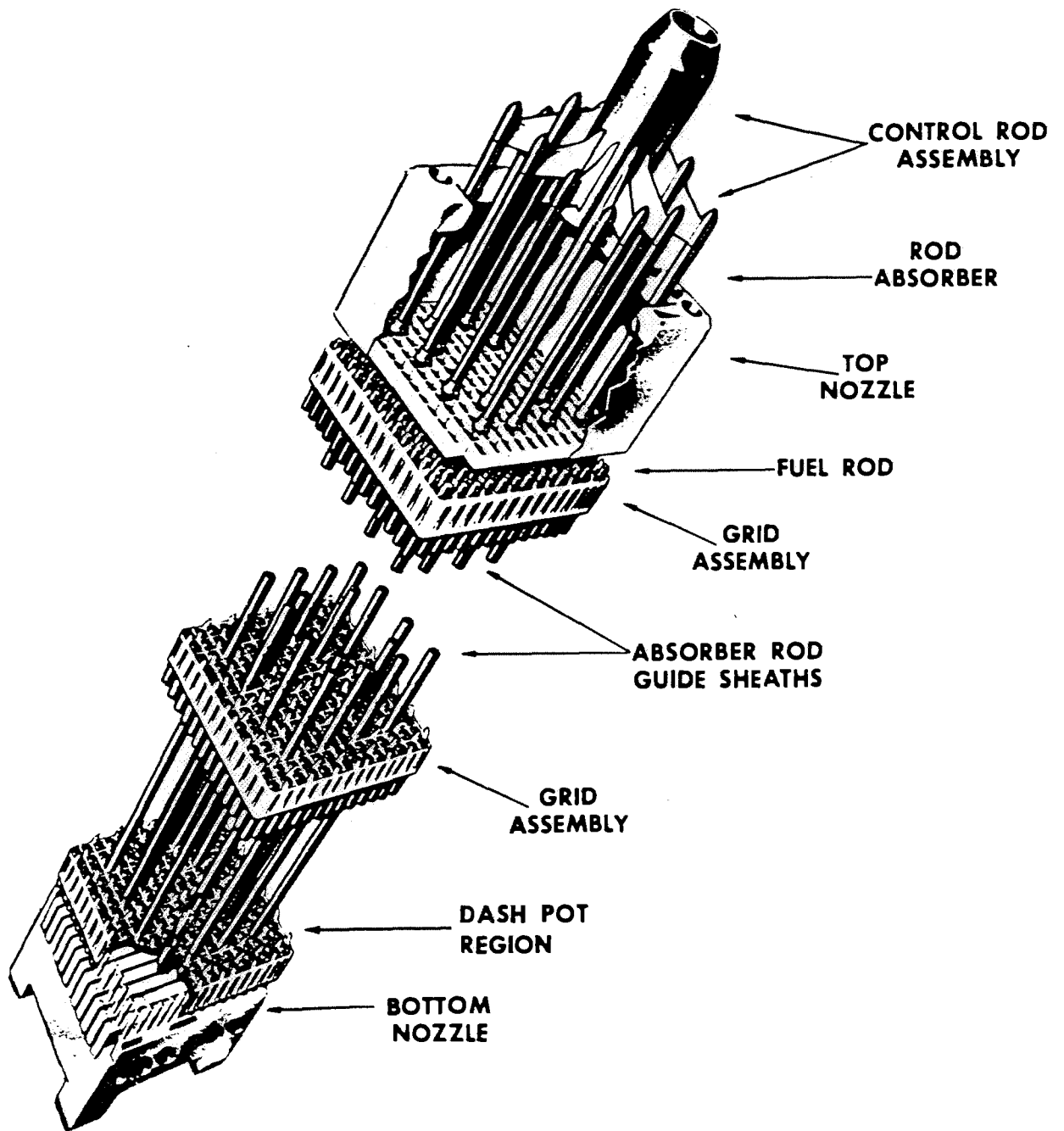
RCCA - CONTROL OR SHUTDOWN
W - NUMBER OF RODLETS ON
WABA ASSEMBLY

INDIAN POINT UNIT No. 3

CYCLE 21 CORE COMPONENTS
AND FRESH IFBA LOCATIONS

UFSAR FIGURE 3.2-24B

REV. No. 8



INDIAN POINT 3

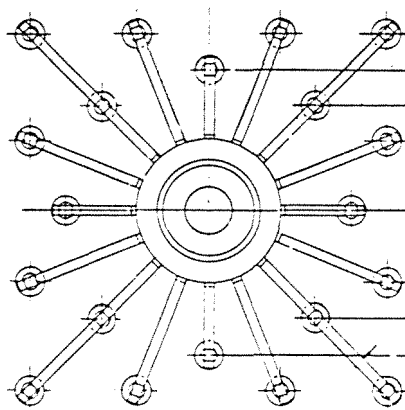
FSAR UPDATE

TYPICAL ROD CLUSTER CONTROL ASSEMBLY

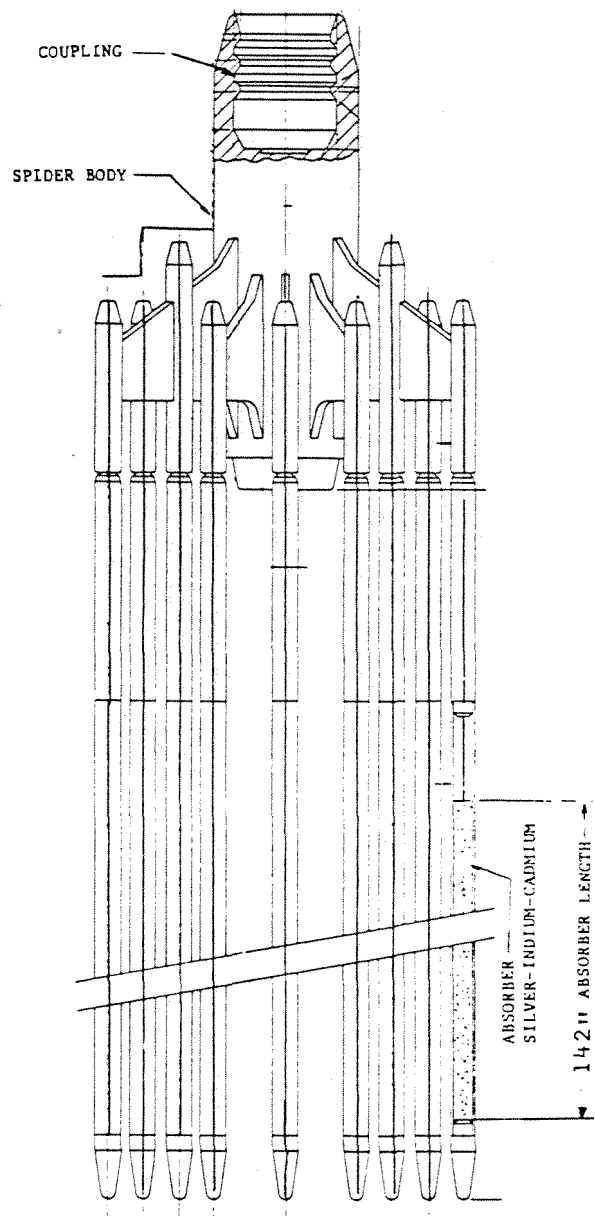
REV. 0

JULY, 1982

FIGURE NO. 3.2-25



TOP VIEW



INDIAN POINT 3

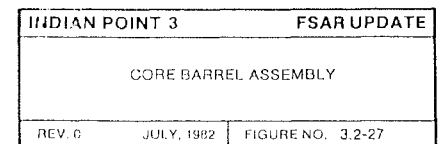
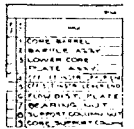
FSAR UPDATE

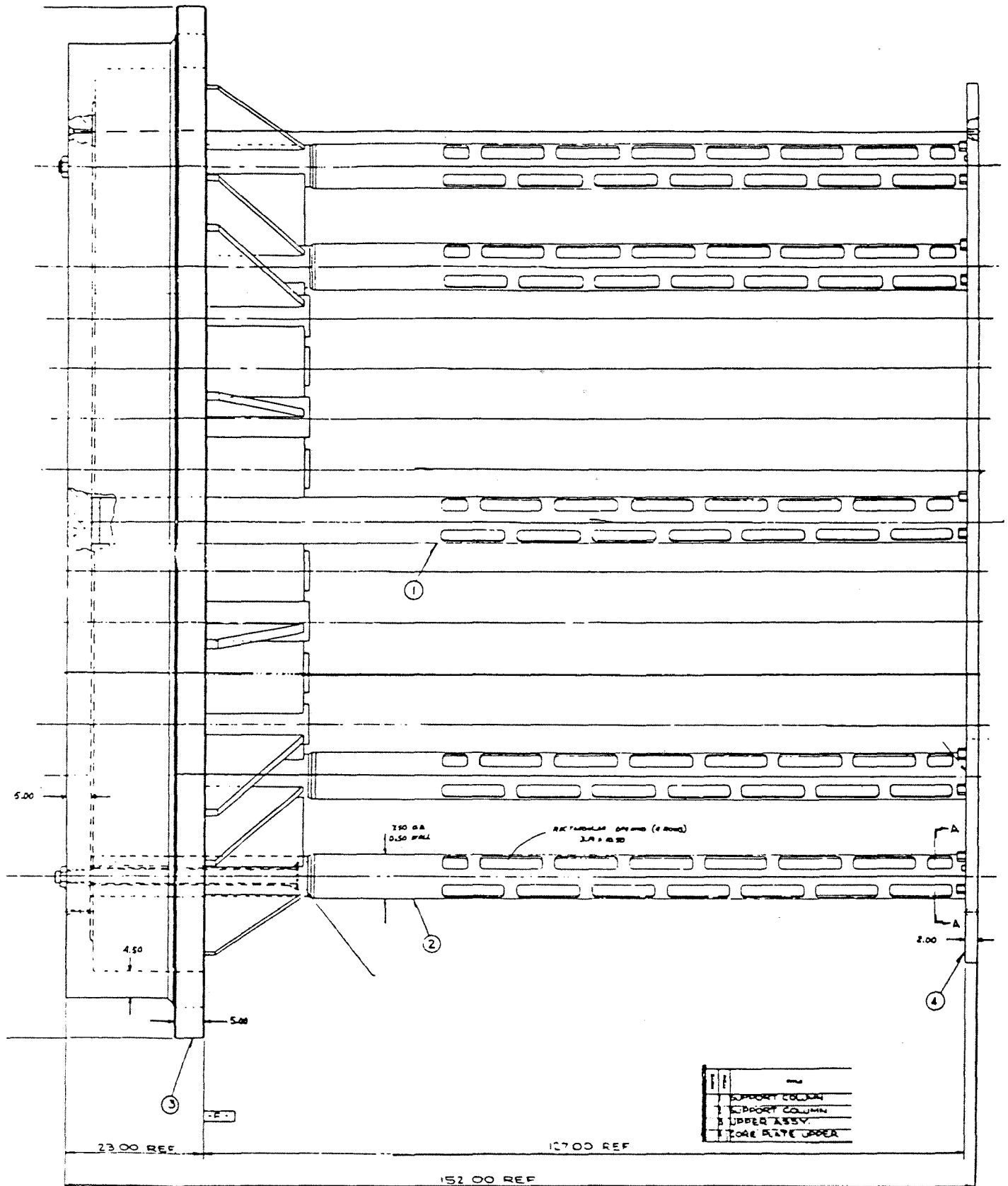
ROD CONTROL CLUSTER ASSEMBLY OUTLINE

REV. 0

JULY, 1982

FIGURE NO. 3.2-26





INDIAN POINT 3

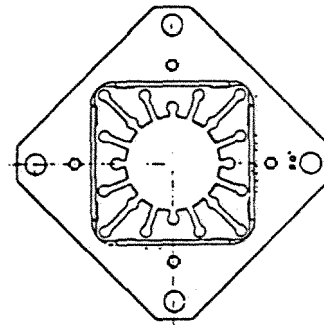
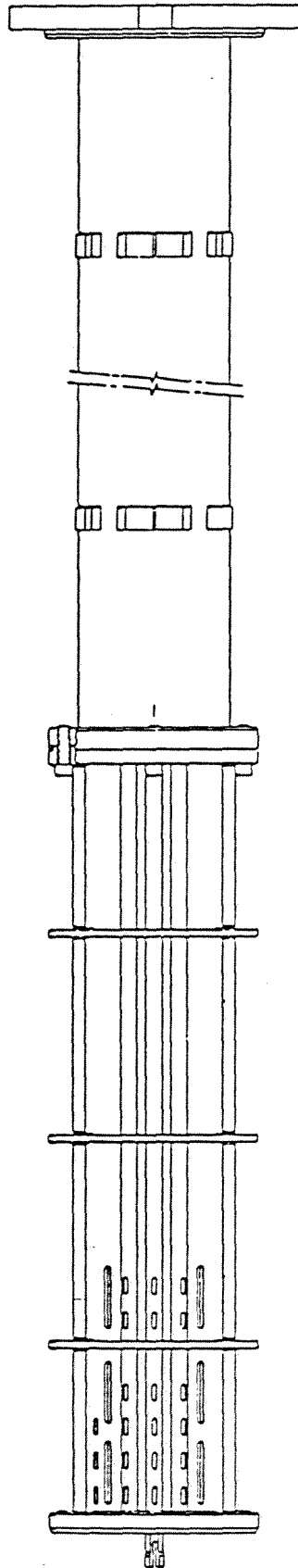
FSAR UPDATE

UPPER CORE SUPPORT STRUCTURE

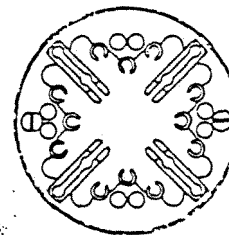
REV. 0

JULY, 1982

FIGURE NO. 3.2-28

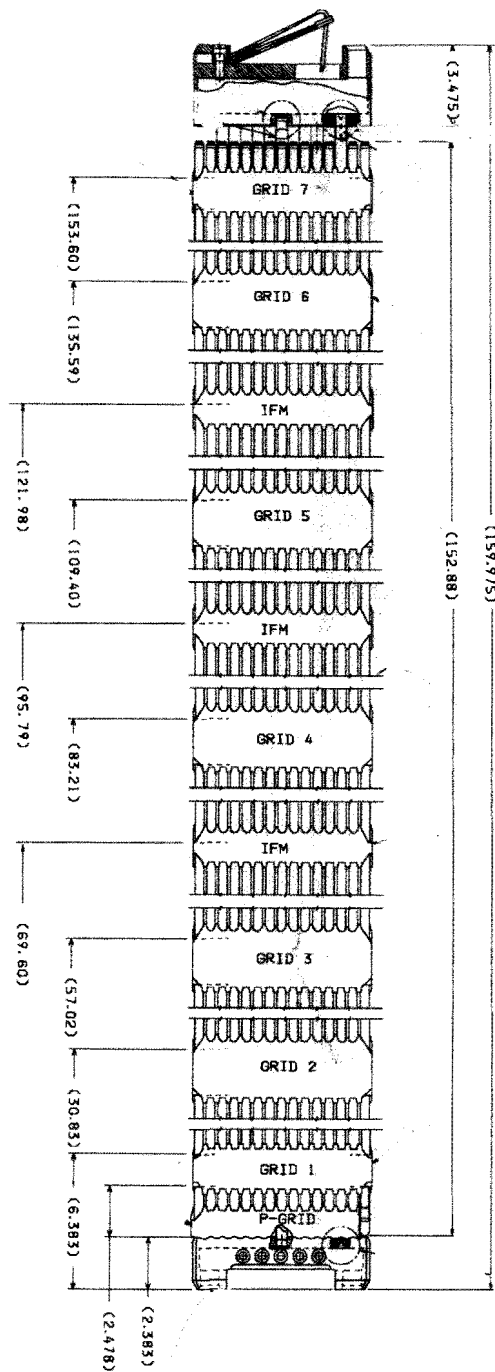


TOP VIEW



BOTTOM VIEW

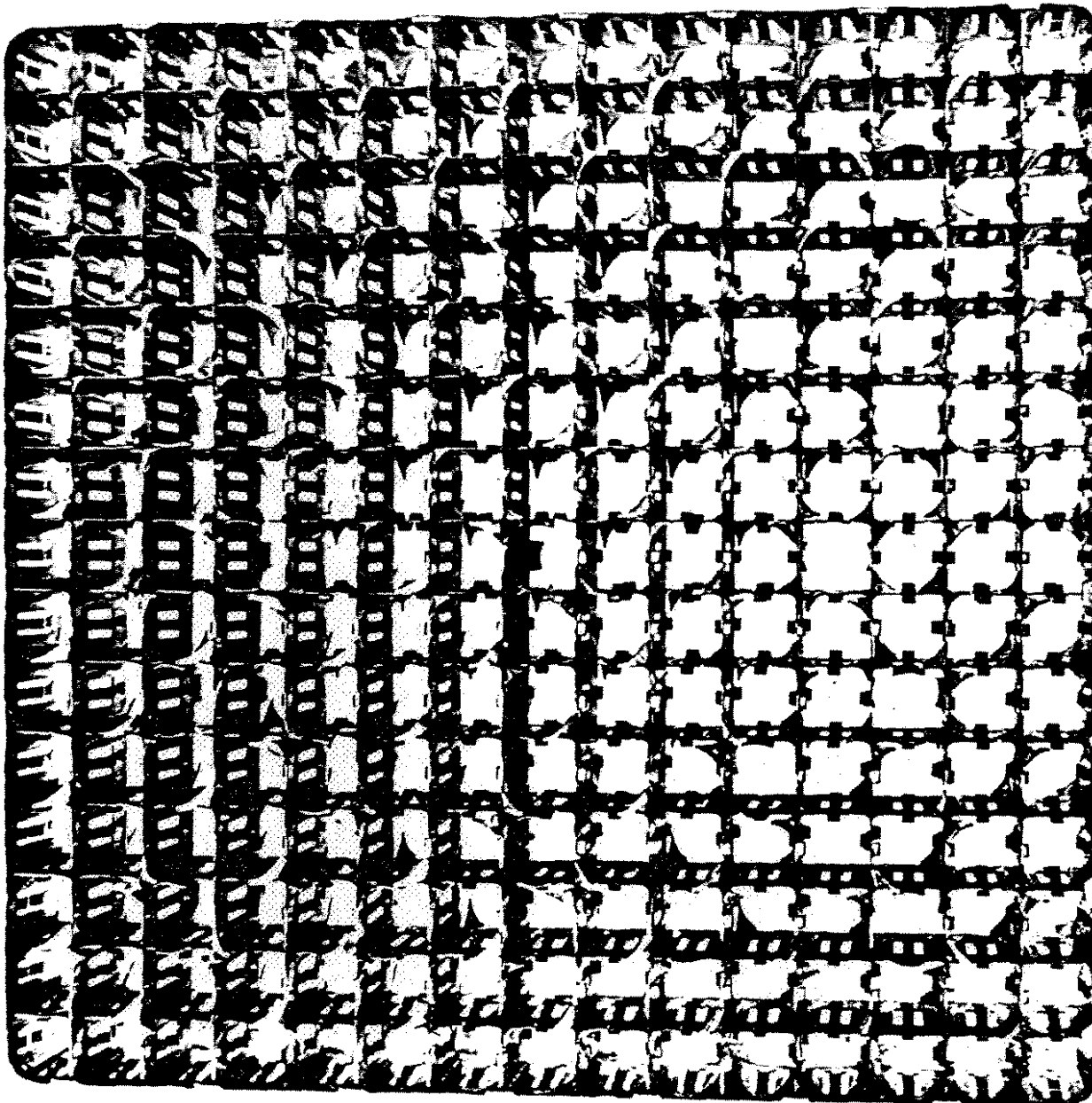
INDIAN POINT 3	FSAR UPDATE
GUIDE TUBE ASSEMBLY	
REV. 0	JULY, 1982 FIGURE NO. 3.2-29



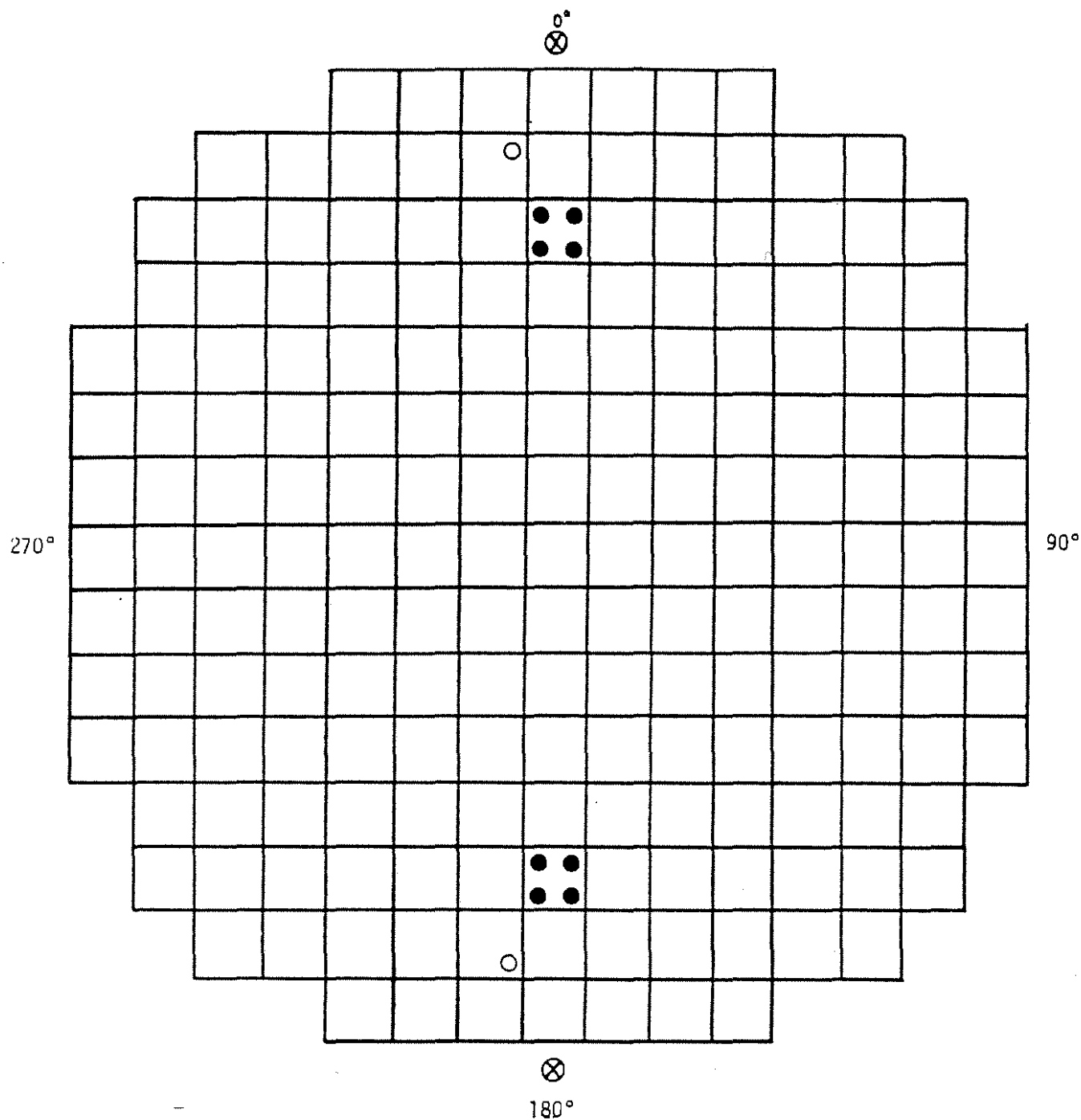
INDIAN POINT 3 FSAR UPDATE

FUEL ASSEMBLY OUTLINE
(Ref: Westinghouse Dwg 10006E64 r1)

FIGURE NO. 3.2-31

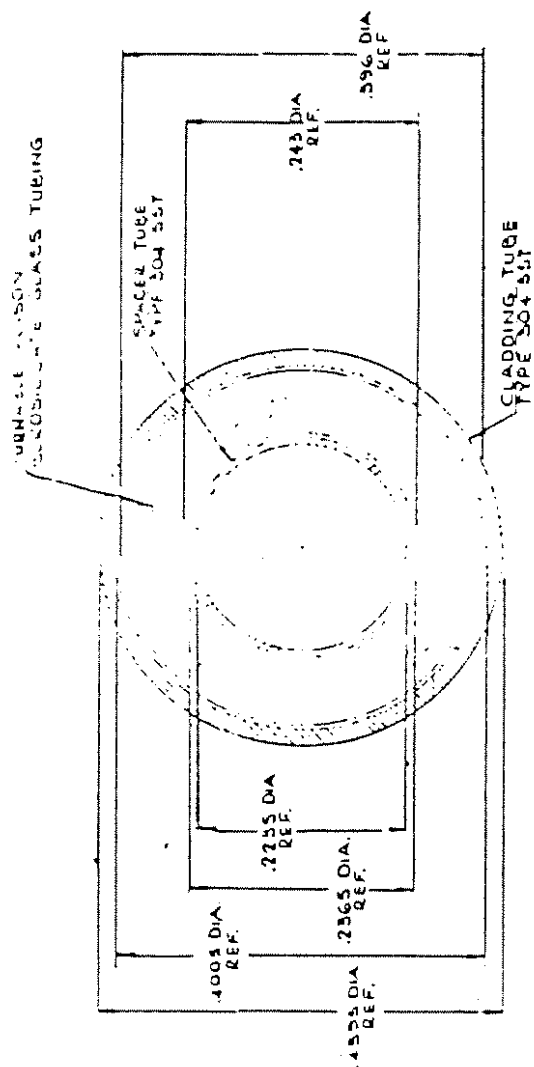


INDIAN POINT 3		FSAR UPDATE
SPRING CLIP GRID ASSEMBLY		
REV. 0	JULY, 1982	FIGURE NO. 3.2-32

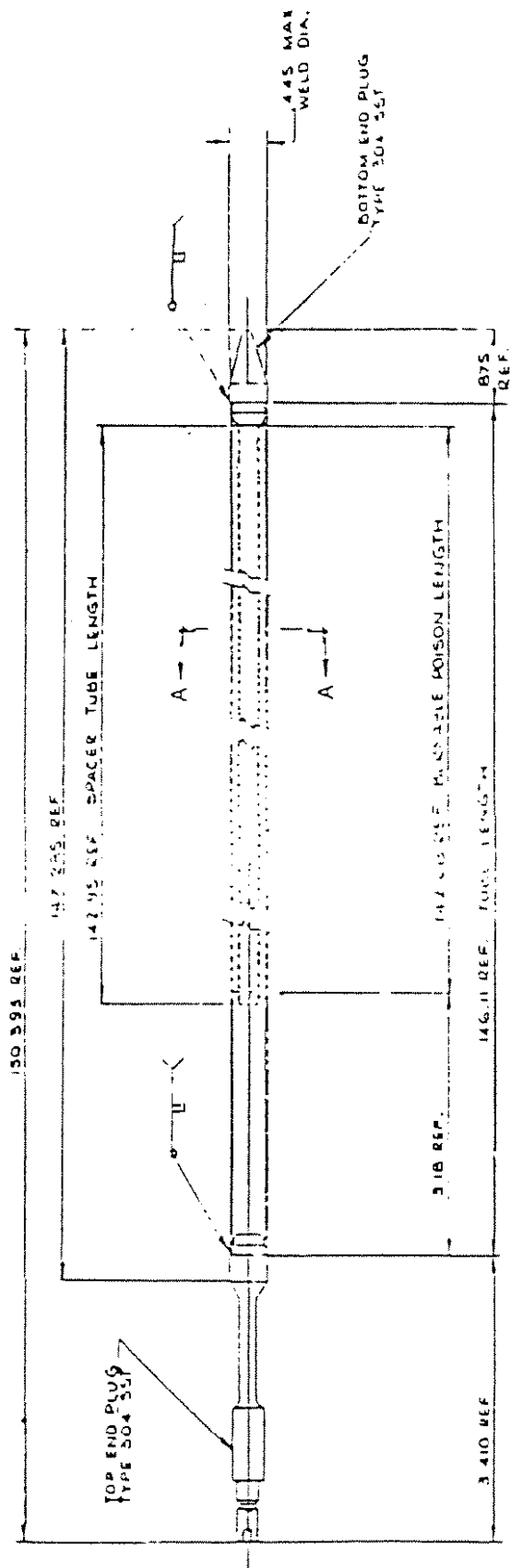


- Primary source rod
- Secondary source rod
- ⊗ Detector Location

INDIAN POINT 3		FSAR UPDATE
NEUTRON SOURCE LOCATIONS (FIRST CYCLE)		
REV. 0	JULY, 1982	FIGURE NO. 3.2-33



SECTION A-A
SCALE 1:1



INDIAN POINT 3

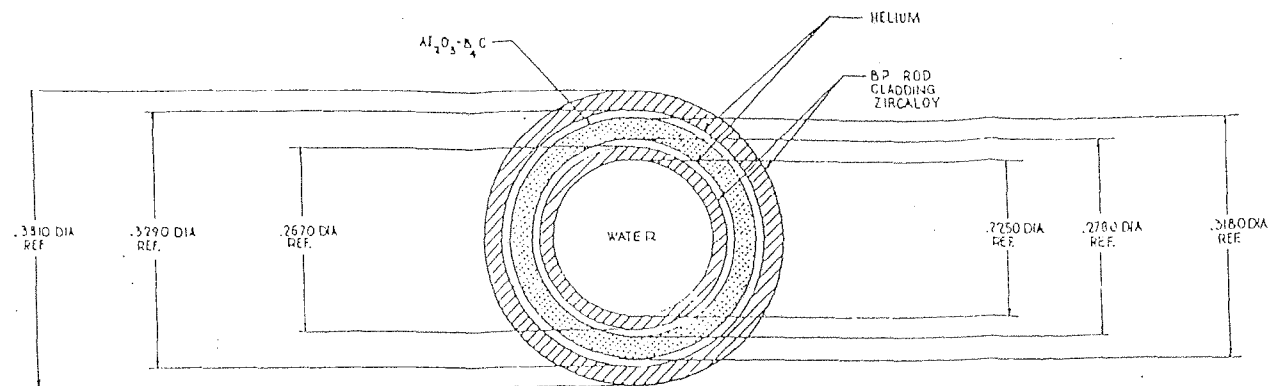
FSAR UPDATE

OLD BURNABLE POISON ROD
(BOROSILICATE GLASS BURNABLE ABSORBER)

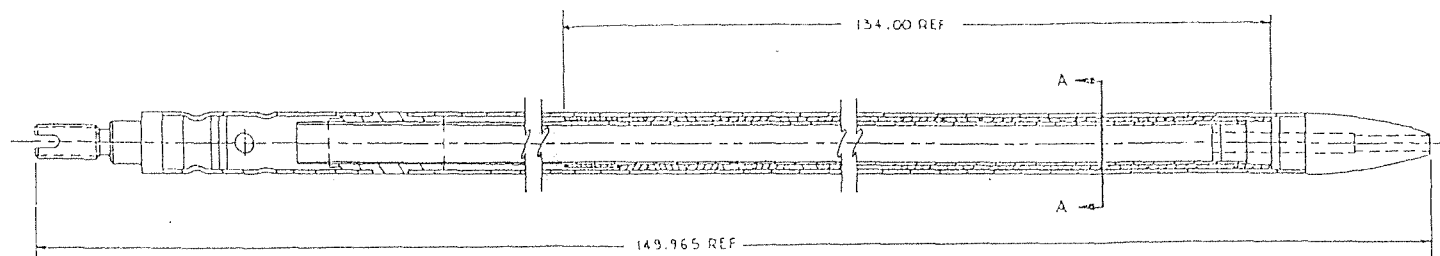
2314

JULY, 1986

FIGURE NO. 3.2-14



SECTION A-A
SCALE 2:1



INDIAN POINT 3

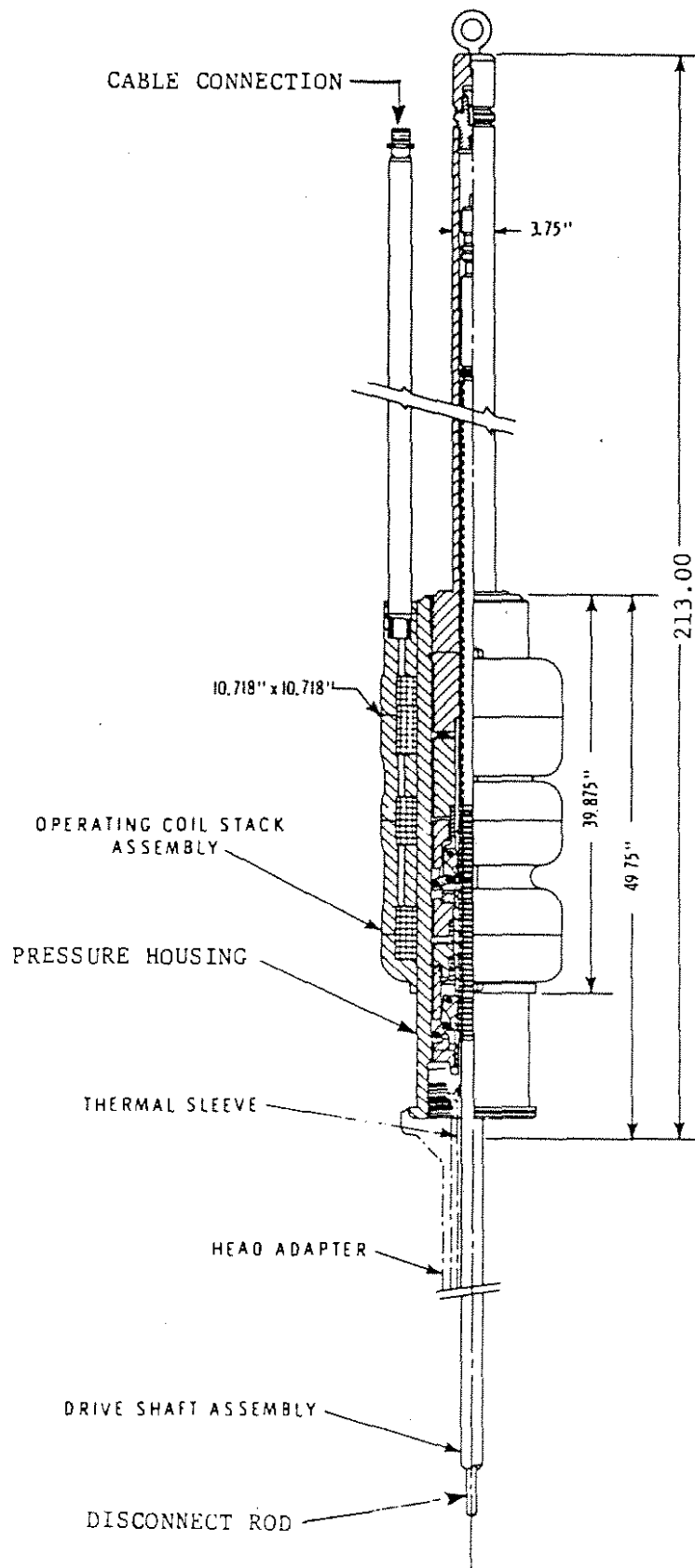
FSAR UPDATE

NEW BURNABLE POISON ROD
(WET ANNULAR BURNABLE ABSORBER)

REV. 0

JULY, 1986

FIGURE NO. 3.2-34a



INDIAN POINT 3

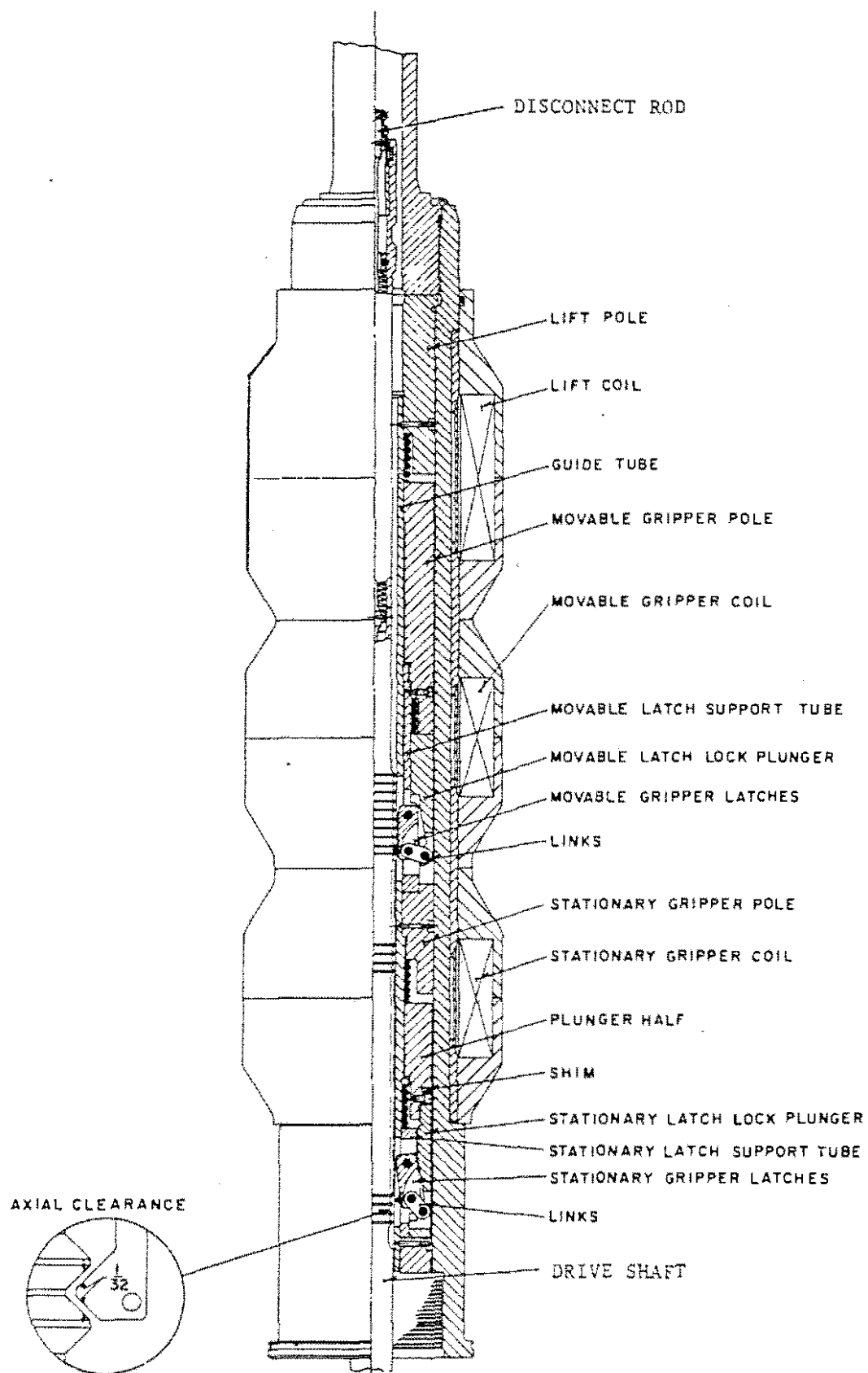
FSAR UPDATE

CONTROL ROD DRIVE MECHANISM ASSEMBLY

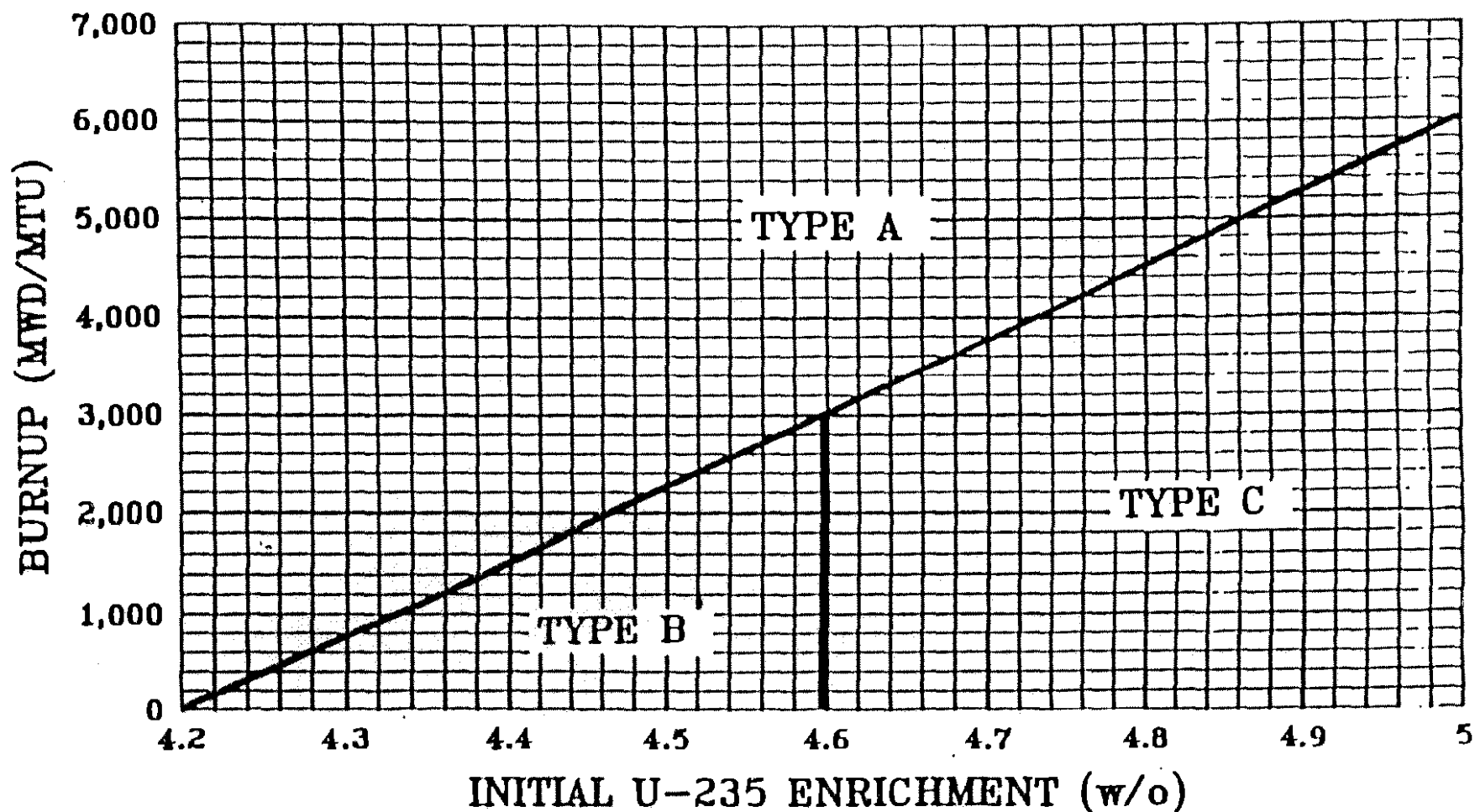
REV. 0

JULY, 1982

FIGURE NO. 3.2-35



INDIAN POINT 3		FSAR UPDATE
CONTROL ROD DRIVE MECHANISM SCHEMATIC		
REV. 0	JULY, 1982	FIGURE NO. 3.2-36

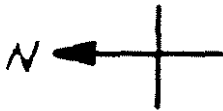
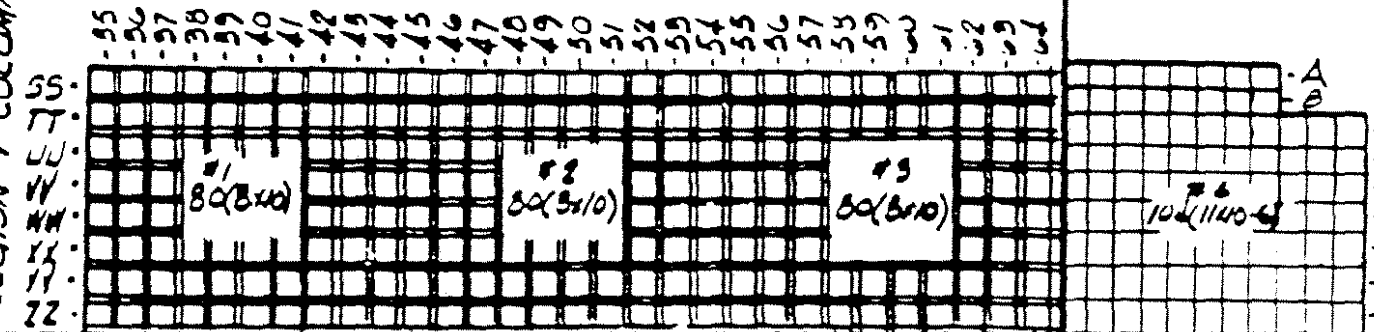


Note: Fresh (unburned) fuel is defined as fuel with a burnup of 0 MWD/MTU.

INDIAN POINT 3 FSAR UPDATE
SPENT FUEL PIT REGION 1 TYPE DEFINITION
REV. 1 DEC 1997 FIGURE NO. 3.2-37A

REGION 1 ROWS

REGION 1 COLUMNS



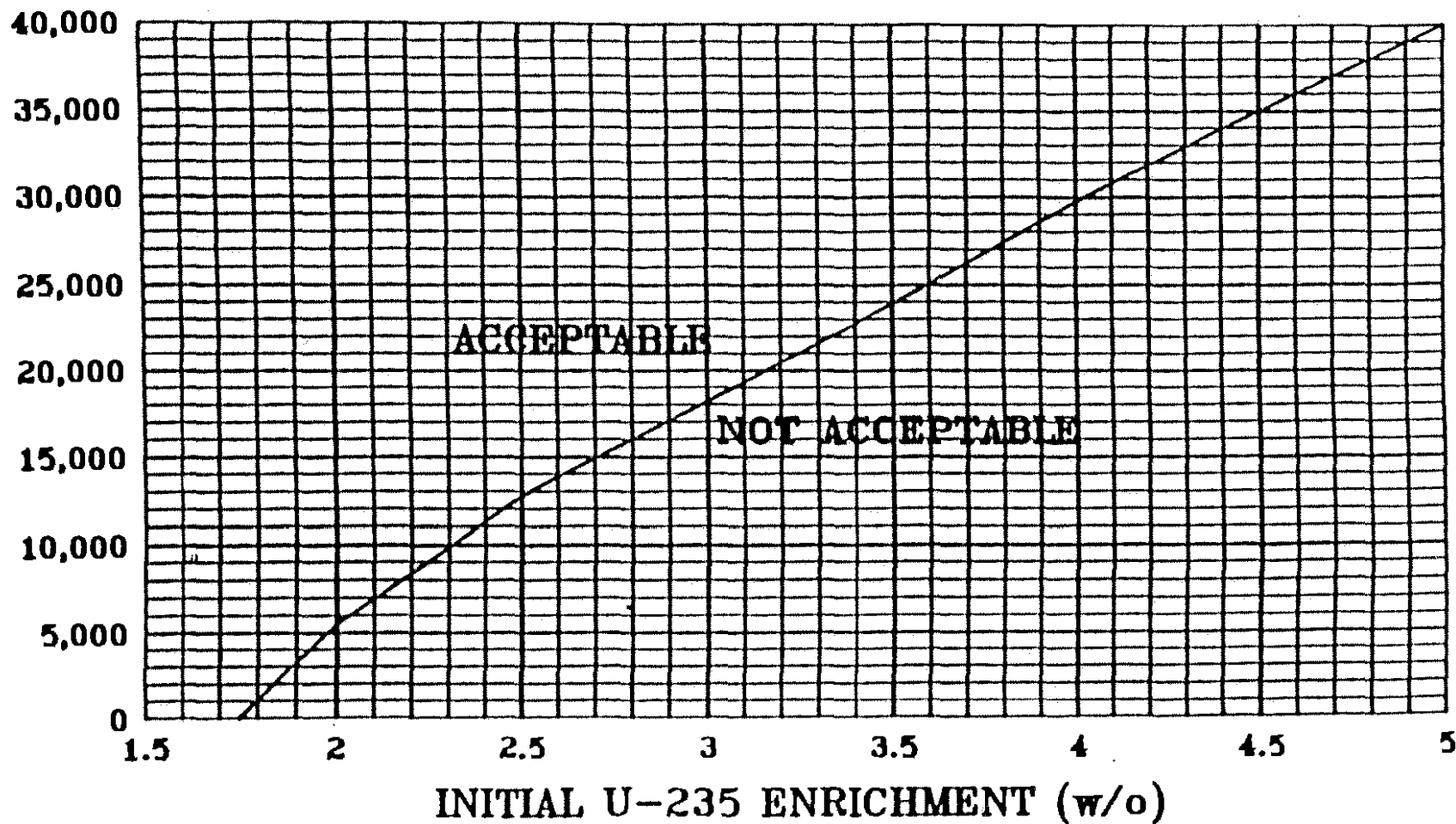
HH
II
JJ
KK
LL
MM
NN
OO
PP
RR

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23

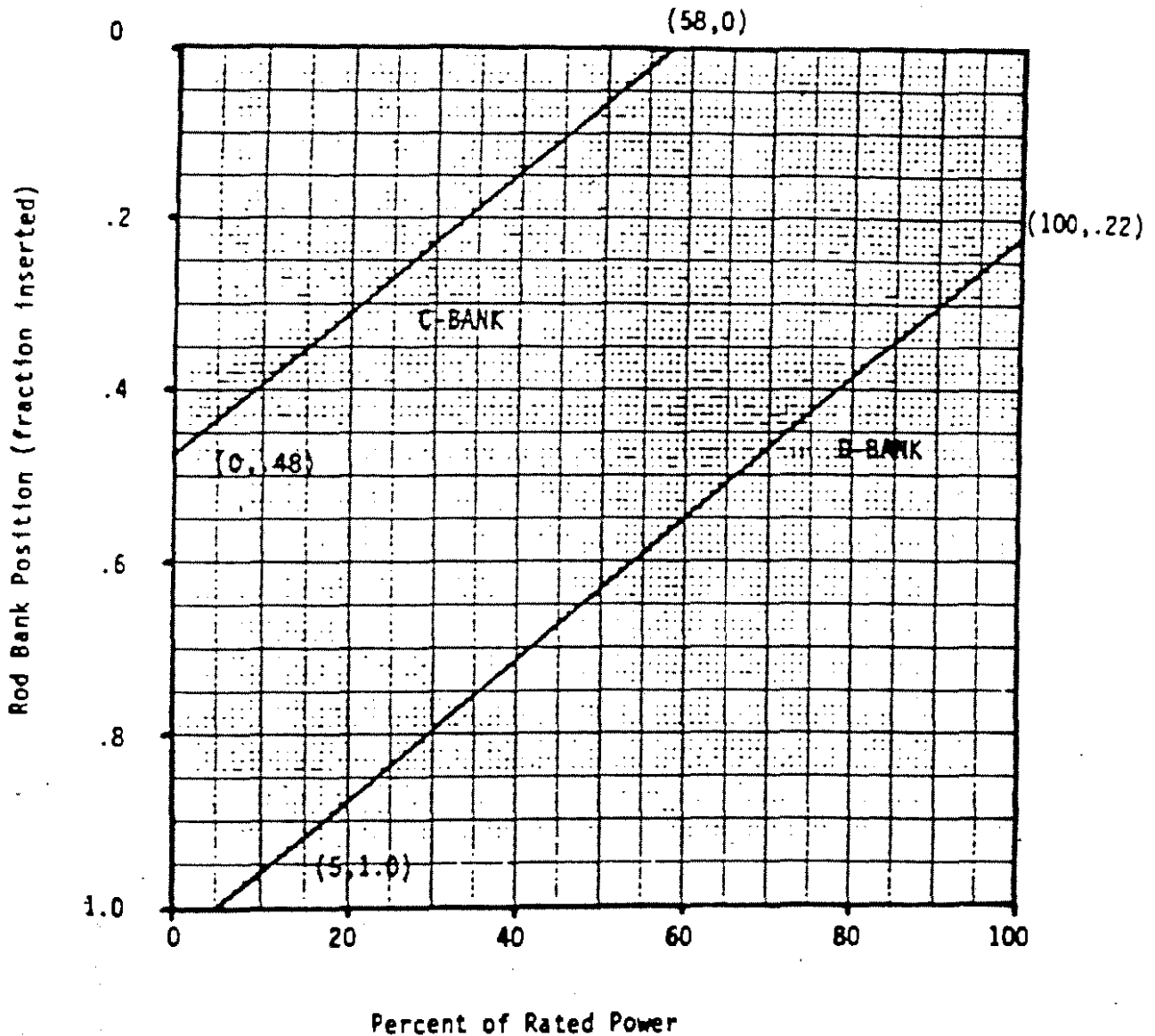
REGION 2 ROWS

INDIAN POINT 3	FSAR UPDATE
MAXIMUM DENSITY SPENT FUEL PIT (SFP) RACKS REGIONS AND INDEXING	
REV. 0, JULY 1990	FIGURE NO. 3.2-37B

MINIMUM ASSY. DISCHARGE BURNUP (MWD/MTU)



INDIAN POINT 3 FSAR UPDATE
REGION 2 BURNUP REQUIREMENTS FOR FUEL ASSEMBLY STORAGE IN SPENT FUEL PIT
REV. 0 DEC 1997 FIGURE NO. 3.2-37C



NOTE: Banks A and B are fully withdrawn at zero power

INDIAN POINT 3	FSAR UPDATE
INSERTION LIMITS 100 STEP OVERLAP FOUR LOOP OPERATION (CYCLE 1)	
REV. 1, JULY 1990	FIGURE NO. 3.2-38