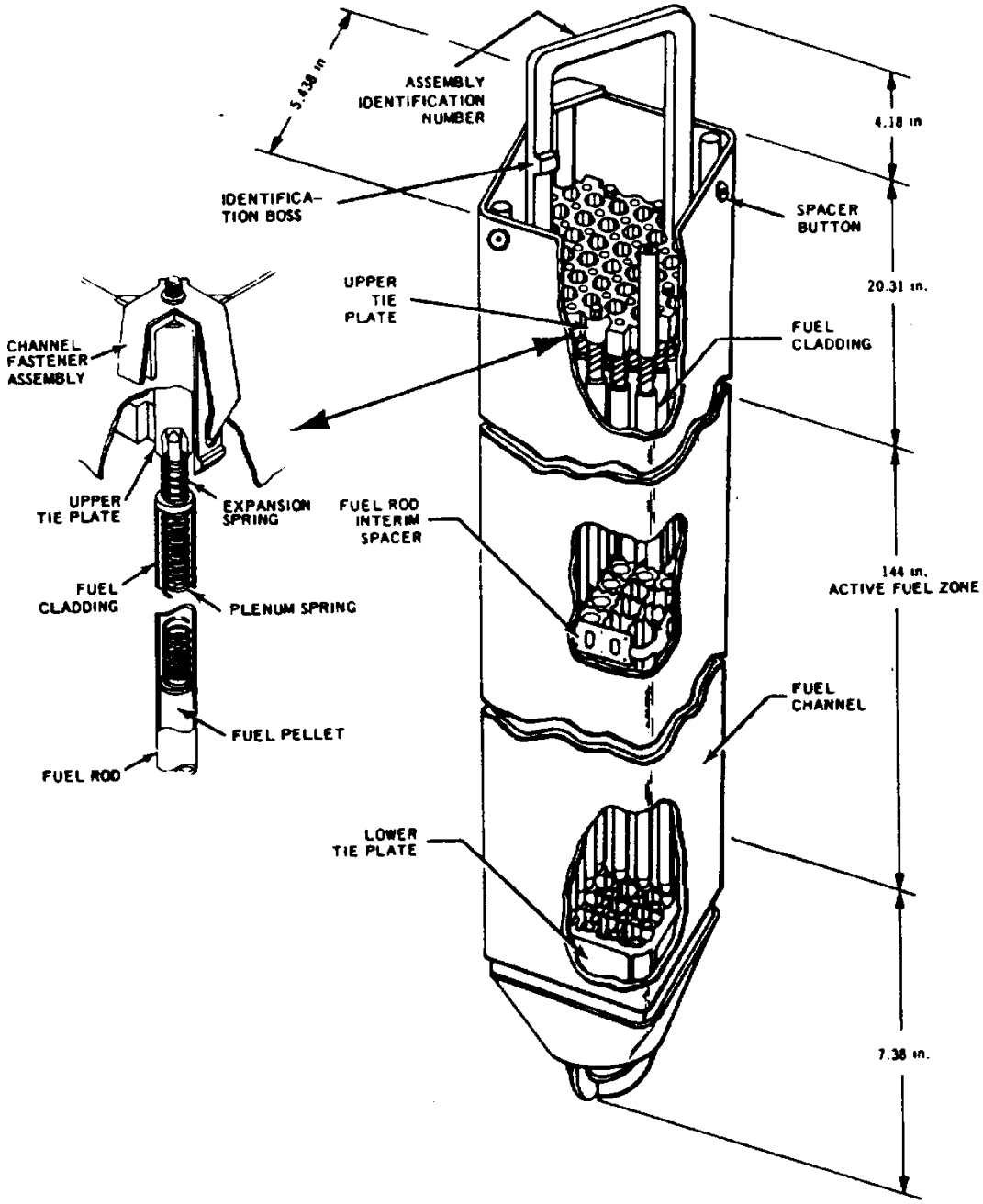
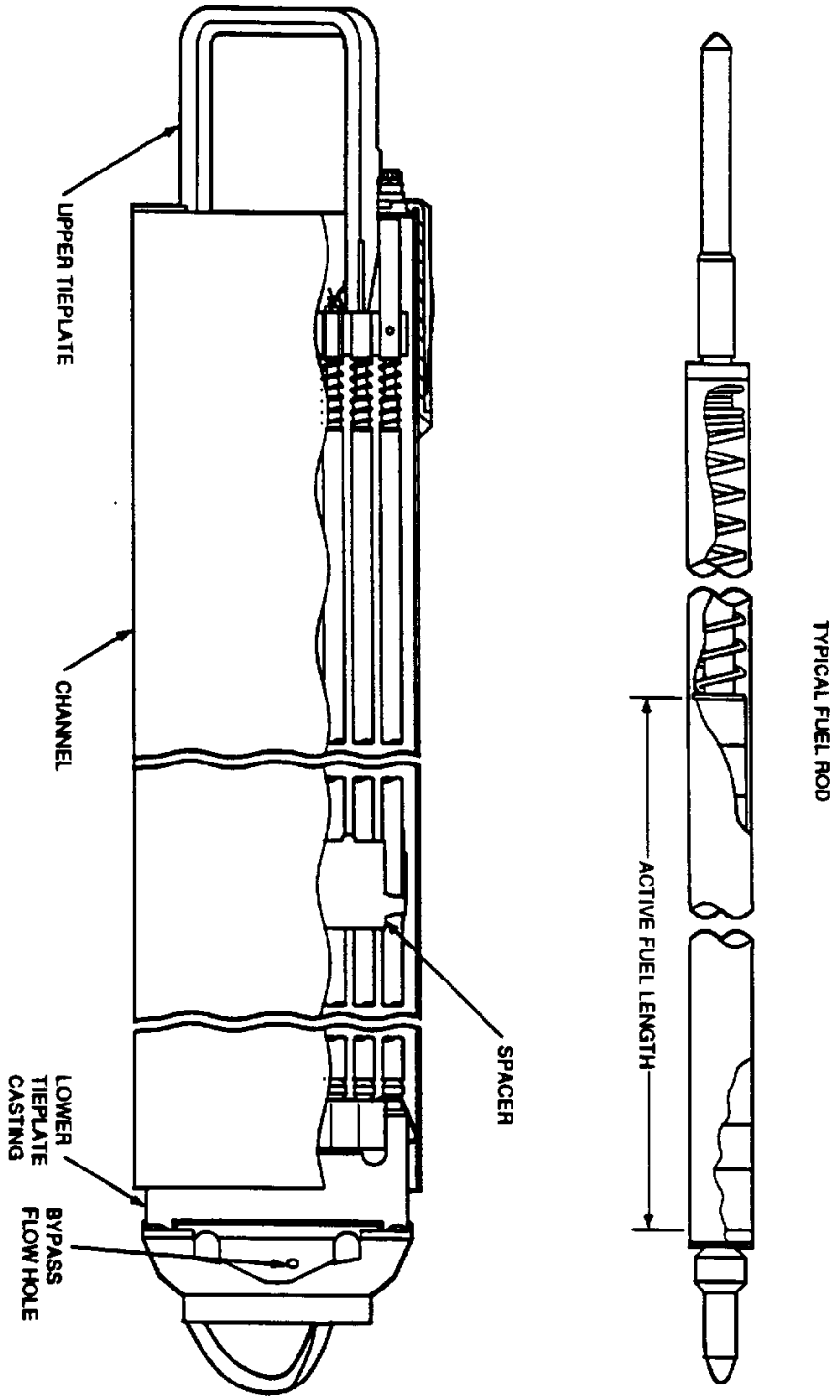
LIST OF FIGURES

LIST OF FIGURES

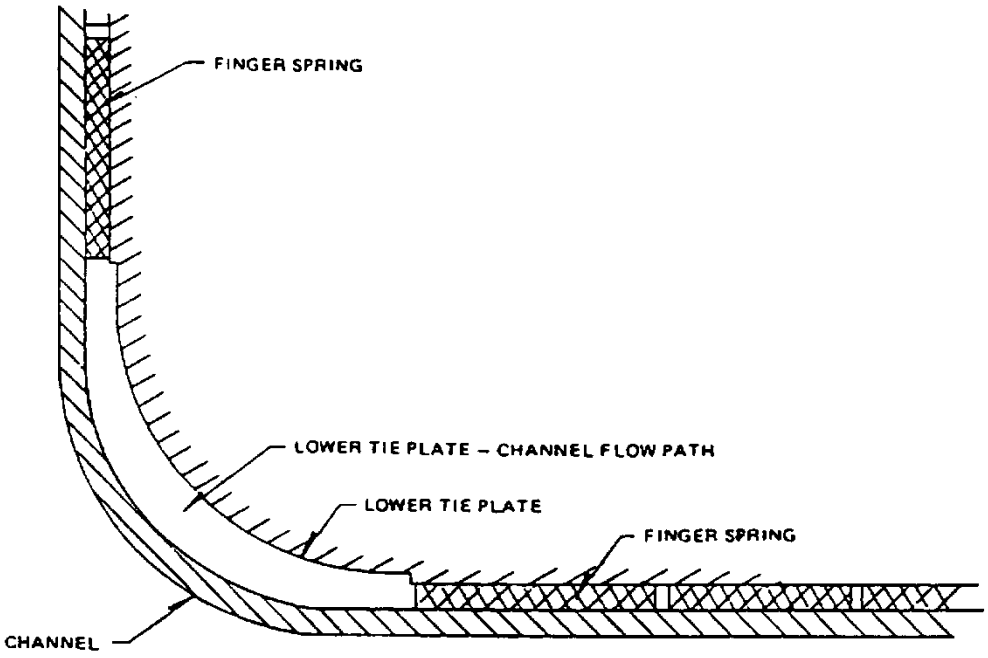
FUEL ASSEMBLY (ISOMETRIC)



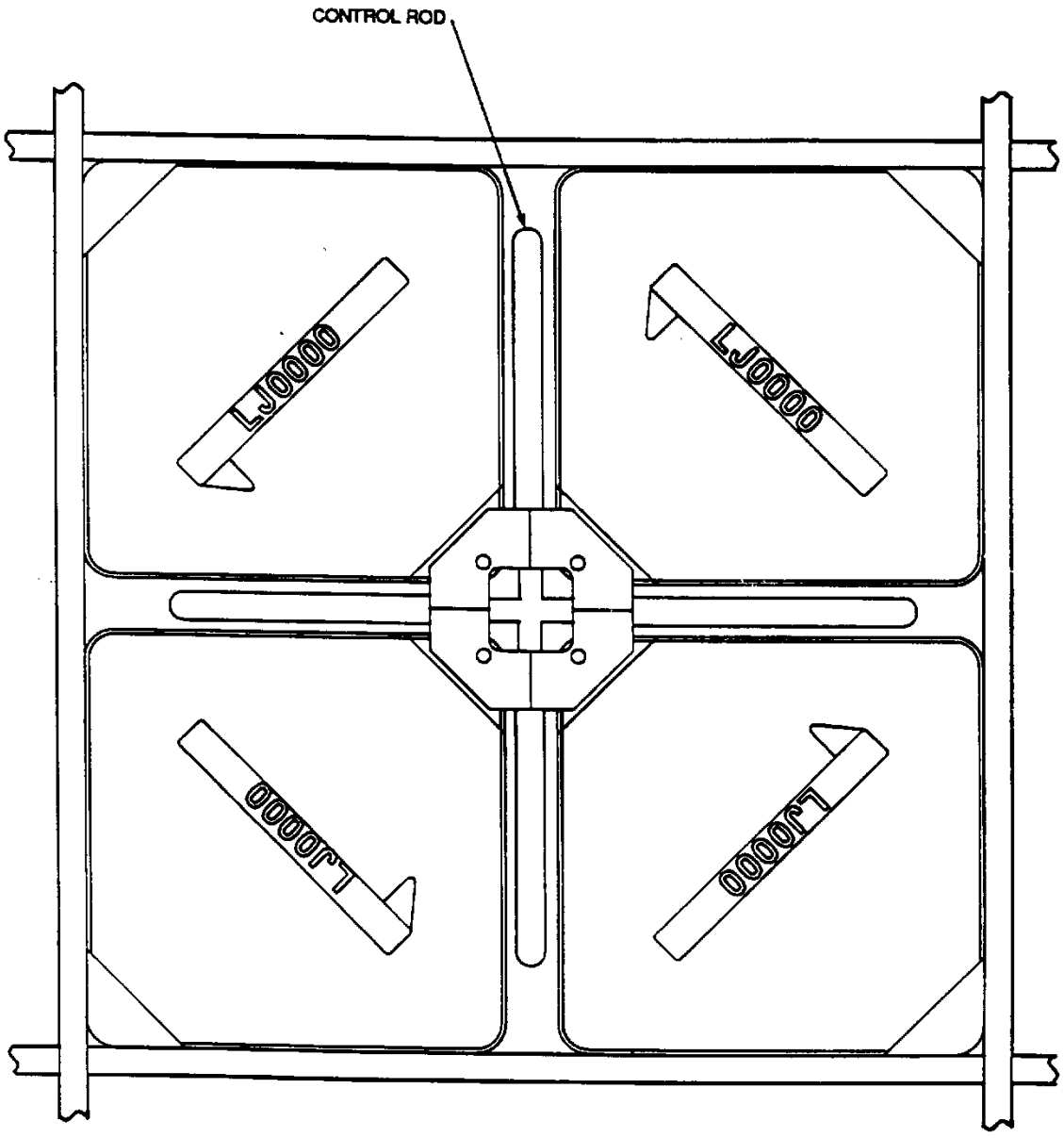
TYPICAL GE BWR FUEL ASSEMBLY



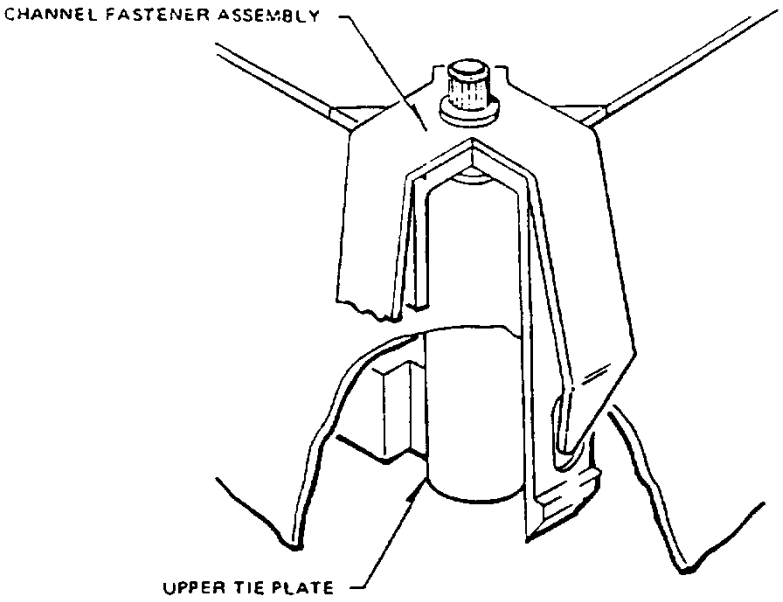
SCHEMATIC CROSS SECTION OF LOWER TIE PLATE SHOWING CHANNEL/LOWER TIE PLATE (FINGER SPRING) FLOW PATH



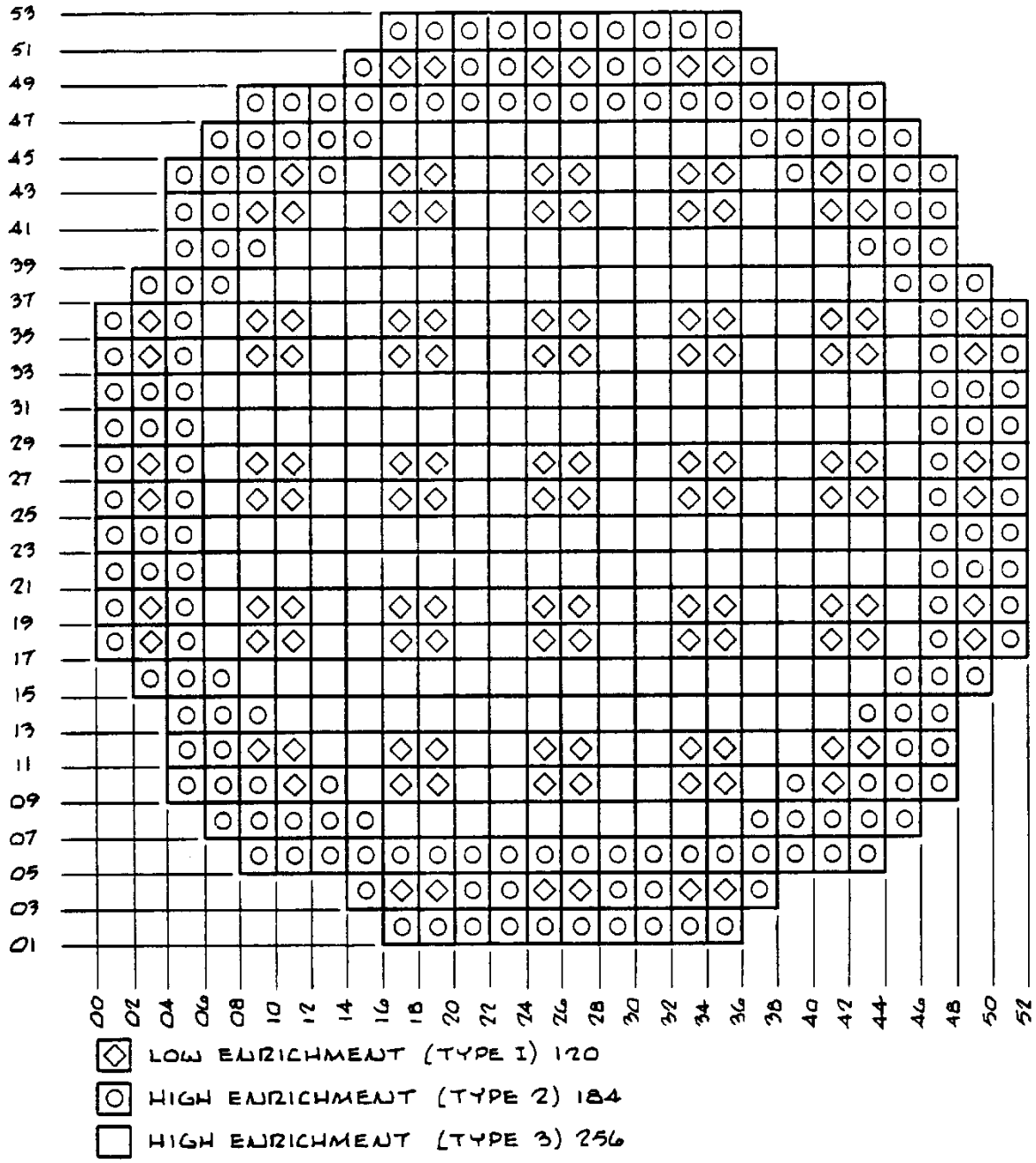
TYPICAL CORE CELL



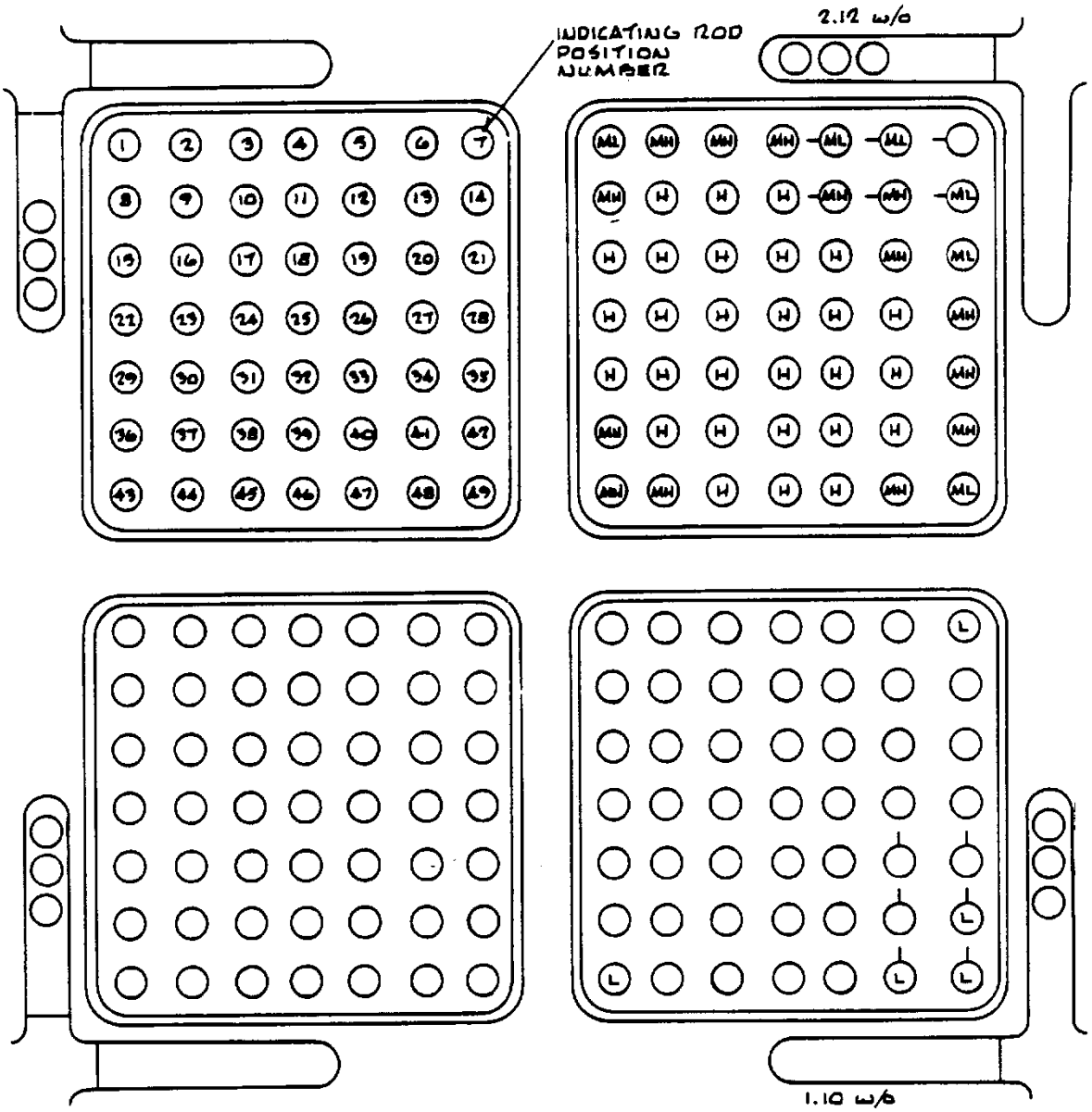
CHANNEL FASTENER ASSEMBLY



UNIT 2 INITIAL CORE - CORE LOADING MAP

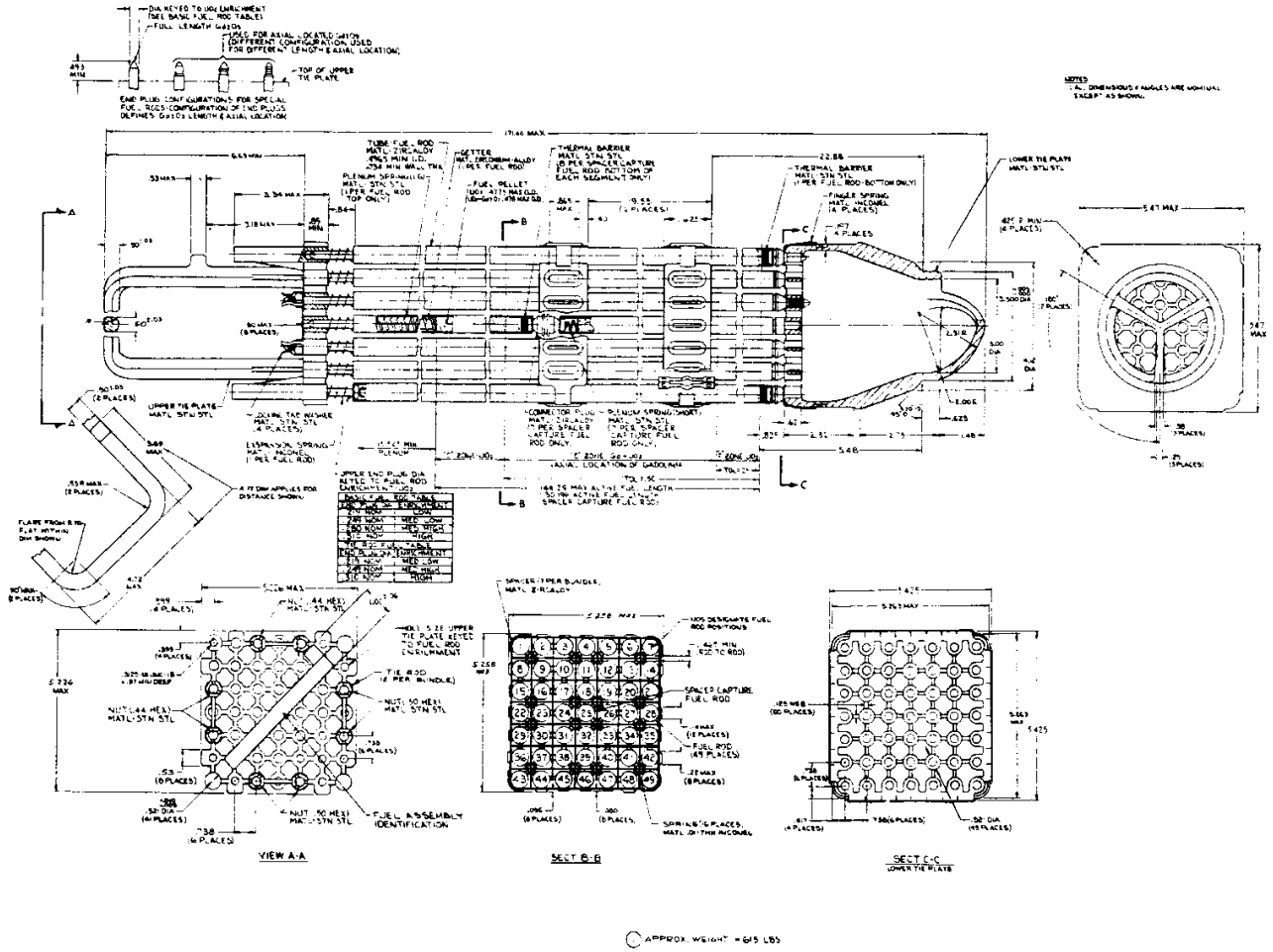


FUEL ASSEMBLY ROD ENRICHMENTS

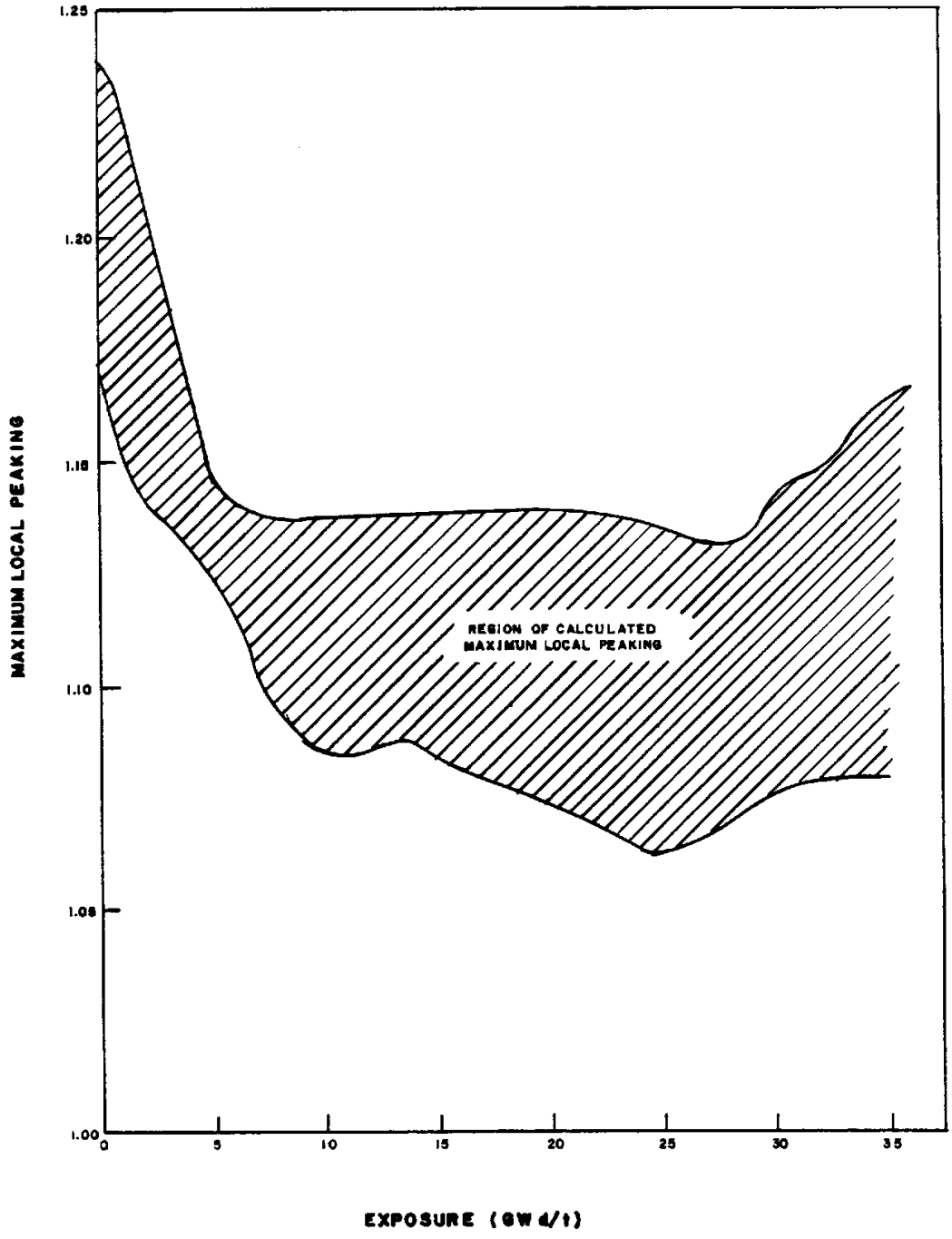


2.12 w/o BUNDLE	1.10 w/o BUNDLE
BLANK = 1.15 w/o ML = 1.40 w/o MH = 1.80 w/o H = 2.47 w/o	BLANK = 1.15 w/o L = 0.71 w/o

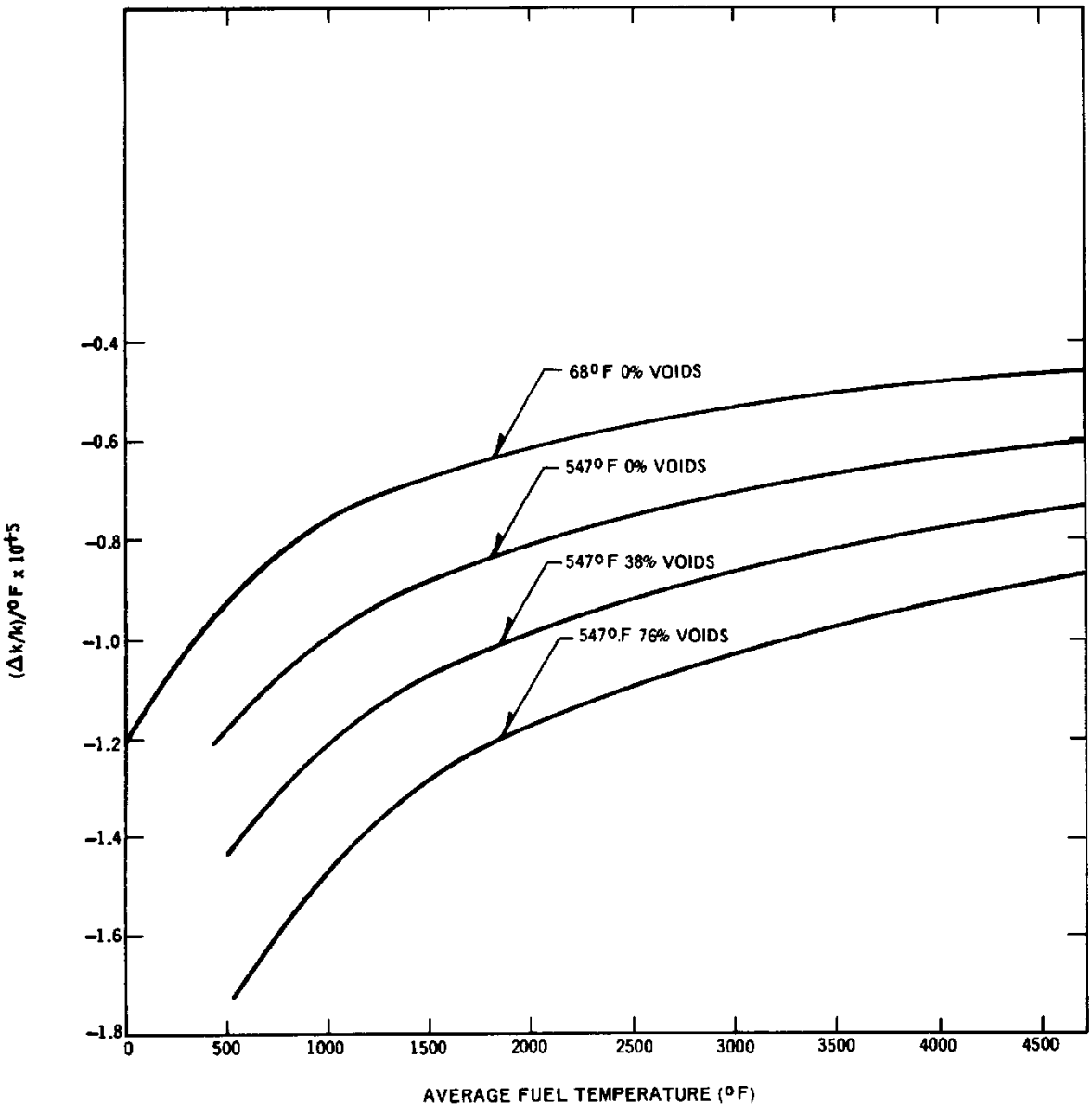
7X7 FUEL ASSEMBLY



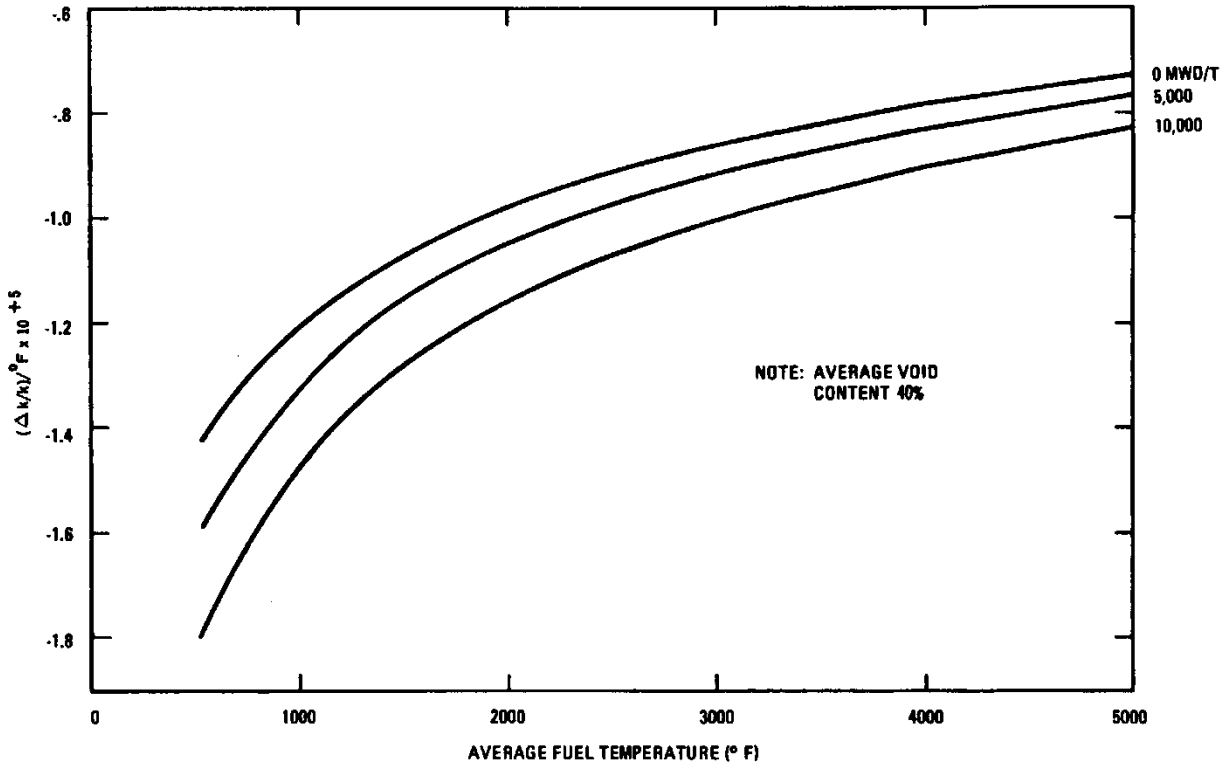
CALCULATED RANGE OF HOT UNCONTROLLED MAXIMUM LOCAL PEAKING VERSUS EXPOSURE



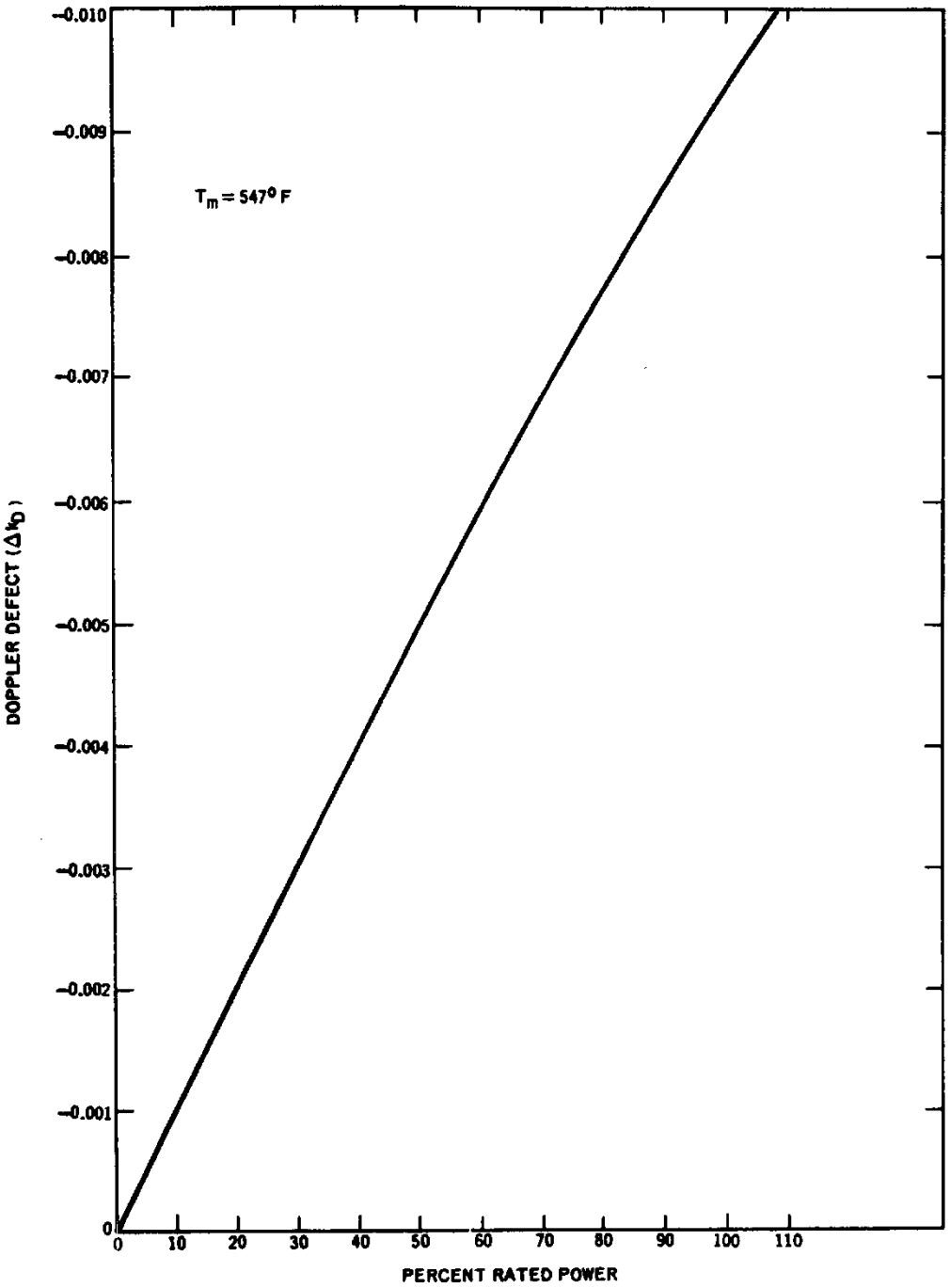
DOPPLER COEFFICIENT OF REACTIVITY



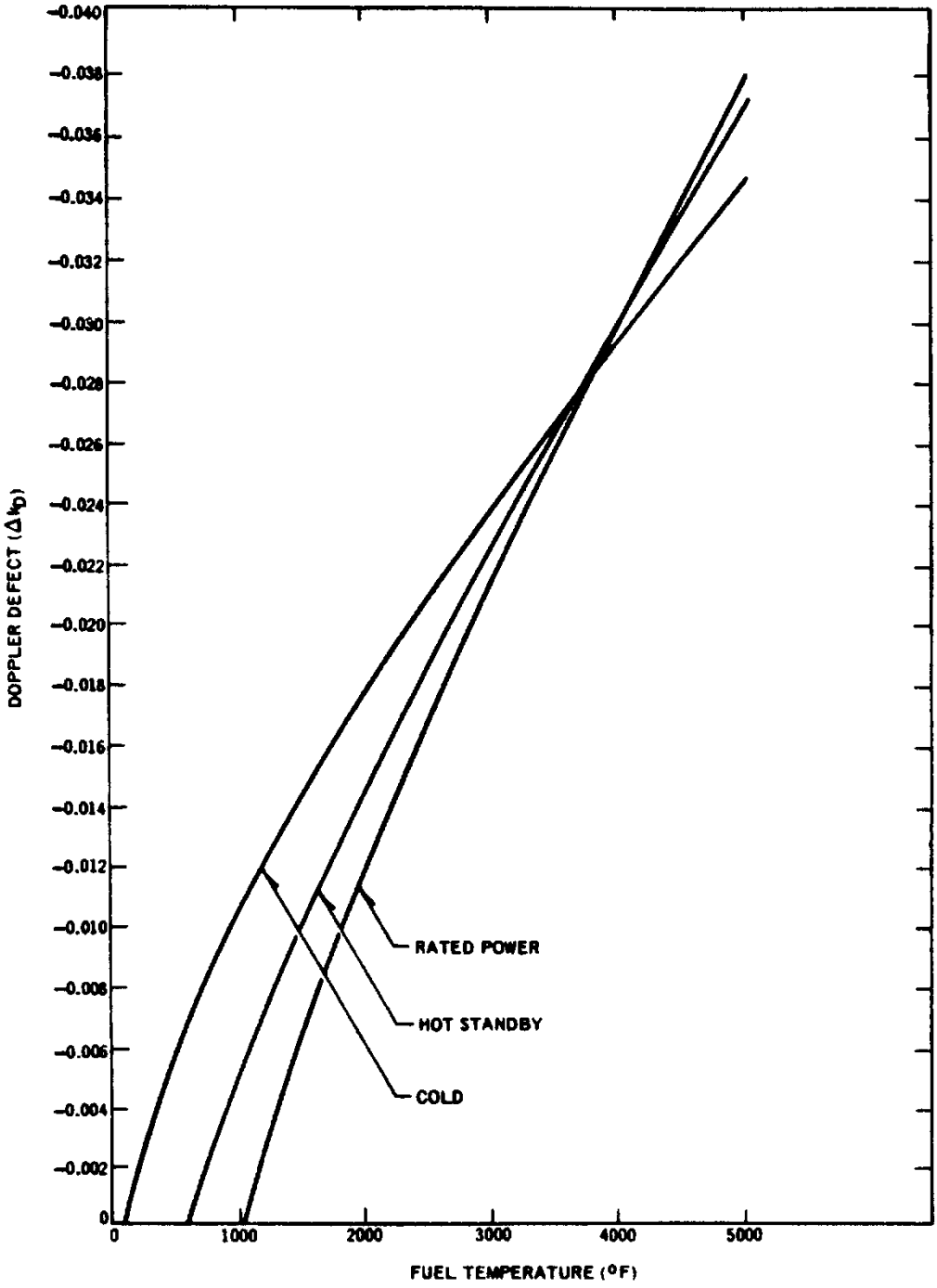
DOPPLER COEFFICIENT AS FUNCTION OF FUEL EXPOSURE



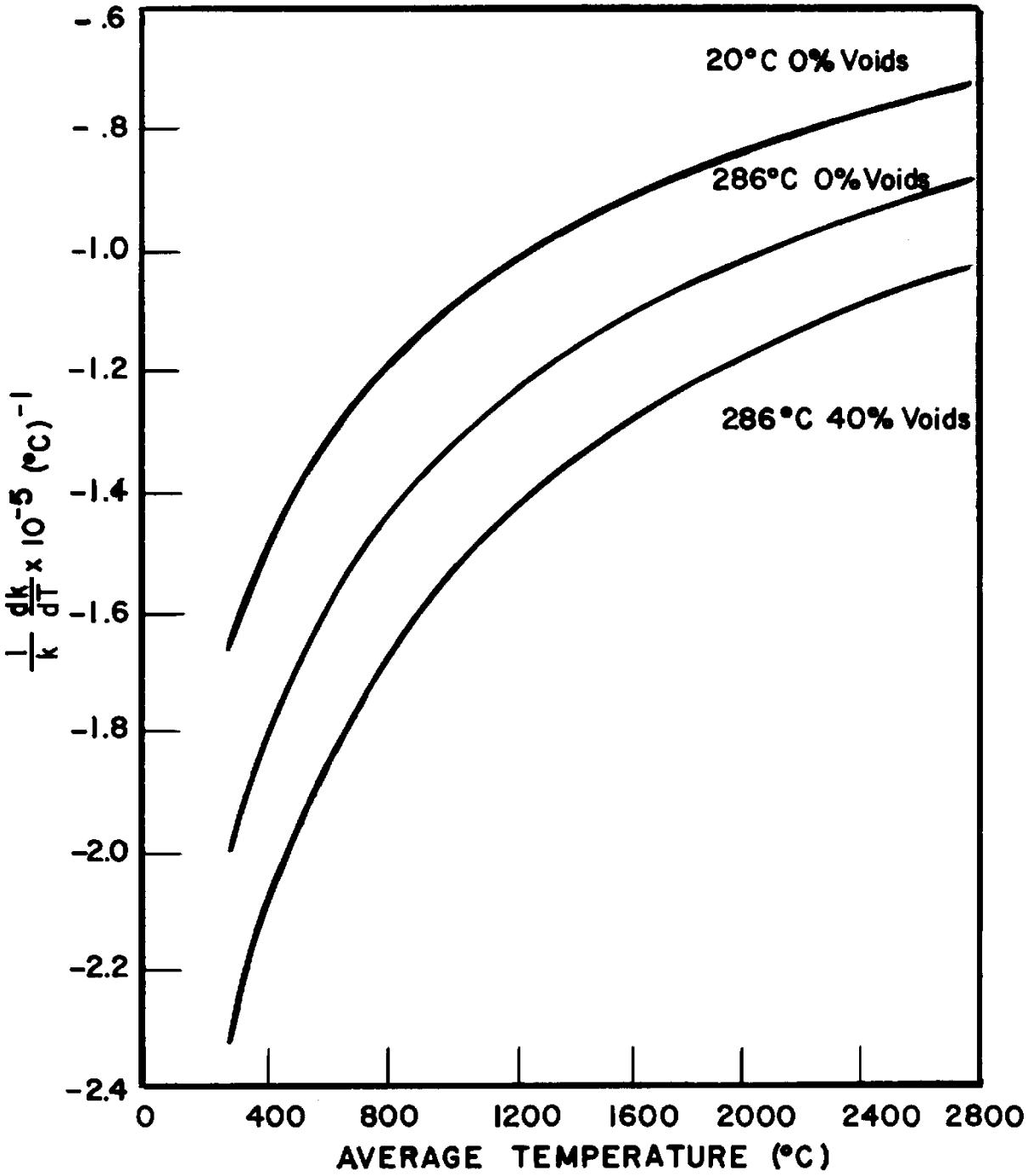
CORE AVERAGE DOPPLER DEFECT VERSUS CORE POWER LEVEL



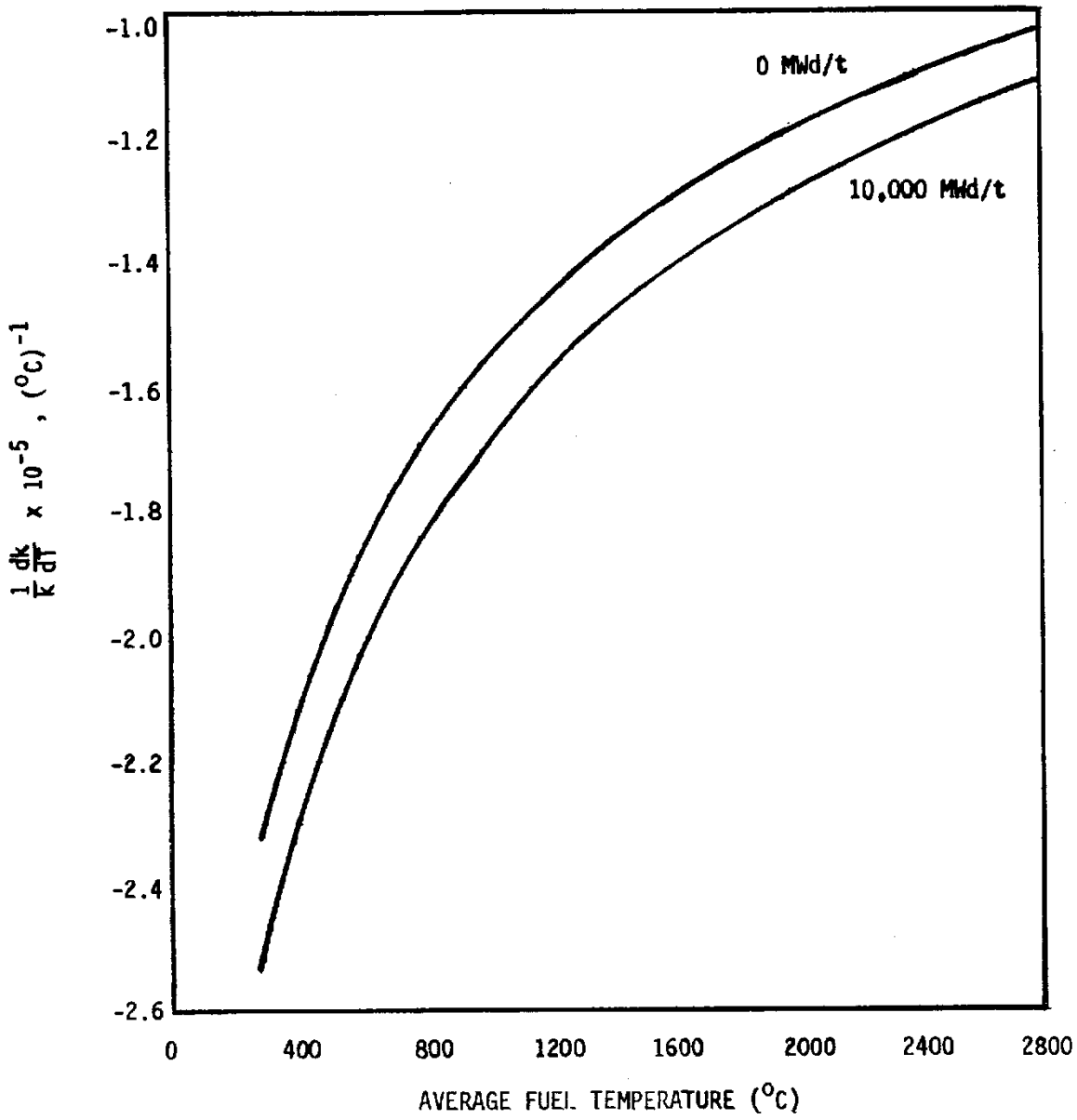
DOPPLER DEFECT VERSUS FUEL TEMPERATURE



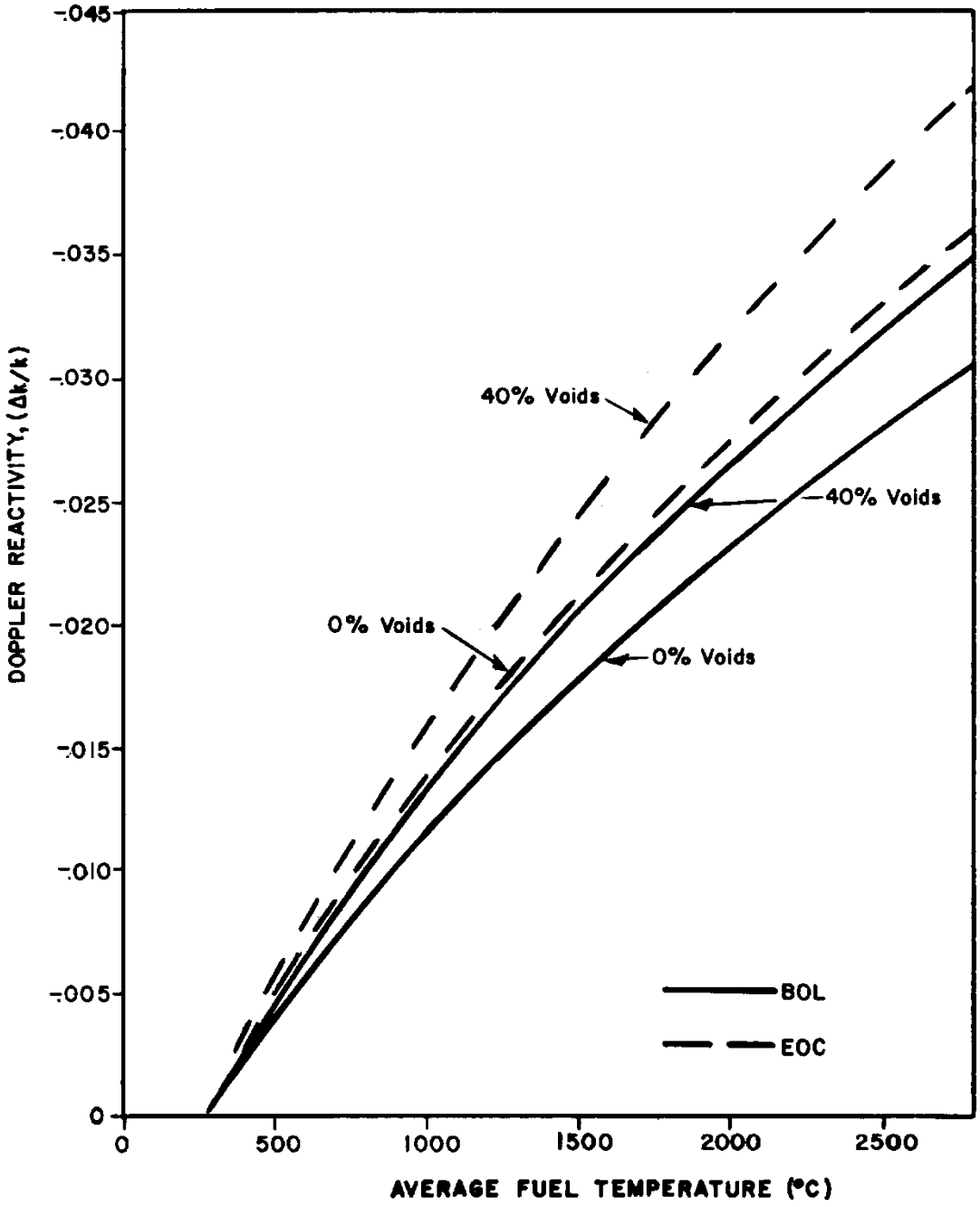
DOPPLER COEFFICIENT OF REACTIVITY VERSUS MODERATOR CONDITION OF AVERAGE FUEL TEMPERATURE AT BOL



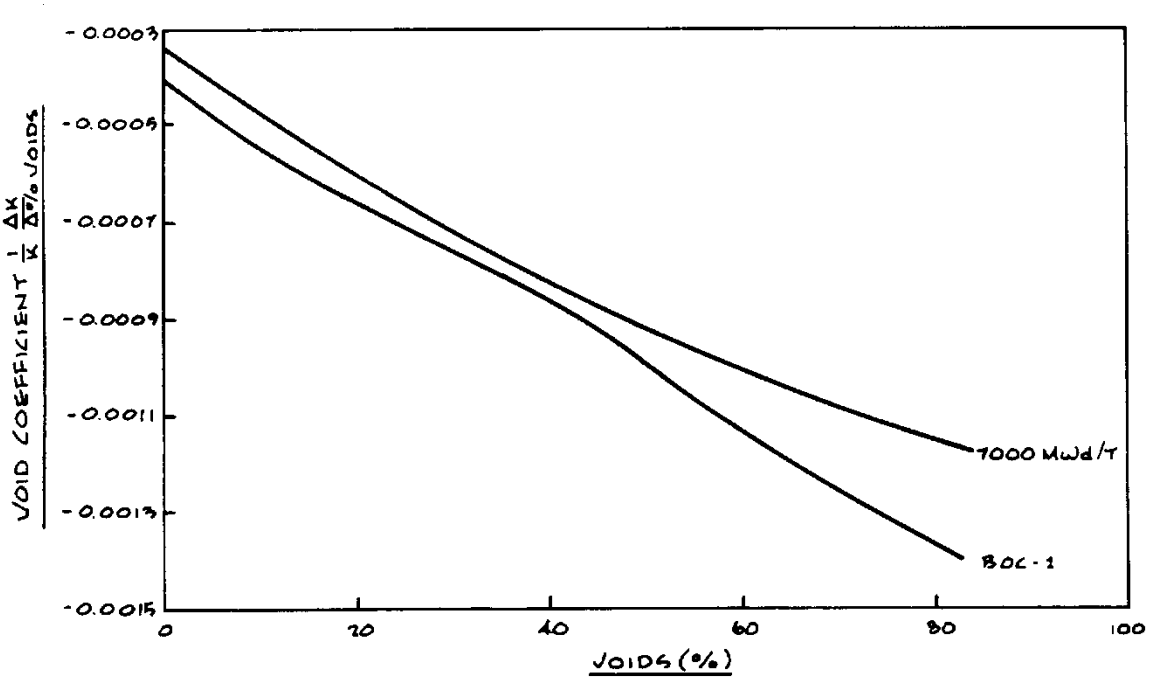
DOPPLER REACTIVITY COEFFICIENT AS A FUNCTION OF FUEL EXPOSURE AND AVERAGE FUEL TEMPERATURE AT AN AVERAGE VOID CONTENT OF 40%



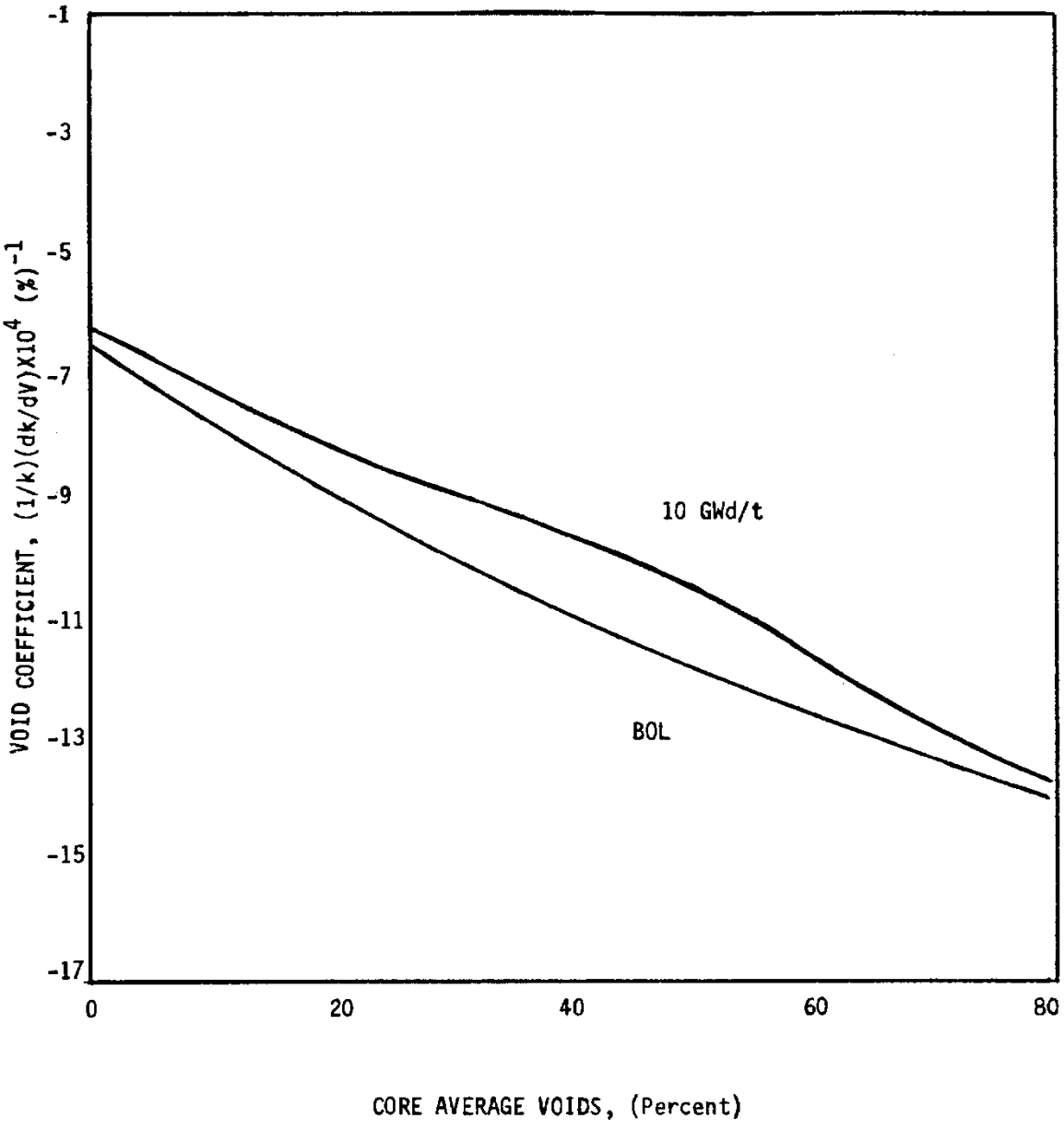
DOPPLER REACTIVITY AS A FUNCTION OF CORE AVERAGE VOID FRACTION AND AVERAGE FUEL TEMPERATURE AT BOL AND EOC



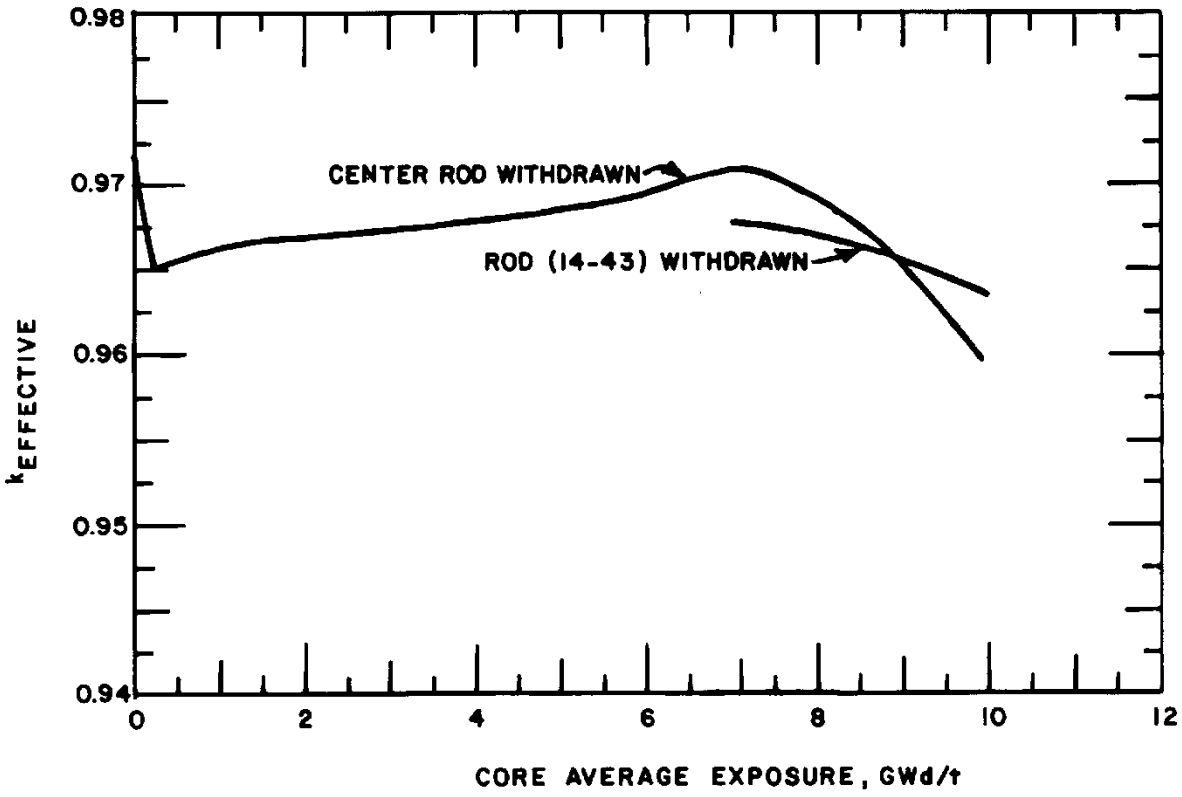
VOID COEFFICIENTS AT BEGINNING OF CYCLE 1 AND AT A CORE AVERAGE EXPOSURE OF 7000 MWD/T



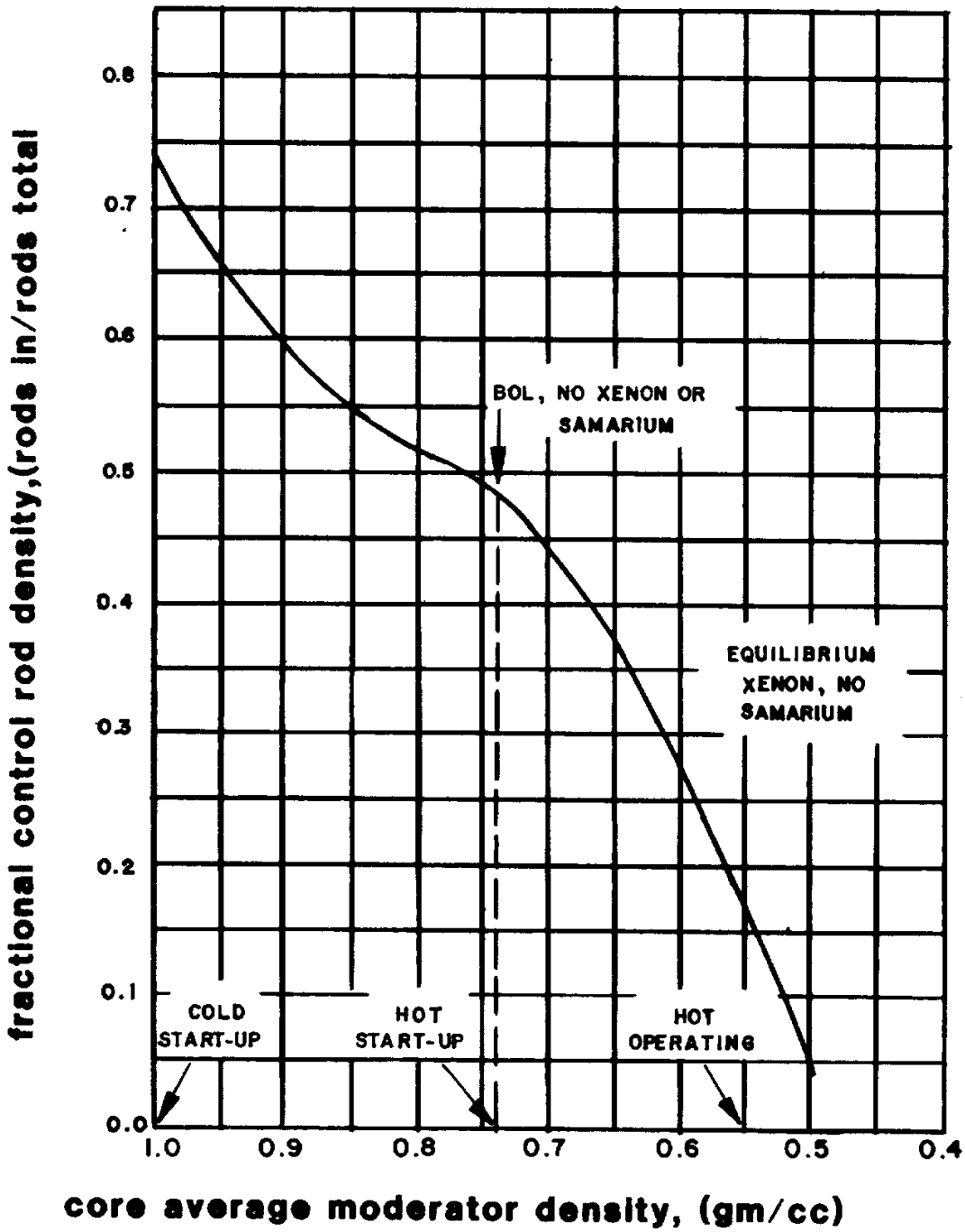
MODERATOR VOID REACTIVITY COEFFICIENT AT BOL AND AT A CORE AVERAGE EXPOSURE OF 10 GWD/T



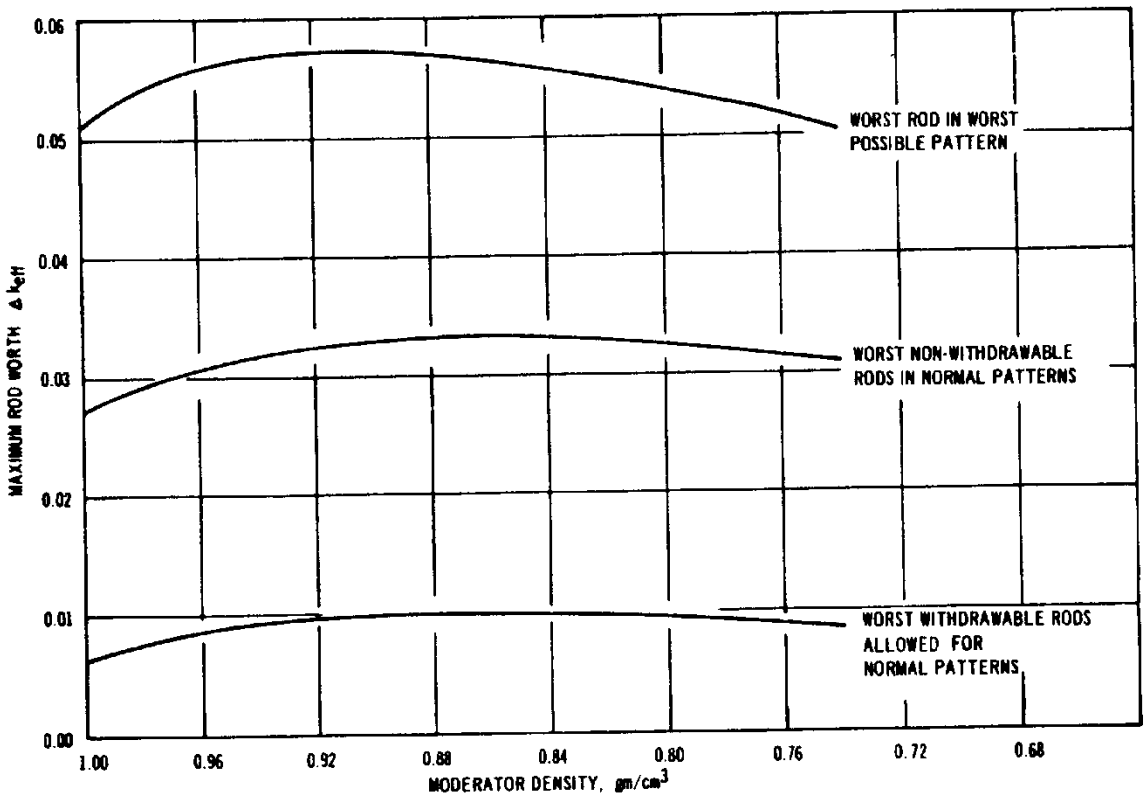
BRUNSWICK UNIT 1 COLD SHUTDOWN REACTIVITY



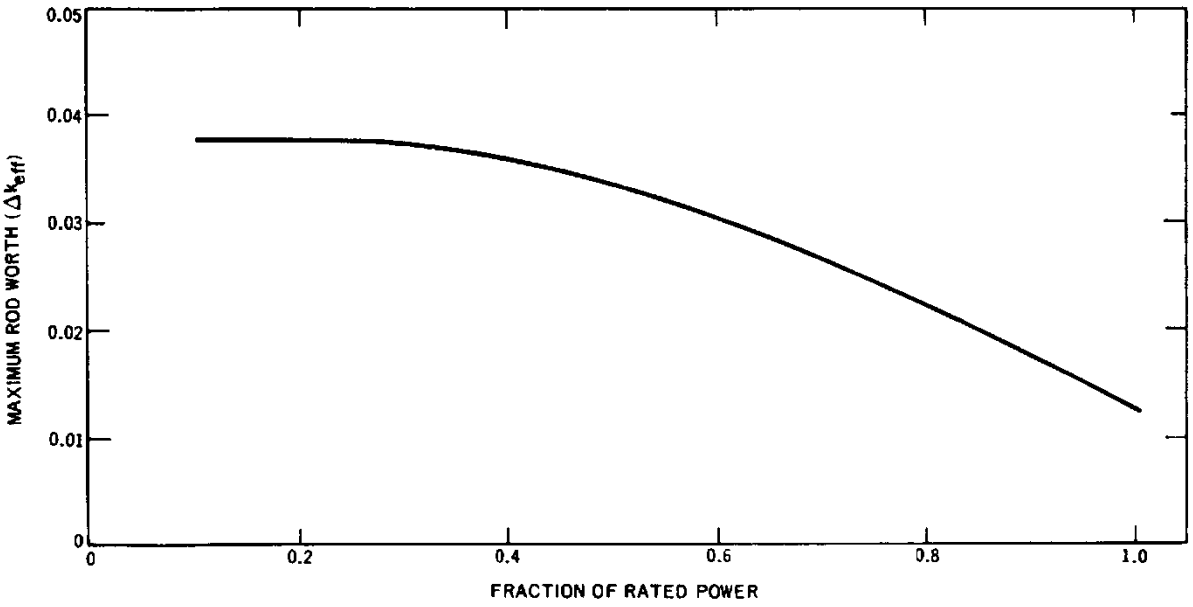
FRACTIONAL CONTROL ROD DENSITY VERSUS CORE AVERAGE MODERATOR DENSITY FOR A CRITICAL REACTOR AT BOL



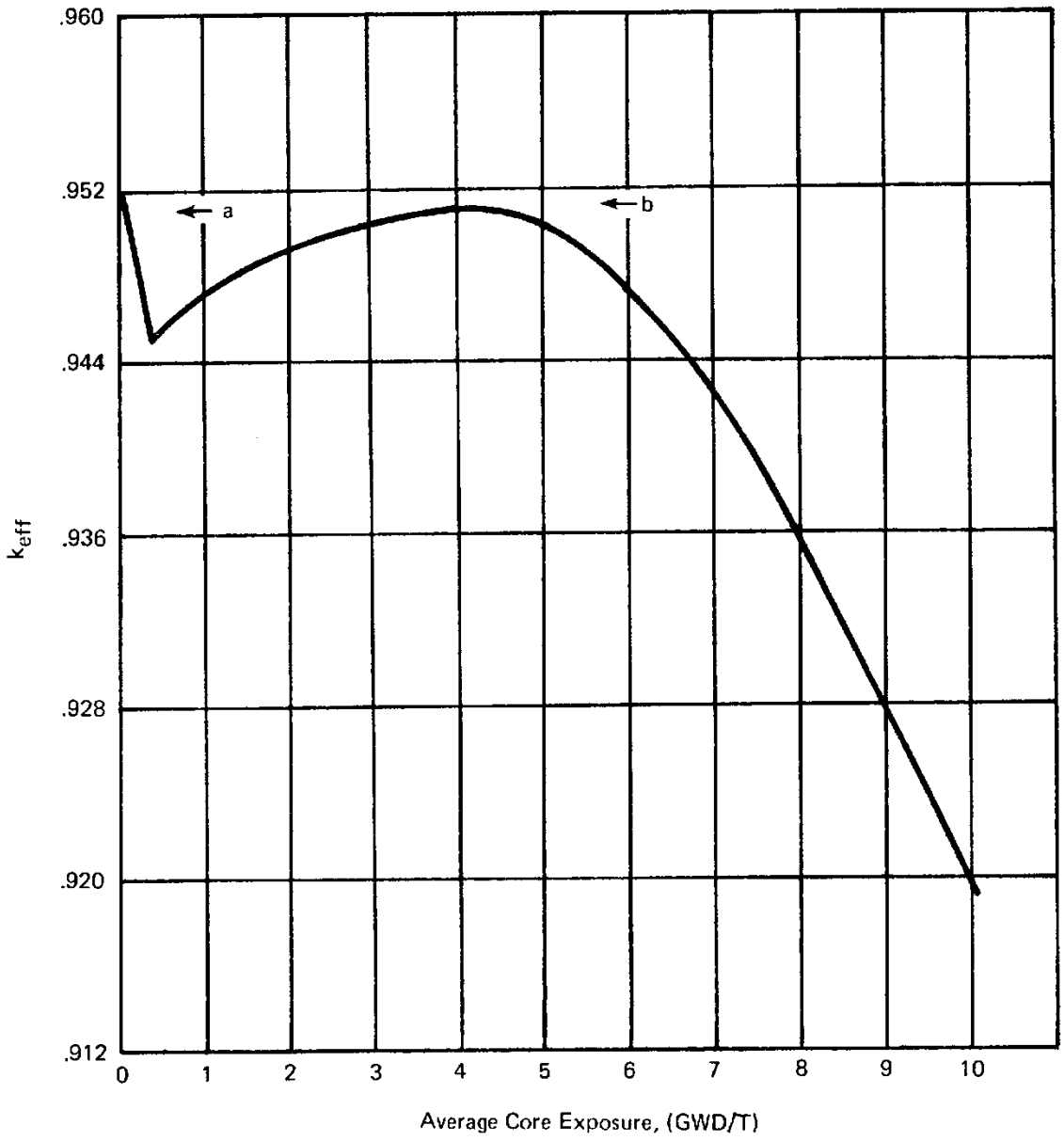
MAXIMUM ROD WORTH VERSUS MODERATOR DENSITY



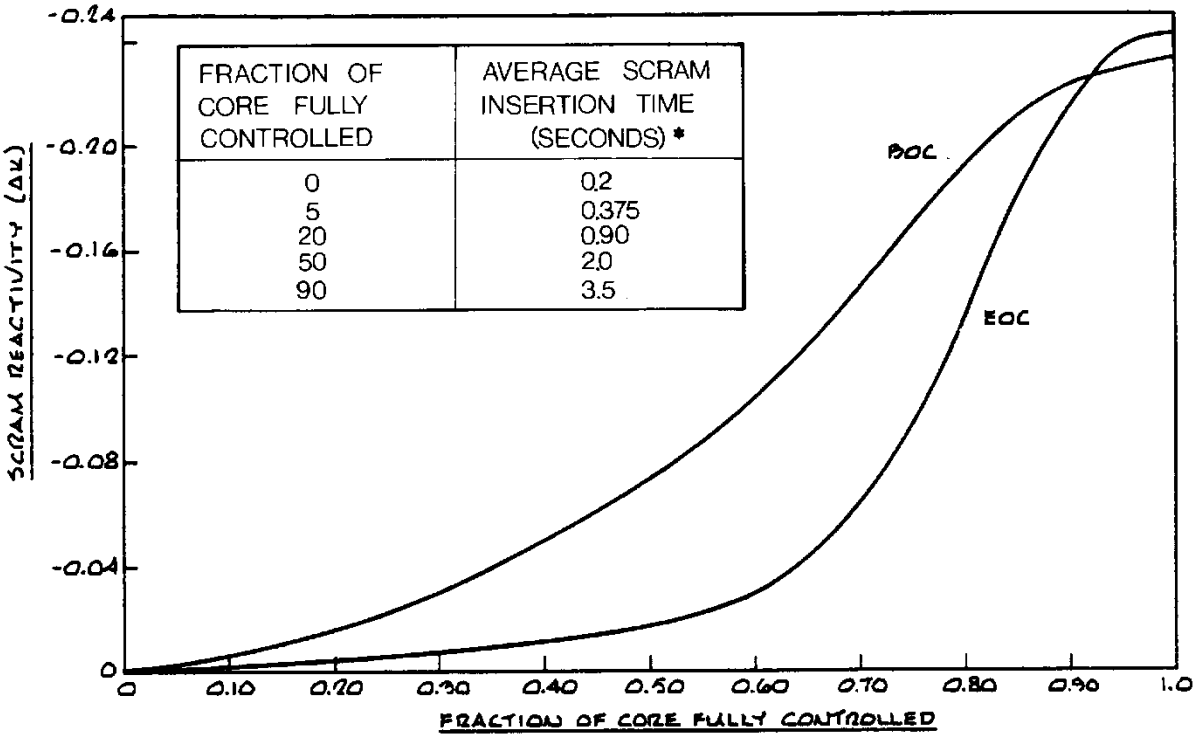
MAXIMUM ROD WORTH VERSUS POWER LEVEL



EFFECTIVE CORE EIGENVALUE AS A FUNCTION OF AVERAGE CORE EXPOSURE (MOST REACTIVE ROD WITHDRAWN)

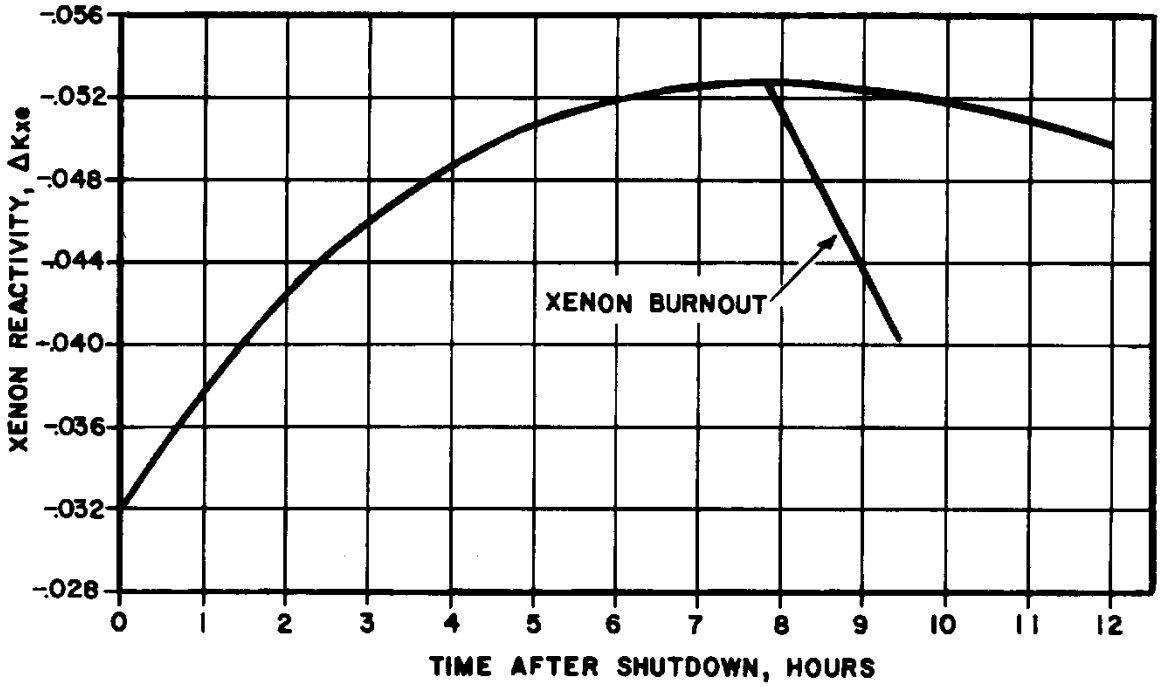


SCRAM REACTIVITY BEGINNING AND END OF FIRST CYCLE FOR HOT OPERATING CONDITIONS

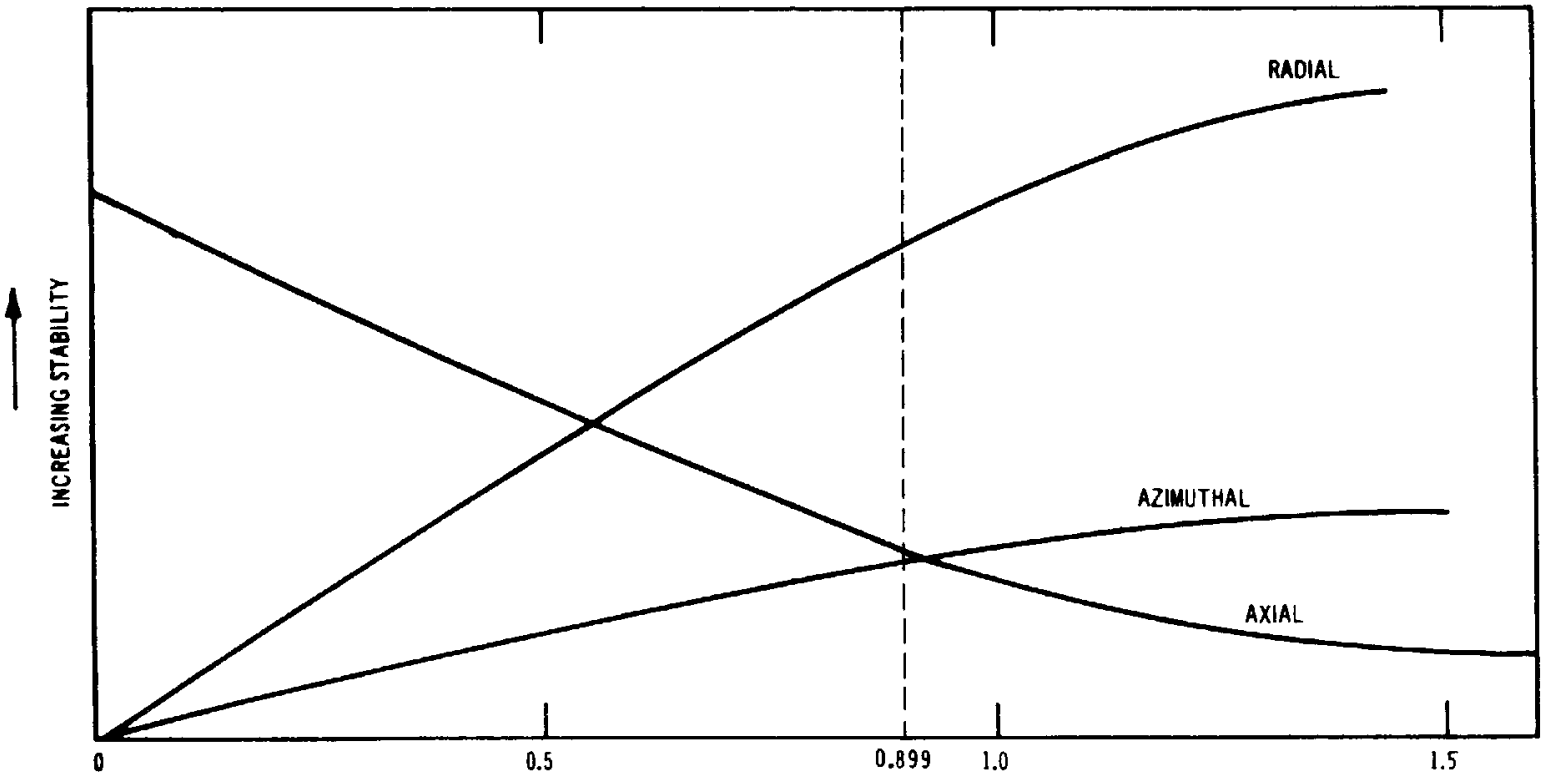


*Measured from time of de-energization of scram solenoid

XENON REACTIVITY BUILDUP AFTER SHUTDOWN AND BURNOUT ON RETURN TO FULL POWER FROM MAXIMUM SHUTDOWN XENON BUILDUP AT BEGINNING OF LIFE

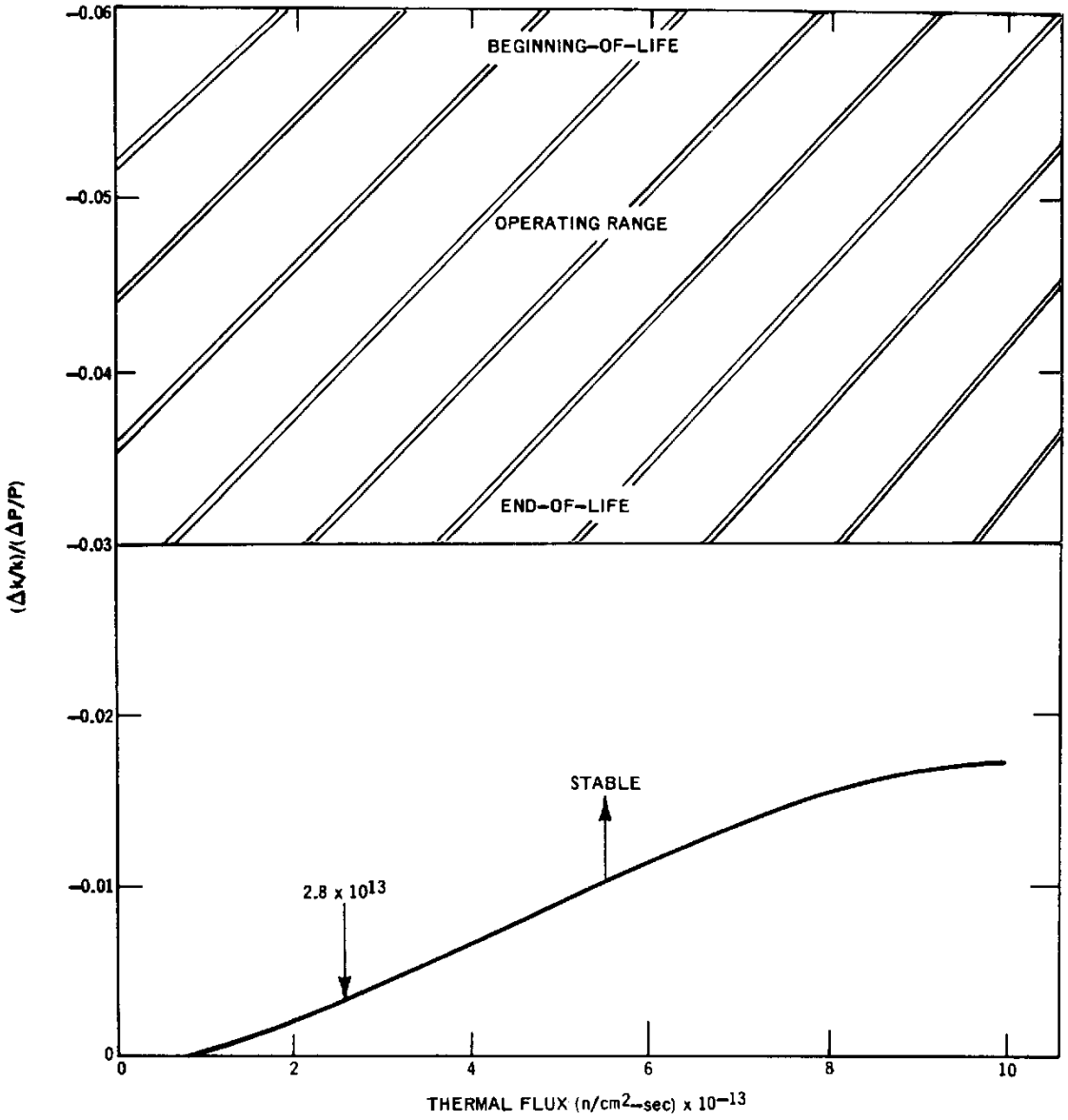


RELATIVE XENON STABILITY WITH NO FLUX FLATTENING

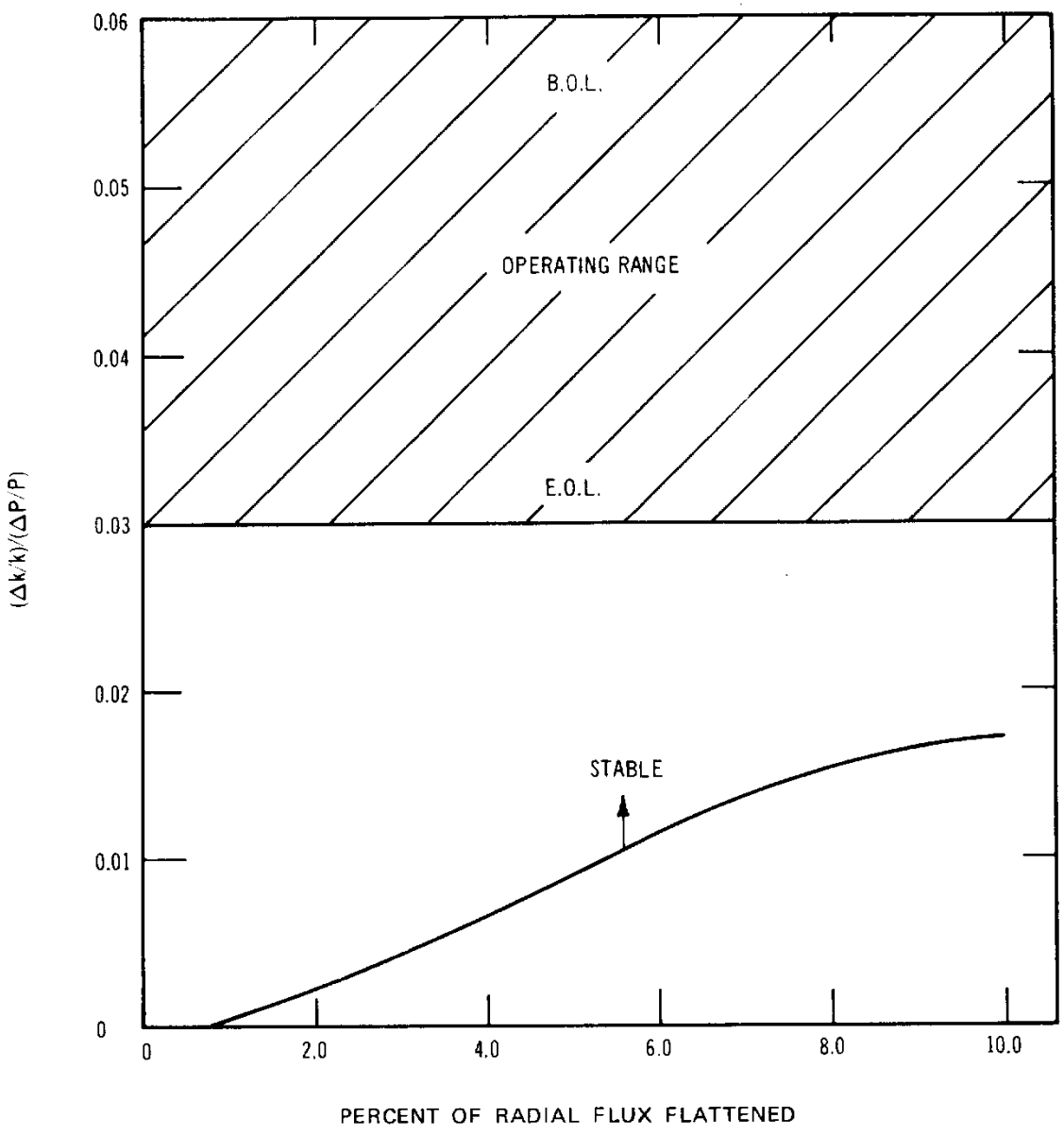


THE L/D RATIO FOR THIS PLANT IS 0.899 AS SHOWN BY THE DASHED LINE

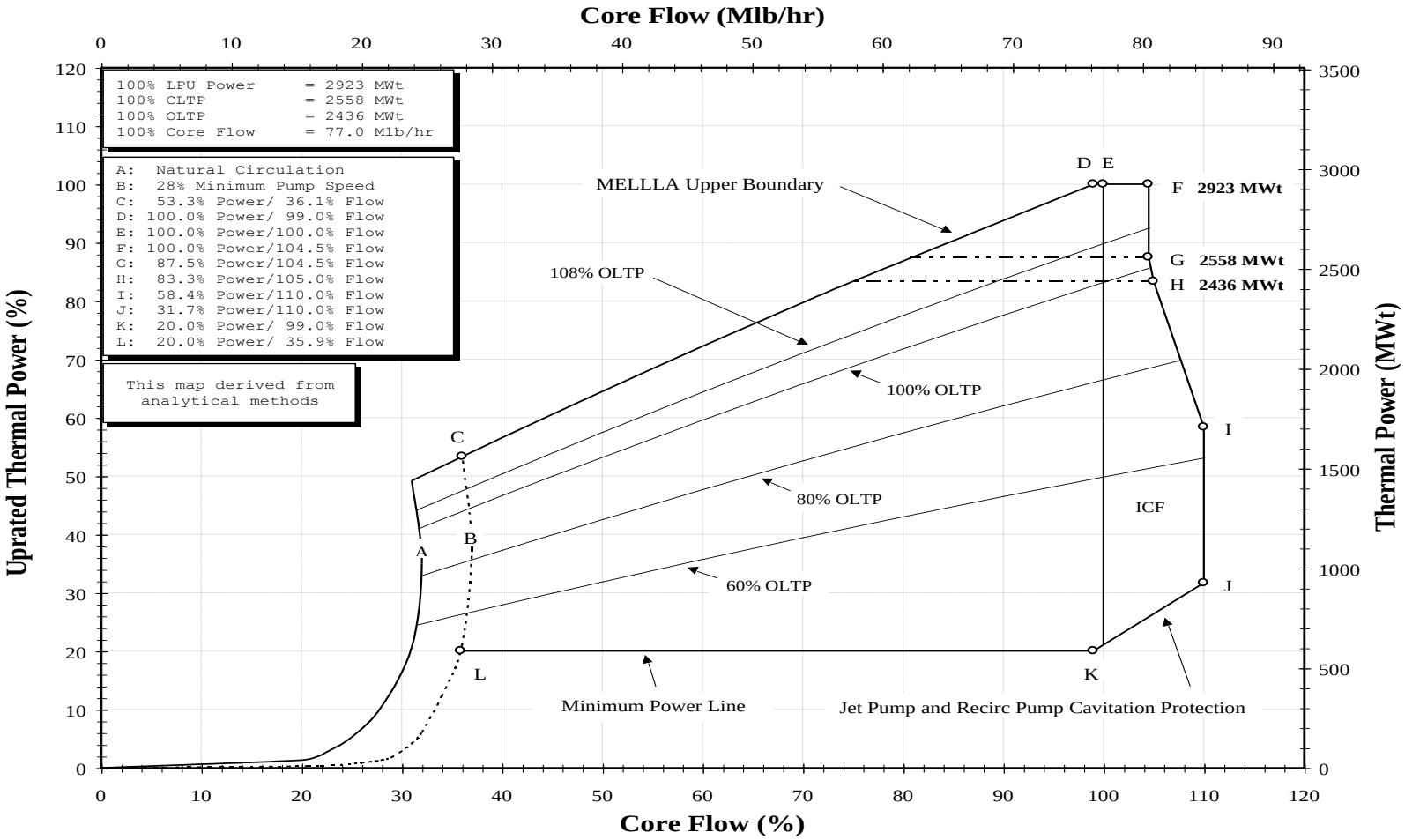
EFFECT OF POWER DENSITY ON AXIAL XENON STABILITY INCLUDING VOID TRANSPORT



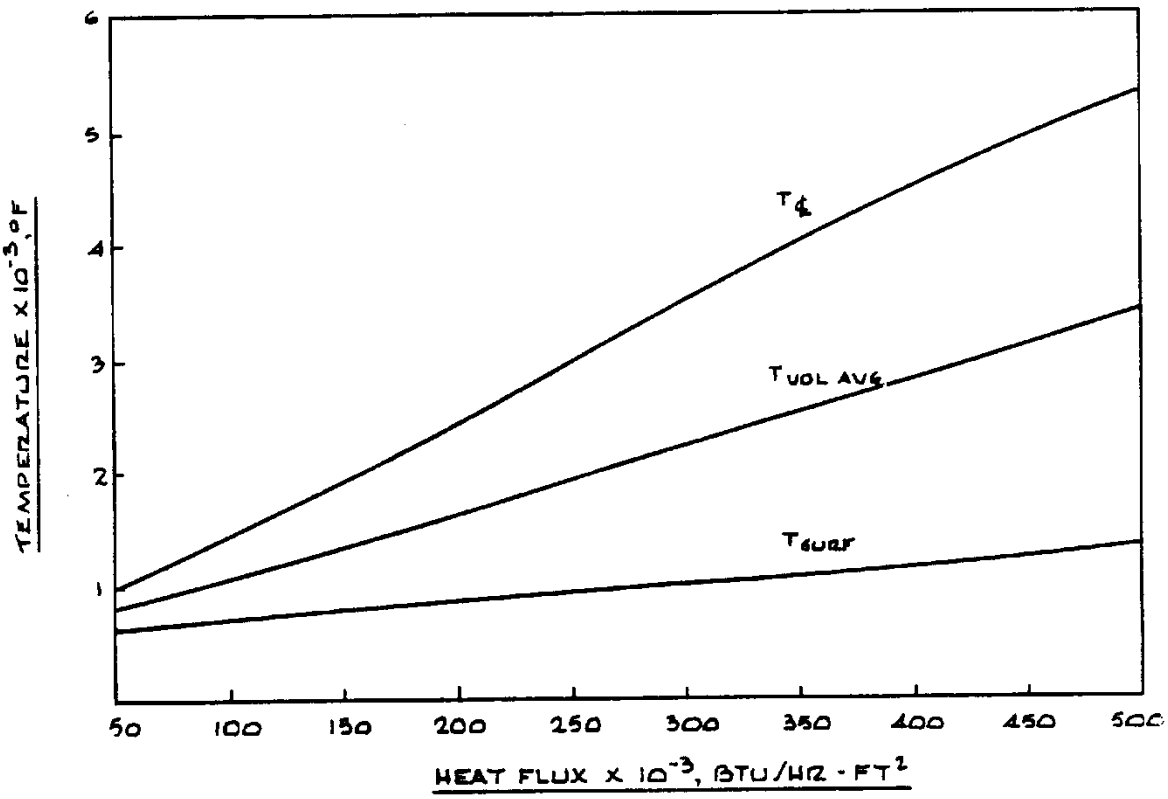
AZIMUTHAL XENON STABILITY



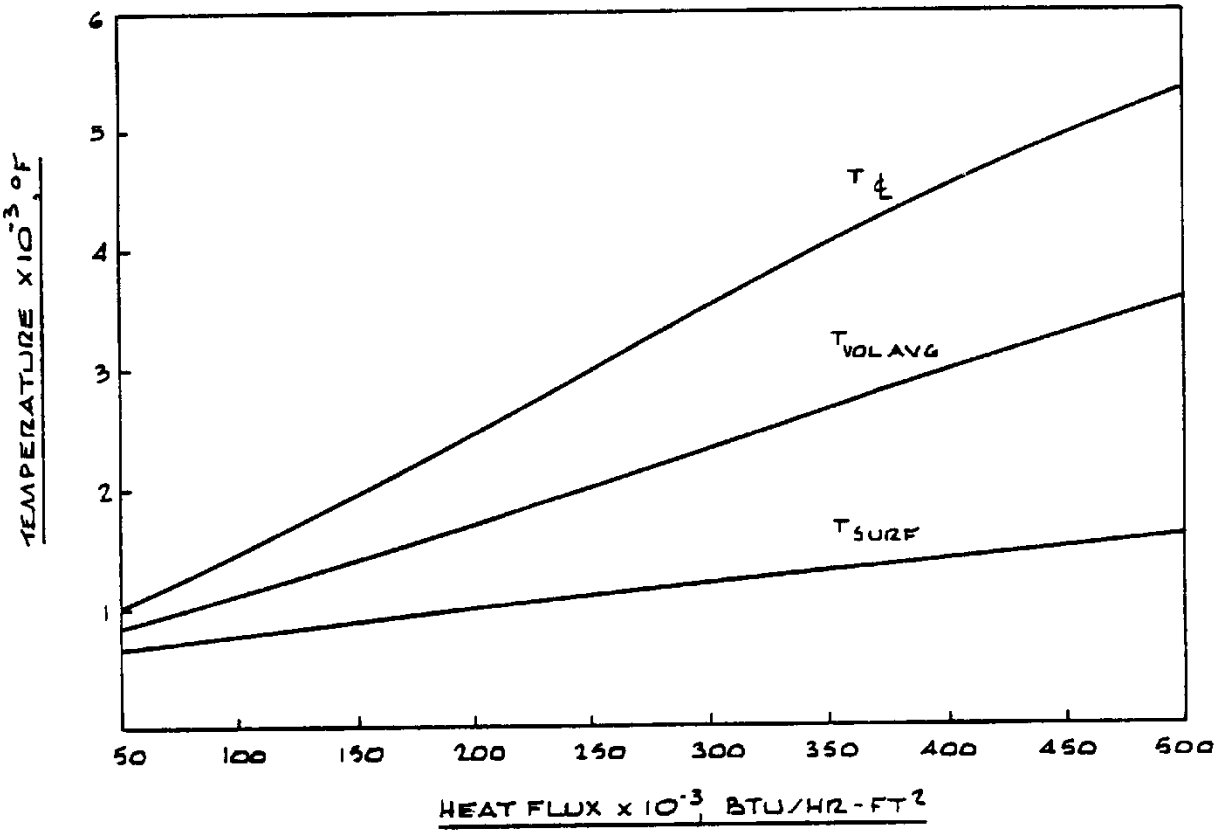
POWER/FLOW OPERATING MAP FOR POWER UPRATE



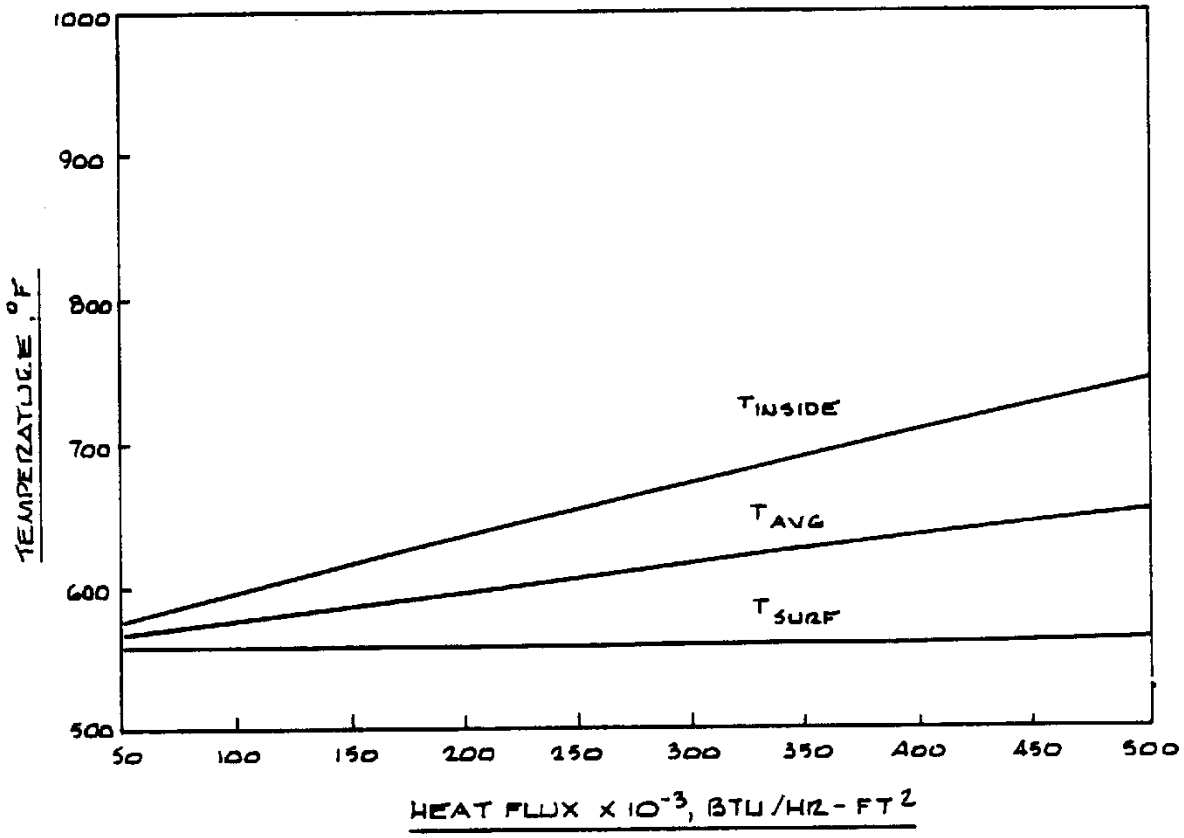
FUEL TEMPERATURE VERSUS HEAT FLUX - BOL 3 W/O GD_2O_3



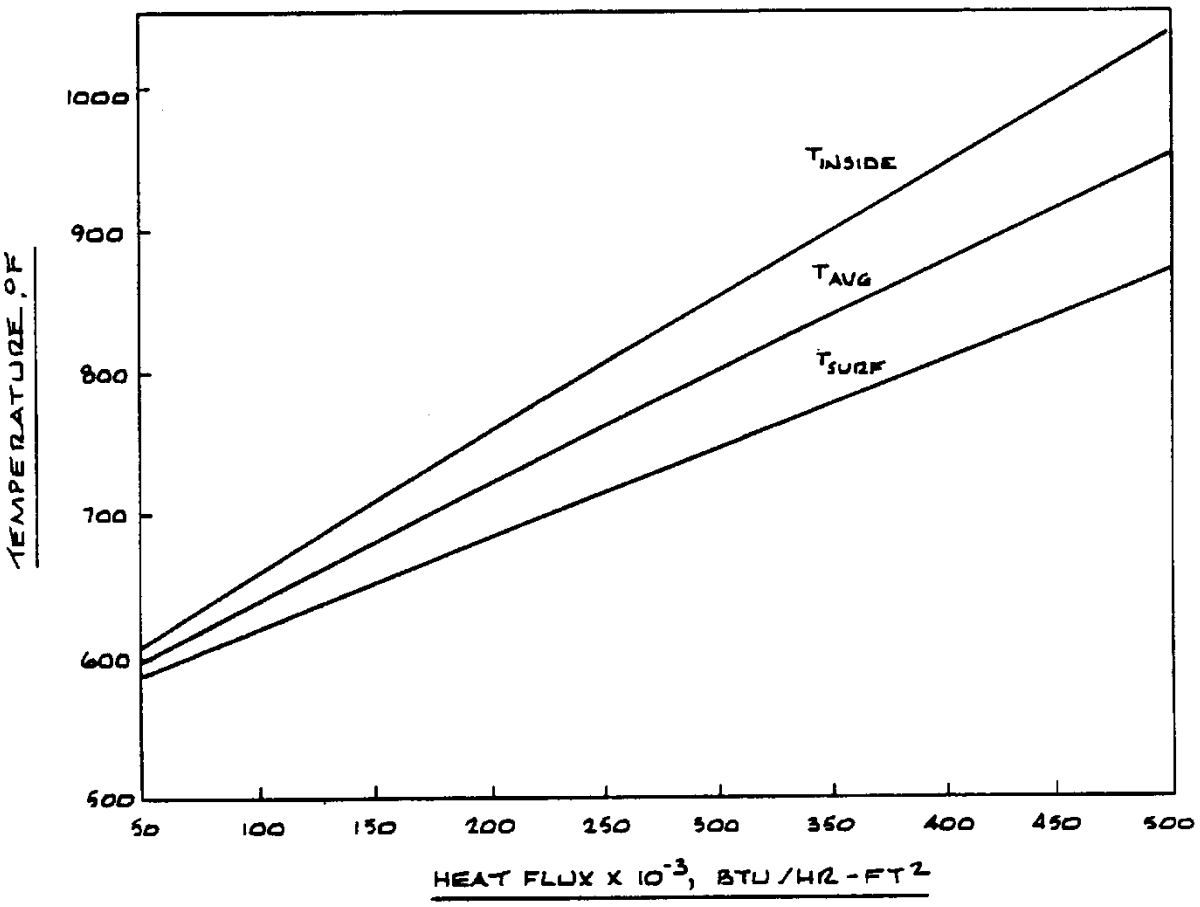
FUEL TEMPERATURE VERSUS HEAT FLUX - 5 YEARS 3 W/O GD_2O_3



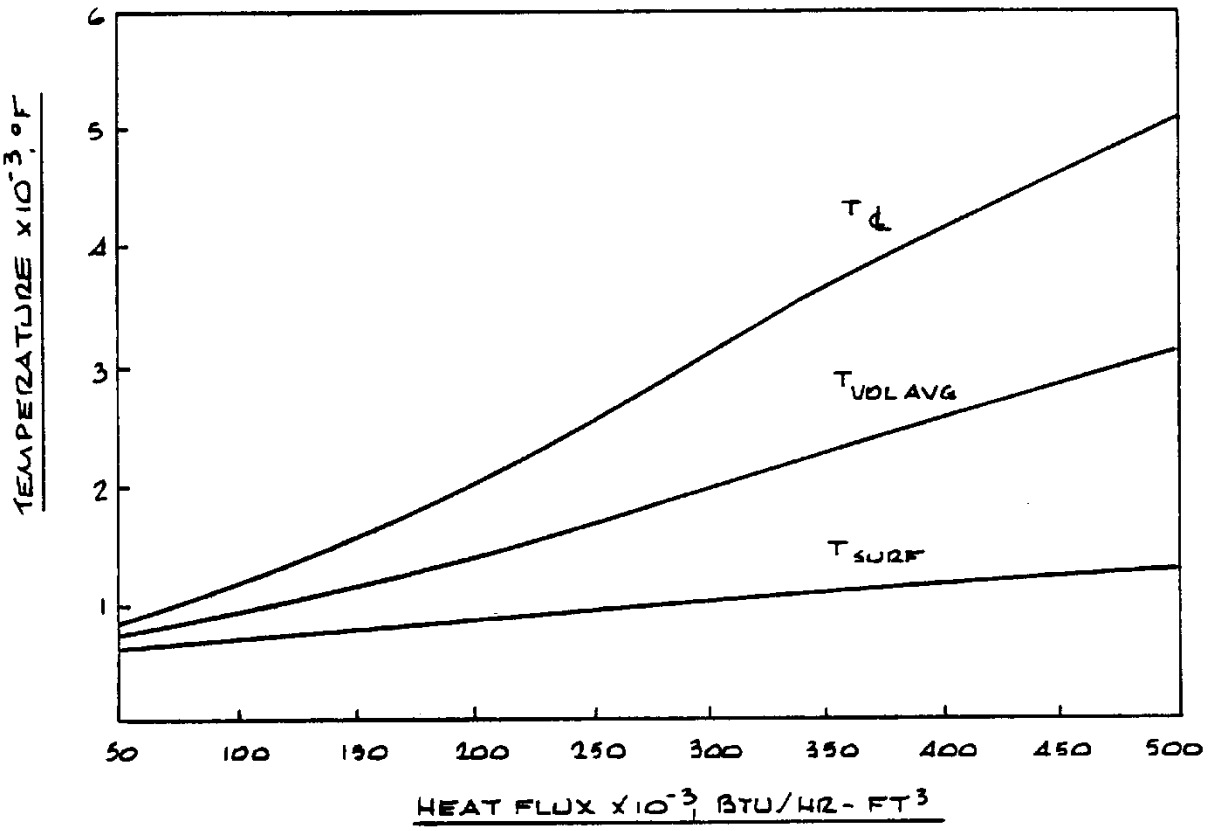
CLAD TEMPERATURE VERSUS HEAT FLUX - BOL 3 W/O GD_2O_3



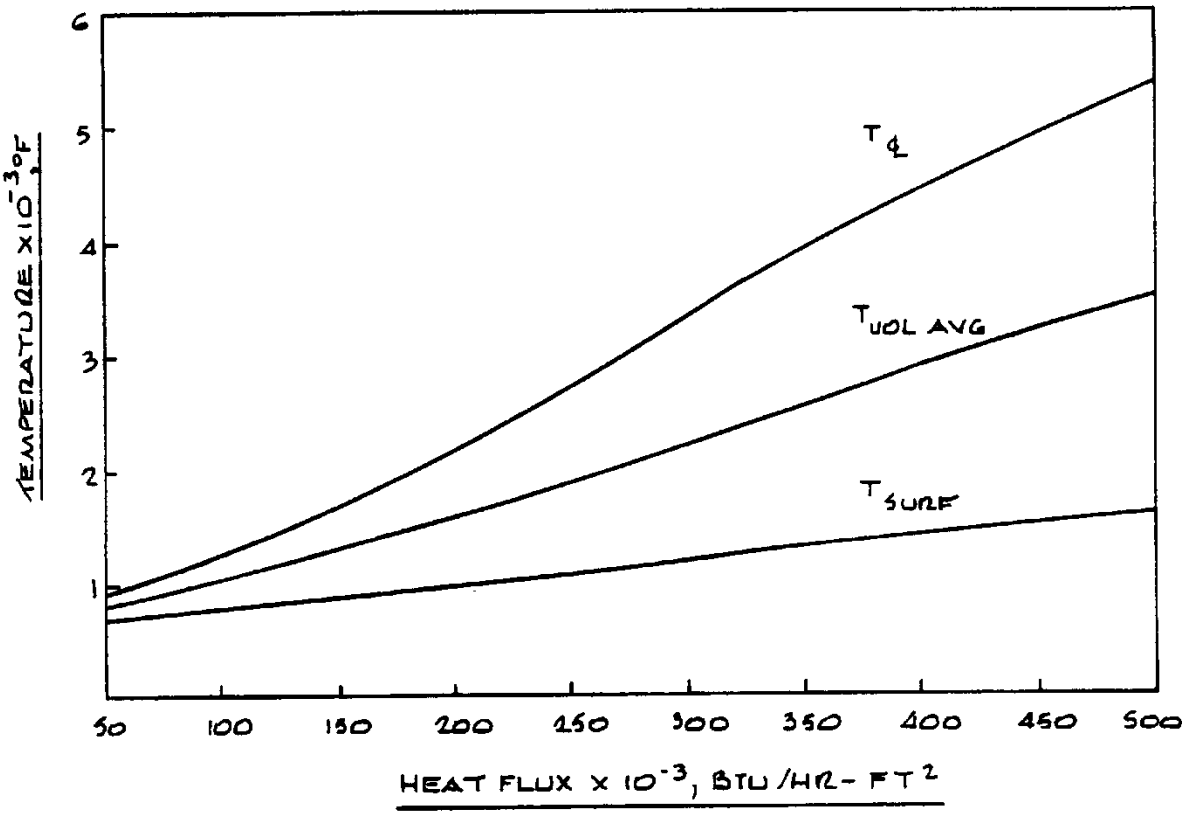
CLAD TEMPERATURE VERSUS HEAT FLUX - 5 YEARS 3 W/O GD_2O_3



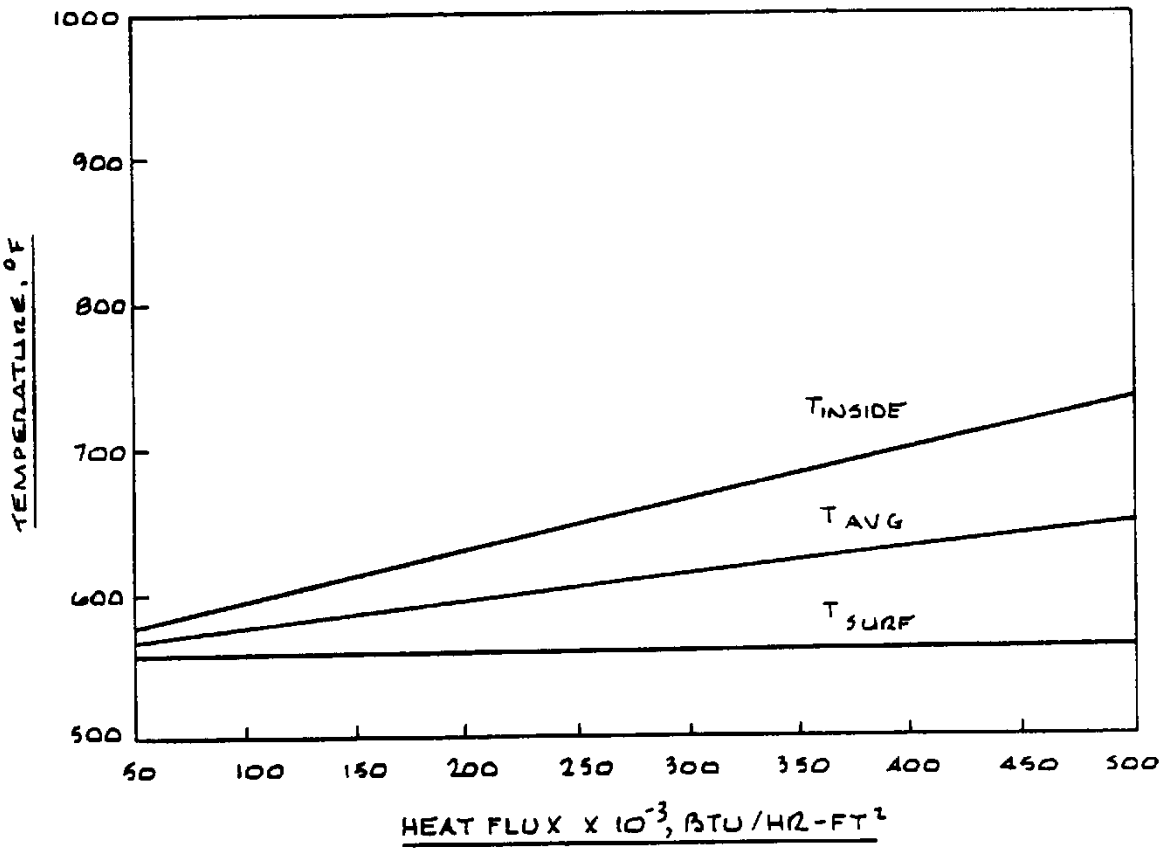
FUEL TEMPERATURE VERSUS HEAT FLUX - BOL UO_2



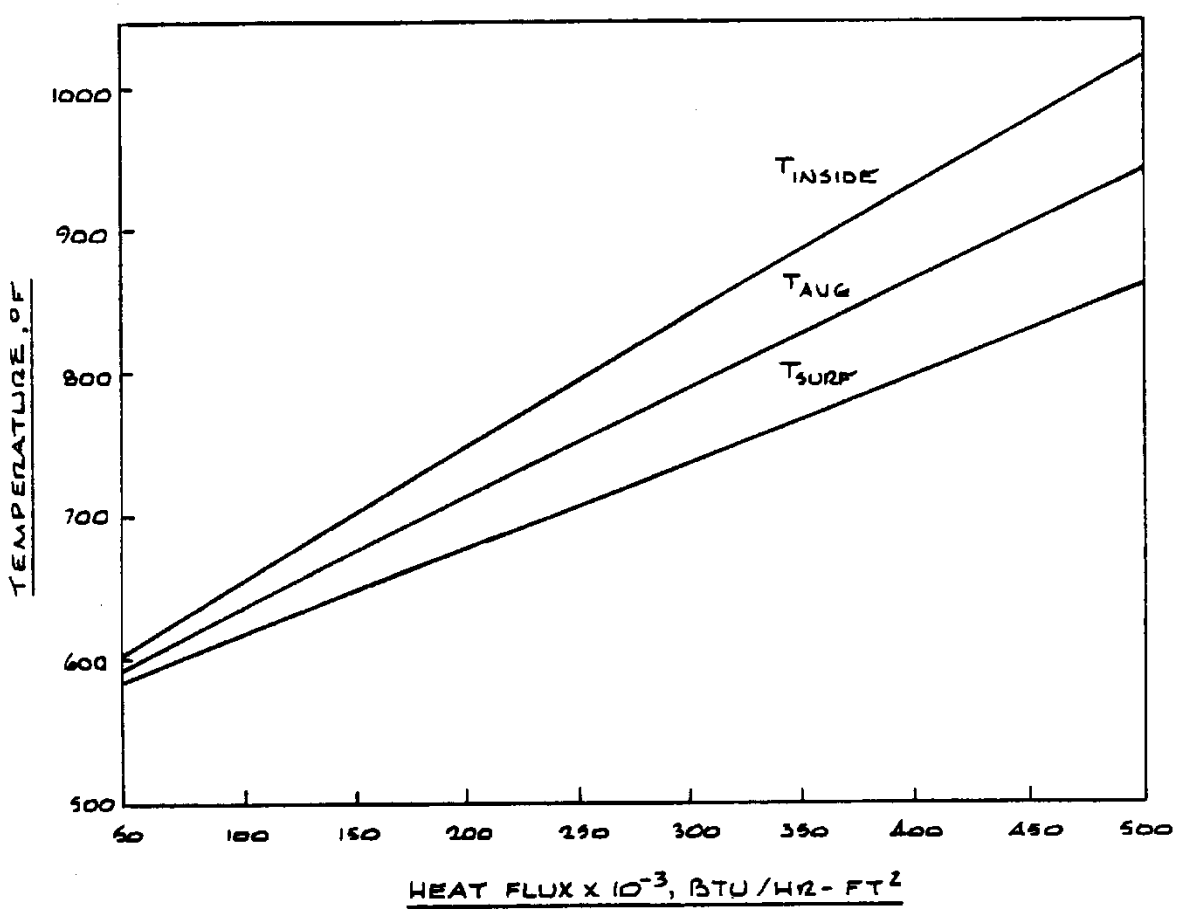
FUEL TEMPERATURE VERSUS HEAT FLUX - 5 YEARS UO_2



CLAD TEMPERATURE VERSUS HEAT FLUX - BOL UO_2



CLAD TEMPERATURE VERSUS HEAT FLUX - 5 YEARS UO_2



FUEL ASSEMBLY INITIAL ENRICHMENT

DISTRIBUTION 2.1 AVERAGE ENRICHMENT

WIDE-WIDE GAP

4	3	3	2	2	2	3	3
3	2	2	1	1	1	1	2
3	2	1	1	1	1	1	2
2	1	1	1	1	1	1	1
2	1	1	1	Water Rod	1	1	1
2	1	1	1	1	1	1	1
3	1	1	1	1	1	1	2
3	2	2	1	1	1	2	3

NARROW-NARROW GAP

ROD TYPE	NO.	wt%
1	38	2.35
2	15	1.90
3	9	1.49
4	1	1.18
	1	Water Tube

LOCAL POWER FACTORS 0 MWD/T 40% VOIDS

	1	2	3	4	5	6	7	8
1	1.101	1.148	1.037	1.175	1.135	1.150	1.002	1.124
2	1.148	1.153	1.011	1.087	1.029	1.029	1.141	1.136
3	1.037	1.011	1.007	0.886	0.833	0.407	0.967	1.010
4	1.175	1.087	0.886	0.393	0.803	0.825	0.933	1.127
5	1.135	1.029	0.833	0.803	0.	0.894	0.953	1.120
6	1.150	1.029	0.407	0.825	0.894	0.926	0.995	1.162
7	1.002	1.141	0.967	0.933	0.953	0.995	1.075	1.056
8	1.124	1.136	1.010	1.127	1.120	1.162	1.056	0.988

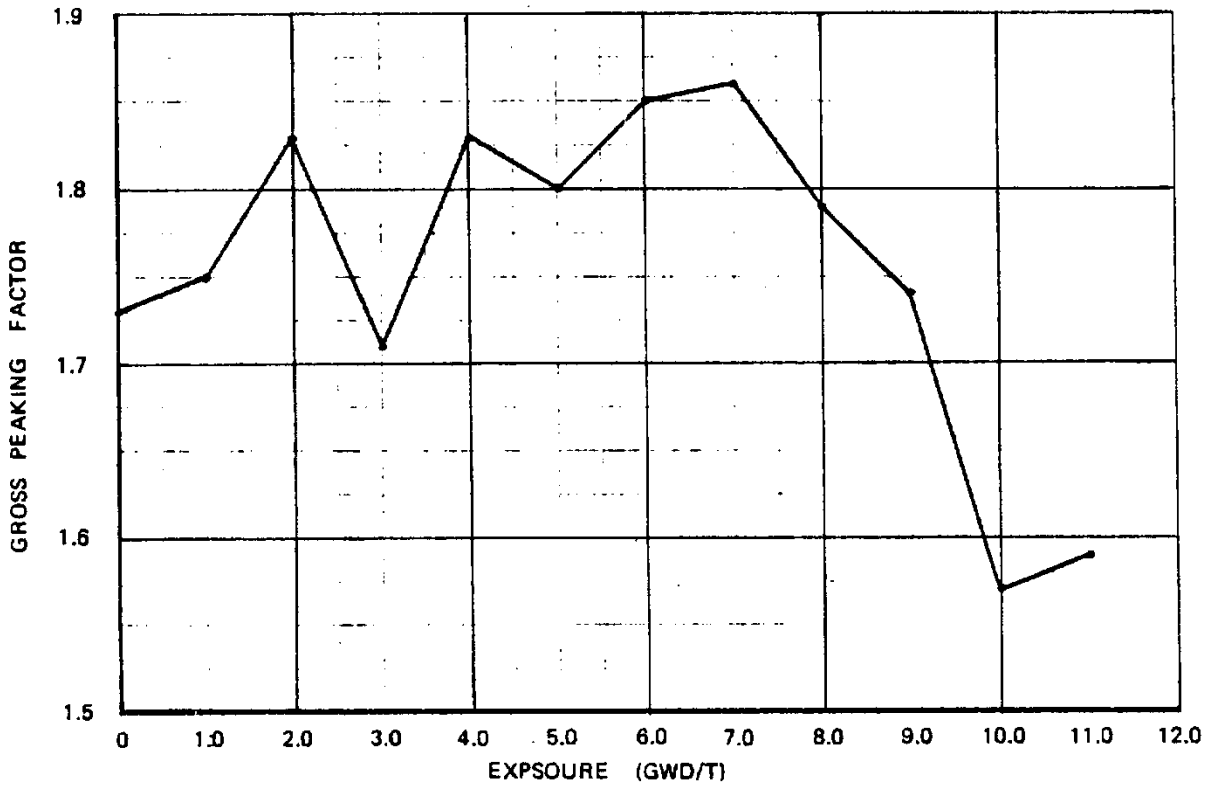
PEAK = 1.175
ROD (1, 4)

LOCAL POWER FACTORS 10,000 MWD/T 40% VOIDS

	1	2	3	4	5	6	7	8
1	1.091	1.092	0.992	1.088	1.064	1.080	1.013	1.088
2	1.092	1.073	0.953	1.027	1.001	1.019	1.085	1.097
3	0.992	0.953	1.017	0.948	0.927	0.933	1.007	0.977
4	1.088	1.027	0.948	0.907	0.905	0.896	0.943	1.050
5	1.064	1.001	0.927	0.905	0.	0.900	0.927	1.028
6	1.080	1.019	0.933	0.896	0.900	0.897	0.944	1.051
7	1.013	1.085	1.007	0.943	0.927	0.944	1.009	0.977
8	1.088	1.097	0.977	1.050	1.028	1.051	0.977	0.990

PEAK = 1.097
ROD (2, 8)

GROSS PEAKING FACTOR AS A FUNCTION OF EXPOSURE BRUNSWICK 1



DURALIFE - 230 CONTROL ROD

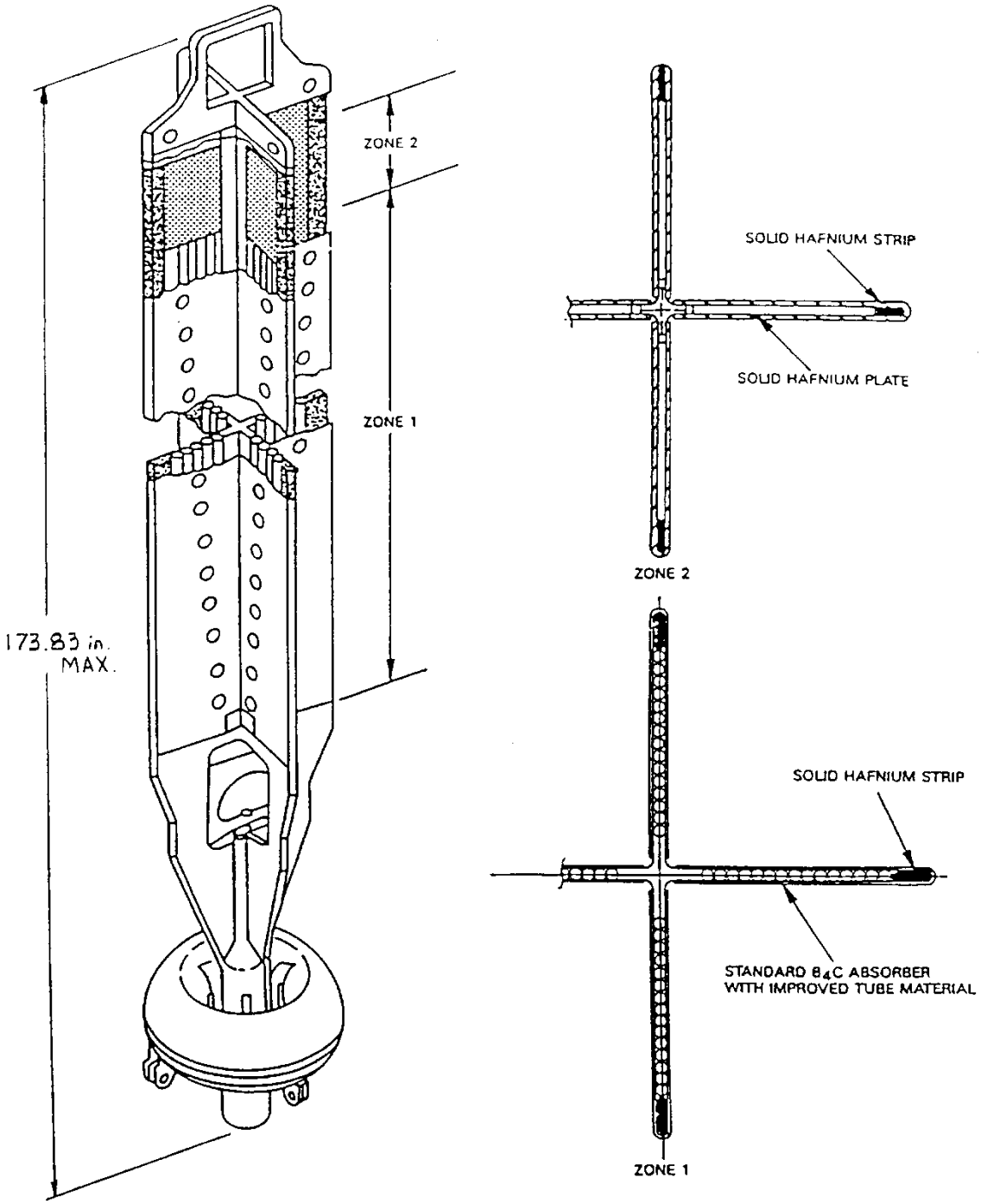
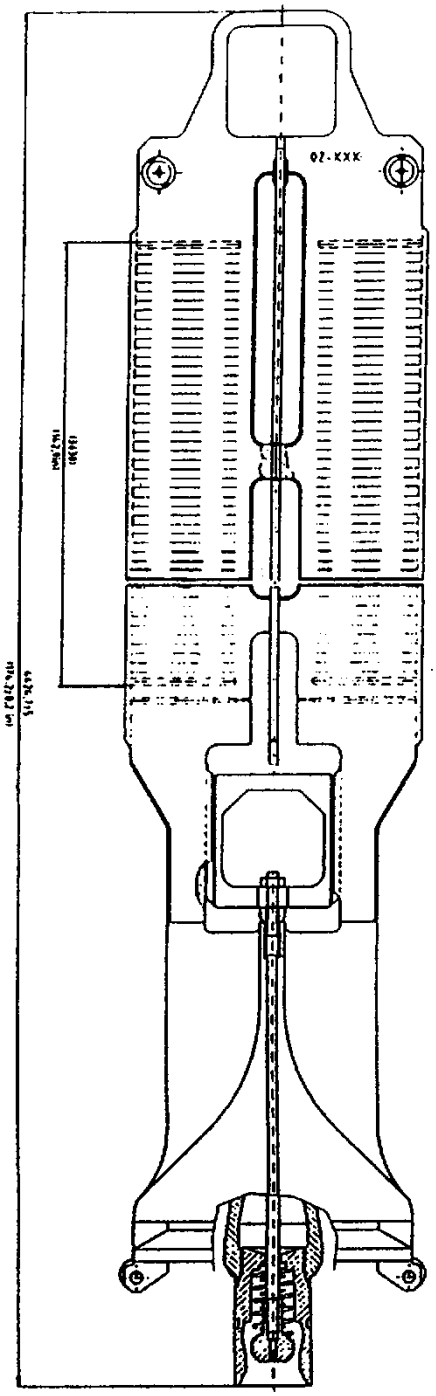


ABB CR82M-1 CONTROL ROD



WESTINGHOUSE ABB CR99 CONTROL ROD