LICENSEE EVENT REPORT

CONTROL BLOCK: [| | | | |] (1) (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

Line	Field	Value
01	LICENSEE CODE (2)	MIDCC2
	LICENSE NUMBER (3)	00-00000-00
	LICENSE TYPE (4)	41111
	CAT (5)	
01 (CON'T)	REPORT SOURCE (6)	L
	DOCKET NUMBER (7)	0500003 16
	EVENT DATE (8)	093082
	REPORT DATE (9)	102782

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

02 FOLLOWING UNIT SHUTDOWN, THE REACTOR COOLANT SYSTEM (RCS) DOSE EQUIVALENT (DOSEQ)
03 IODINE-131 CONCENTRATION EXCEEDED THE 1.0 μCi/gram STEADY STATE LIMIT OF TECHNICAL
04 SPECIFICATION 3.4.8. THE IODINE LEVELS REMAINED IN EXCESS OF TECHNICAL SPECIFICATION
05 LIMITS UNTIL 0902 HOURS ON OCTOBER 2, 1982. THE PUBLIC HEALTH AND SAFETY WERE NOT
06 AFFECTED. PREVIOUS OCCURRENCES OF A SIMILAR NATURE INCLUDE: 50-315/76-059, 78-026;
07 50-316/81-049, 82-004, 013, 018, 067, 075, 078.
08

09	
SYSTEM CODE (11)	CG
CAUSE CODE (12)	X
CAUSE SUBCODE (13)	Z
COMPONENT CODE (14)	ZZZZZZ
COMP. SUBCODE (15)	Z
VALVE SUBCODE (16)	Z

(17) LER/RO REPORT NUMBER	
EVENT YEAR	82
SEQUENTIAL REPORT NO.	079
OCCURRENCE CODE	03
REPORT TYPE	L
REVISION NO.	0

ACTION TAKEN (18)	FUTURE ACTION (19)	EFFECT ON PLANT (20)	SHUTDOWN METHOD (21)	HOURS (22)	ATTACHMENT SUBMITTED (23)	NPRD-4 FORM SUB. (24)	PRIME COMP. SUPPLIER (25)	COMPONENT MANUFACTURER (26)
X	X	Z	Z	0000	Y	N	Z	Z999

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

10 ON SEPTEMBER 30, 1982, FOLLOWING A CONTROLLED UNIT SHUTDOWN, THE RCS DOSEQ-I-131
11 SPIKED TO 2.15 μCi/gram. PRIOR TO THE SHUTDOWN, THE RCS DOSEQ-I-131 WAS AVERAGING
12 9.5×10^{-2} μCi/gram. IN AN ATTEMPT TO PREVENT RECURRENCE, FUEL SIPPING WILL BE
13 PERFORMED DURING THE UPCOMING REFUELING OUTAGE IN AN EFFORT TO LOCATE AND REPLACE
14 THE LEAKING FUEL ASSEMBLIES. (SEE ATTACHED SUPPLEMENT)

Line	Field	Value
15	FACILITY STATUS (28)	G
	% POWER (29)	000
	OTHER STATUS (30)	NA
	METHOD OF DISCOVERY (31)	B
	DISCOVERY DESCRIPTION (32)	ROUTINE CHEMICAL ANALYSIS
16	ACTIVITY RELEASED (33)	Z
	CONTENT OF RELEASE (34)	Z
	AMOUNT OF ACTIVITY (35)	NA
	LOCATION OF RELEASE (36)	NA
17	PERSONNEL EXPOSURES NUMBER (37)	000
	TYPE (38)	Z
	DESCRIPTION (39)	NA
18	PERSONNEL INJURIES NUMBER (40)	000
	DESCRIPTION (41)	NA
19	LOSS OF OR DAMAGE TO FACILITY TYPE (42)	Z
	DESCRIPTION (43)	NA
20	PUBLICITY ISSUED (44)	N
	DESCRIPTION (45)	NA

8211060075 821027
PDR ADOCK 05000316
S PDR

NRC USE ONLY

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ATTACHMENT TO LER# 82-079/03L-0

SUPPLEMENT TO CAUSE DESCRIPTION

THIS REPORT IS SUBMITTED PERSUANT TO THE REQUIREMENTS OF APPENDIX A TECHNICAL SPECIFICATIONS 3.4.8 AND 6.9.1. ON SEPTEMBER 30, 1982, THE DOSE EQUIVALENT IODINE-131 ACTIVITY IN THE UNIT 2 REACTOR COOLANT SYSTEM WAS FOUND OUT OF SPECIFICATION.

AT 1615 HOURS ON SEPTEMBER 30, 1982, THE UNIT STARTED A CONTROLLED SHUTDOWN, WITH THE REACTOR TRIPPING FROM APPROXIMATELY 11% POWER AT 1843 HOURS ON SEPTEMBER 30, 1982. LABORATORY ANALYSIS AT 1913 HOURS ON SEPTEMBER 30, 1982, INDICATED THE REACTOR COOLANT DOSE EQUIVALENT IODINE-131 CONCENTRATION HAD EXCEEDED THE TECHNICAL SPECIFICATION LIMITS OF 1.0 μCi/gram. *THE DOSE EQUIVALENT IODINE-131 ACTIVITY SPIKED TO A MAXIMUM OF 2.15 μCi/gram AT 2116 HOURS ON SEPTEMBER 30, 1982. THE REACTOR COOLANT SYSTEM DOSE EQUIVALENT IODINE REMAINED ABOVE TECHNICAL SPECIFICATION LIMITS UNTIL 0902 HOURS ON OCTOBER 2, 1982. ALL SUBSEQUENT DOSE EQUIVALENT IODINE ANALYSIS INDICATED DECREASING LEVELS OF IODINE. FOLLOWING THE SHUTDOWN, THE UNIT WAS COOLED DOWN TO MODE 4 AND THE RHR SYSTEM PUT IN SERVICE. DUE TO RESIDUAL AMMONIA CONTAMINATION IN THE RHR THE CVCS DEMINERALIZER WAS BYPASSED FROM 0315 HOURS ON OCTOBER 1, 1982, to 1759 HOURS ON OCTOBER 2, 1982. IODINE RELEASE AT THIS TIME PERIOD IS CONSISTENT WITH DATA REPORTED IN WESTINGHOUSE ELECTRIC CORPORATION WCAP-8637, "IODINE BEHAVIOR UNDER TRANSIENT CONDITIONS IN THE PRESSURIZED WATER REACTOR". DOSE EQUIVALENT IODINE-131 VALUES WERE IN THE "ACCEPTABLE OPERATION" PORTION OF TECHNICAL SPECIFICATION FIGURE 3.4-1 AT ALL TIMES DURING THE TRANSIENT. ALL APPLICABLE TECHNICAL SPECIFICATION ACTION ITEMS WERE MET DURING THIS TIME.

IN AN ATTEMPT TO PREVENT RECURRENCE, FUEL SIPPING WILL BE PERFORMED DURING THE UPCOMING REFUELING OUTAGE IN AN EFFORT TO LOCATE AND REPLACE THE LEAKING FUEL ASSEMBLIES.

ATTACHMENT TO LER# 82-079/03L-0

SUPPLEMENT TO CAUSE DESCRIPTION (CONT'D)

FUEL BURNUP BY THE REGION AND ALL ADDITIONAL DATA, AS REQUIRED BY TECHNICAL SPECIFICATION 3.4.8, IS FOUND IN THE ATTACHMENTS.

*COOLANT SAMPLES ARE BROUGHT TO AMBIENT CONDITIONS PRIOR TO COUNTING; THEREFORE UNITS OF μCi/gram AND μCi/cc ARE CONSIDERED INTERCHANGEABLE.

BURNUP CALCULATION SUMMARY SHEET
D. C. COOK UNIT 2

UNIT NO. 2

CYCLE NO. 3

REPORT NO. 19

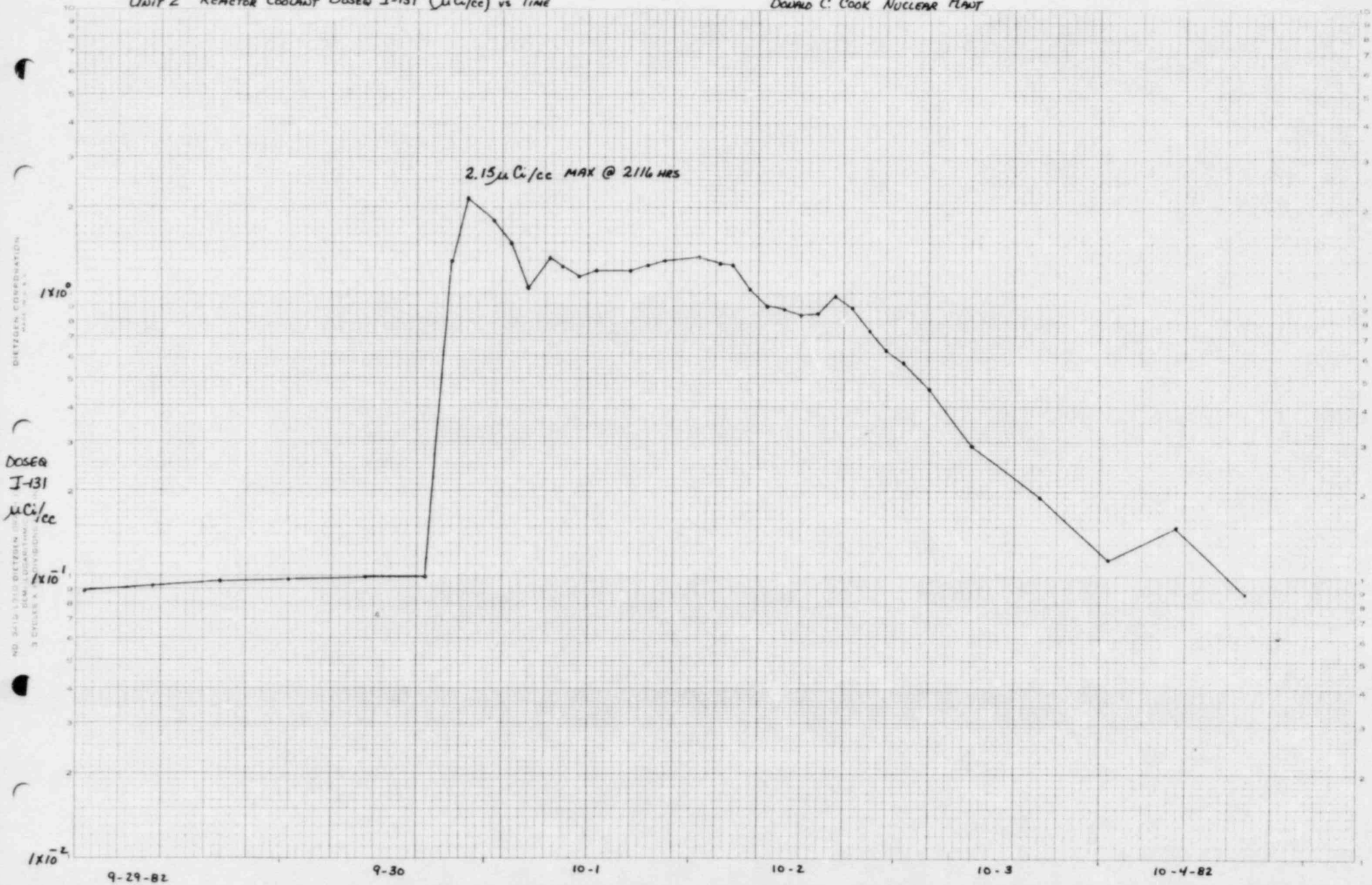
DATE OCTOBER 14, 1982

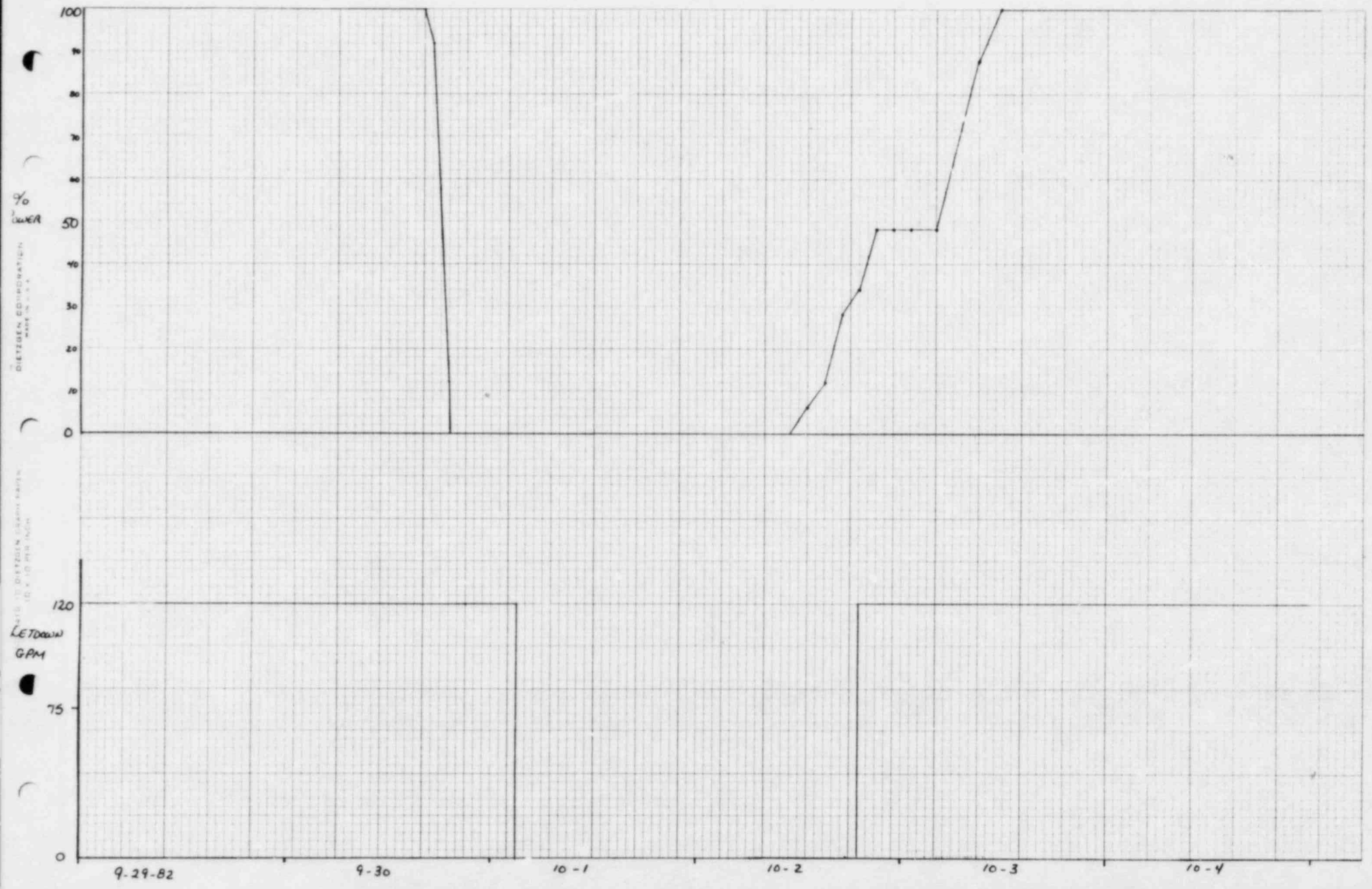
PERIOD 01JUL82-30SEP82

REGION NO	BURNUP FOR PERIOD (MWD/MTU)	CUMULATIVE BURNUP (MWD/MTU)	ENERGY FOR PERIOD (BTU)	CUMULATIVE ENERGY (BTU)
1	0.1538E+04	0.2562E+05	0.1217E+13	0.2029E+14
2	0.2885E+04	0.3052E+05	0.8688E+13	0.9191E+14
3	0.2815E+04	0.1601E+05	0.9718E+13	0.5526E+14
CORE TOTAL	0.2705E+04	0.2308E+05	0.1962E+14	0.1675E+15

Unit 2 Reactor Coolant Dose Eq I-131 (μCi/cc) vs Time

Donald C. Cook Nuclear Plant




100
90
80
70
60
50
40
30
20
10
0
% POWER
120
LETDOWN GPM
75
0
9-29-82
9-30
10-1
10-2
10-3
10-4

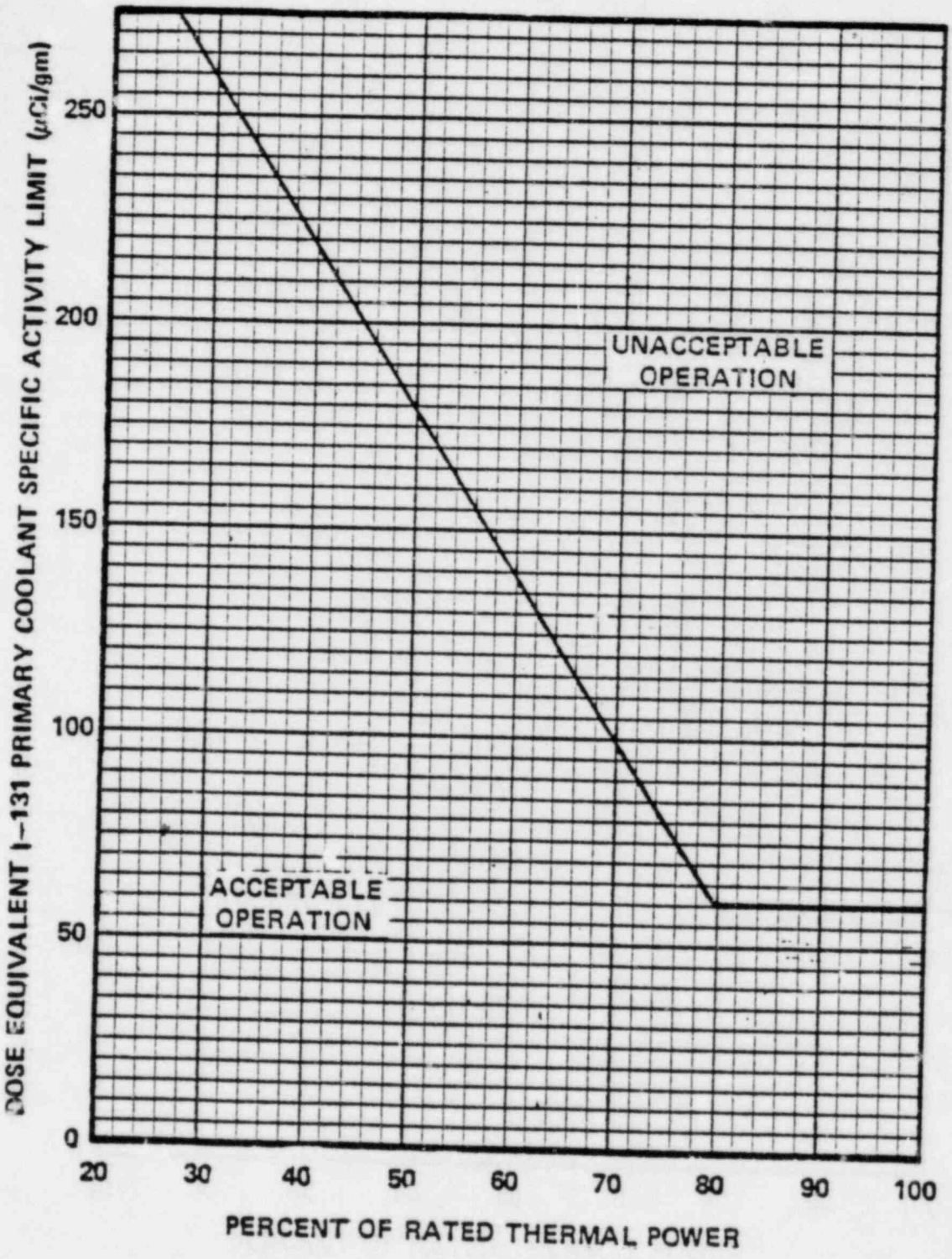


FIGURE 3.4-1

DOSE EQUIVALENT I–131 Primary Coolant Specific Activity Limit Versus Percent of RATED THERMAL POWER with the Primary Coolant Specific Activity > 1.0 μCi/gram Dose Equivalent I-131