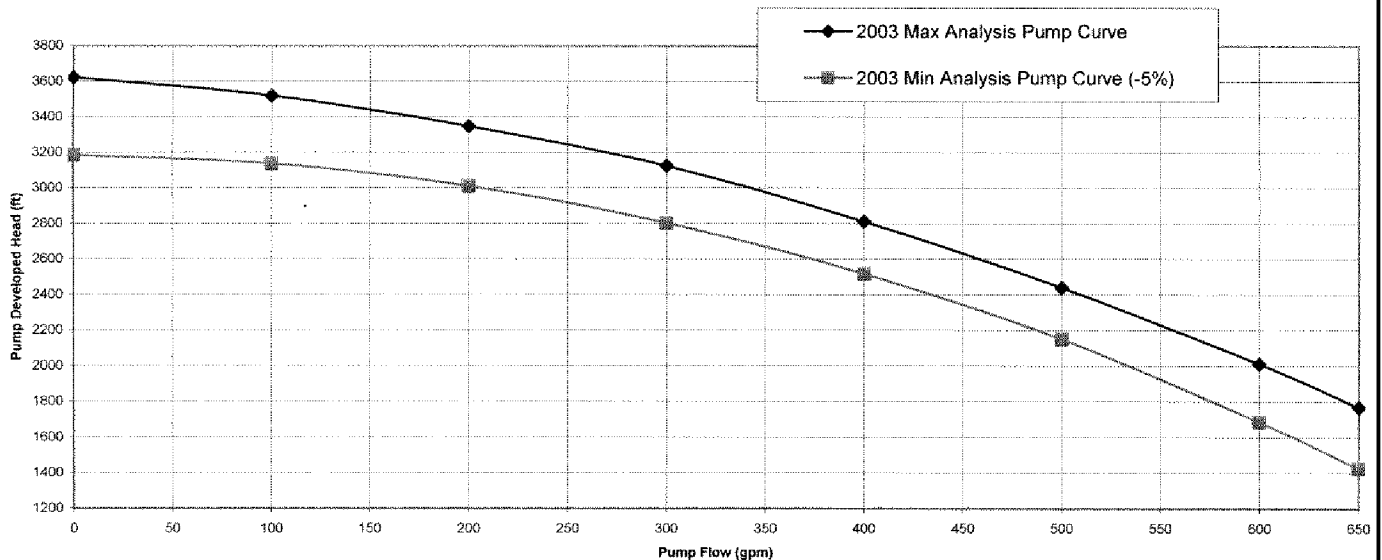


INDIAN POINT 3 HIGH HEAD SAFETY INJECTION PUMP

2003 HHSI Pump Analysis Curves



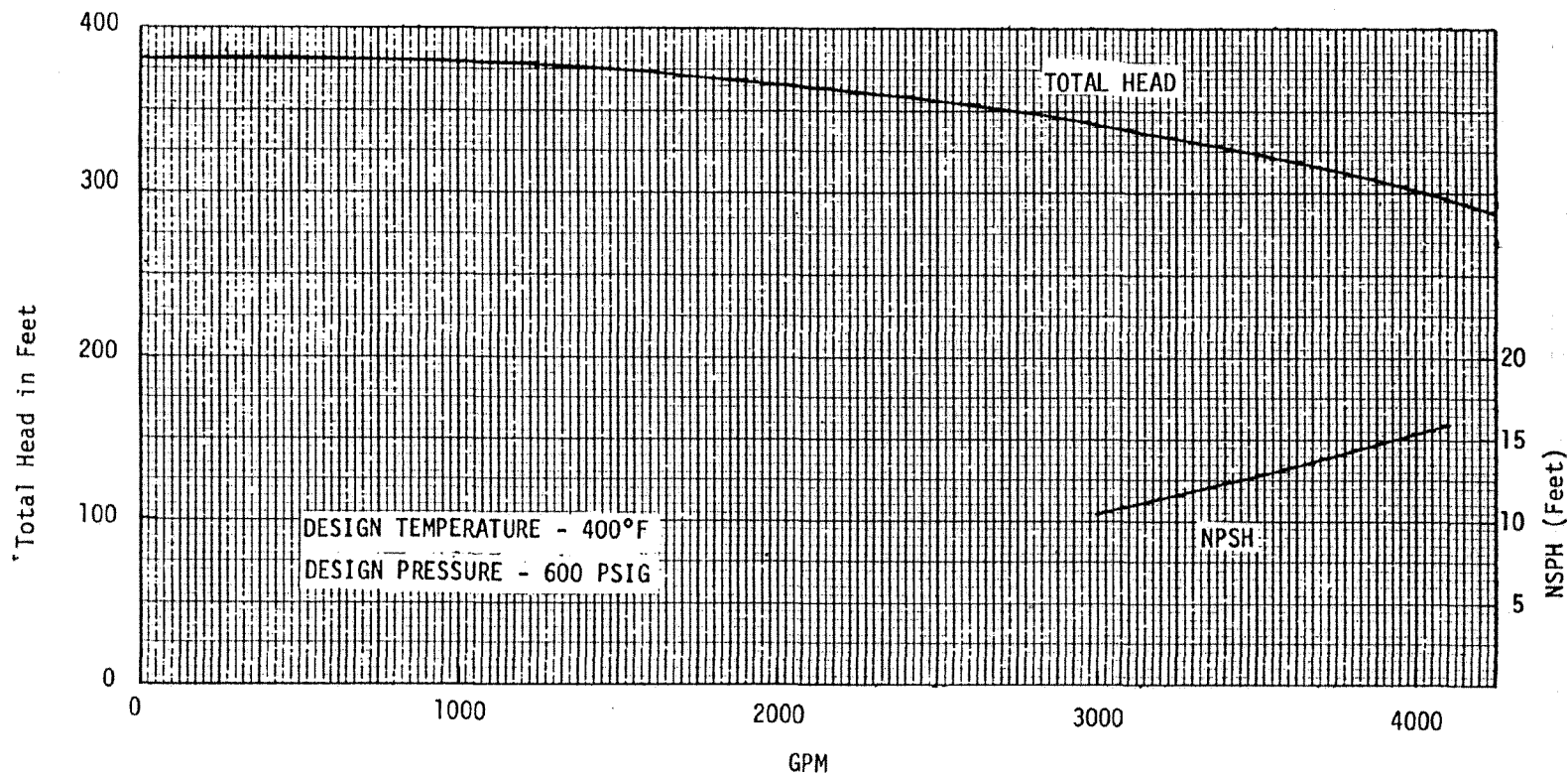
NOTE: CURVES SHOWN ARE BASED ON COMPOSITE DATA CONSIDERING VARIATIONS IN THE CERTIFIED PUMP CURVES OR THE AS TESTED PUMP CURVES FOR ALL THREE PUMPS. THE MAXIMUM CURVE IS A COMPOSITE OF THE THREE PUMP CERTIFIED CURVES ENHANCED FROM 1 TO 3 PERCENT AT EACH FLOW POINT. THE MINIMUM CURVE IS BASED ON THE LOWEST CERTIFIED PUMP HEAD DECREASED BY 5% AT EACH FLOW POINT. THE MAXIMUM AND MINIMUM CURVES HAVE BEEN USED IN THE SYSTEM HYDRAULIC FLOW ANALYSIS AND DO NOT INCLUDE MEASUREMENT UNCERTAINTY.

INDIAN POINT UNIT No. 3

SAFETY INJECTION PUMP PERFORMANCE

UFSAR FIGURE 6.2-2

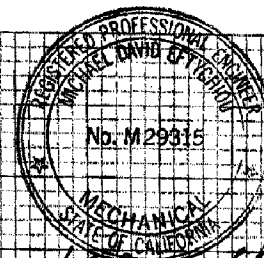
REV. No. 01



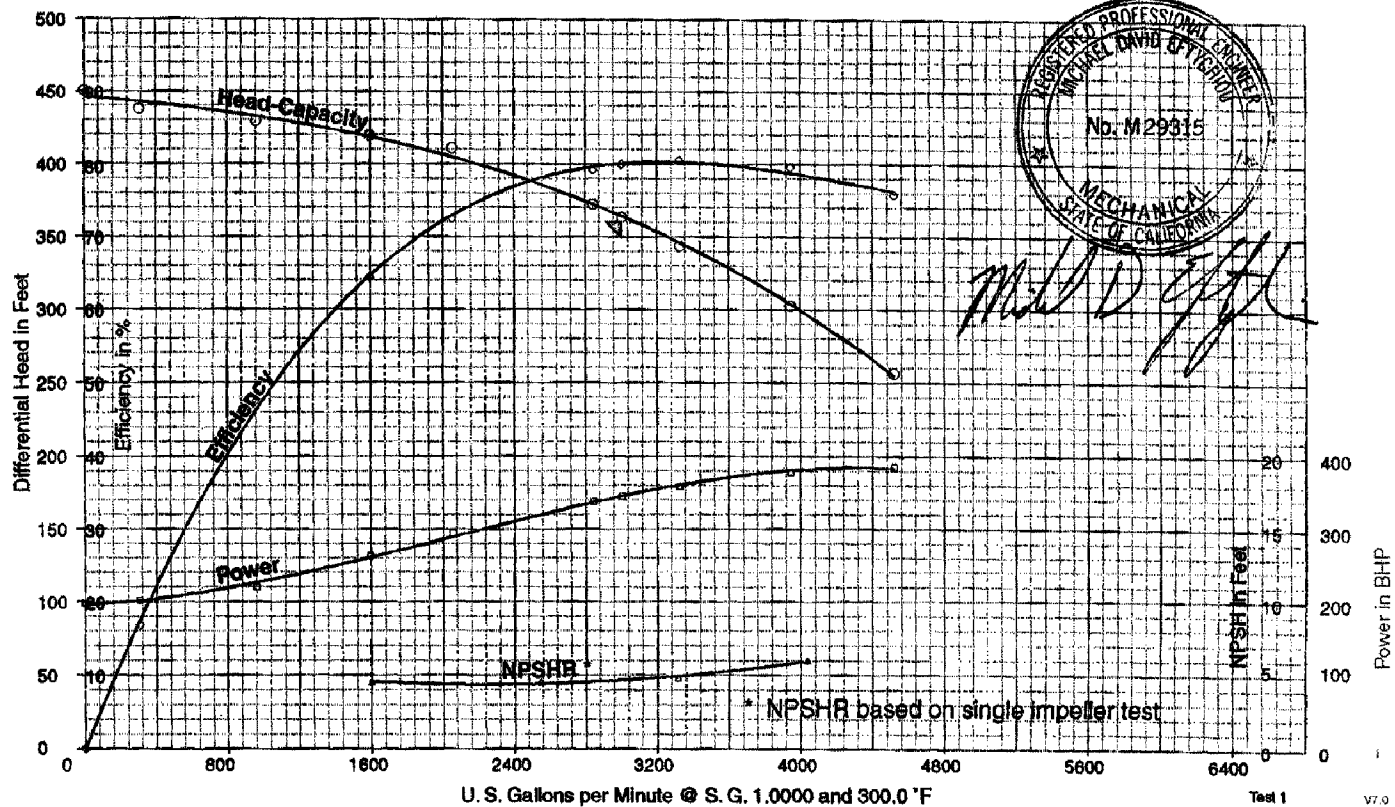
NOTE:

CURVE SHOWN IS CERTIFIED PUMP CURVE REDUCED BY 5% (18 FT.) THIS IS DONE BY TAKING 5% OF THE DEVELOPED HEAD AT THE DESIGN POINT ON THE PUMP CURVE AND APPLYING THIS CORRECTION (18 FT.) UNIFORMLY OVER THE ENTIRE CURVE.

INDIAN POINT 3 FSAR UPDATE
RESIDUAL HEAT
REMOVAL PUMP PERFORMANCE
REV. 1, JULY 1993 FIGURE NO. 6.2-3



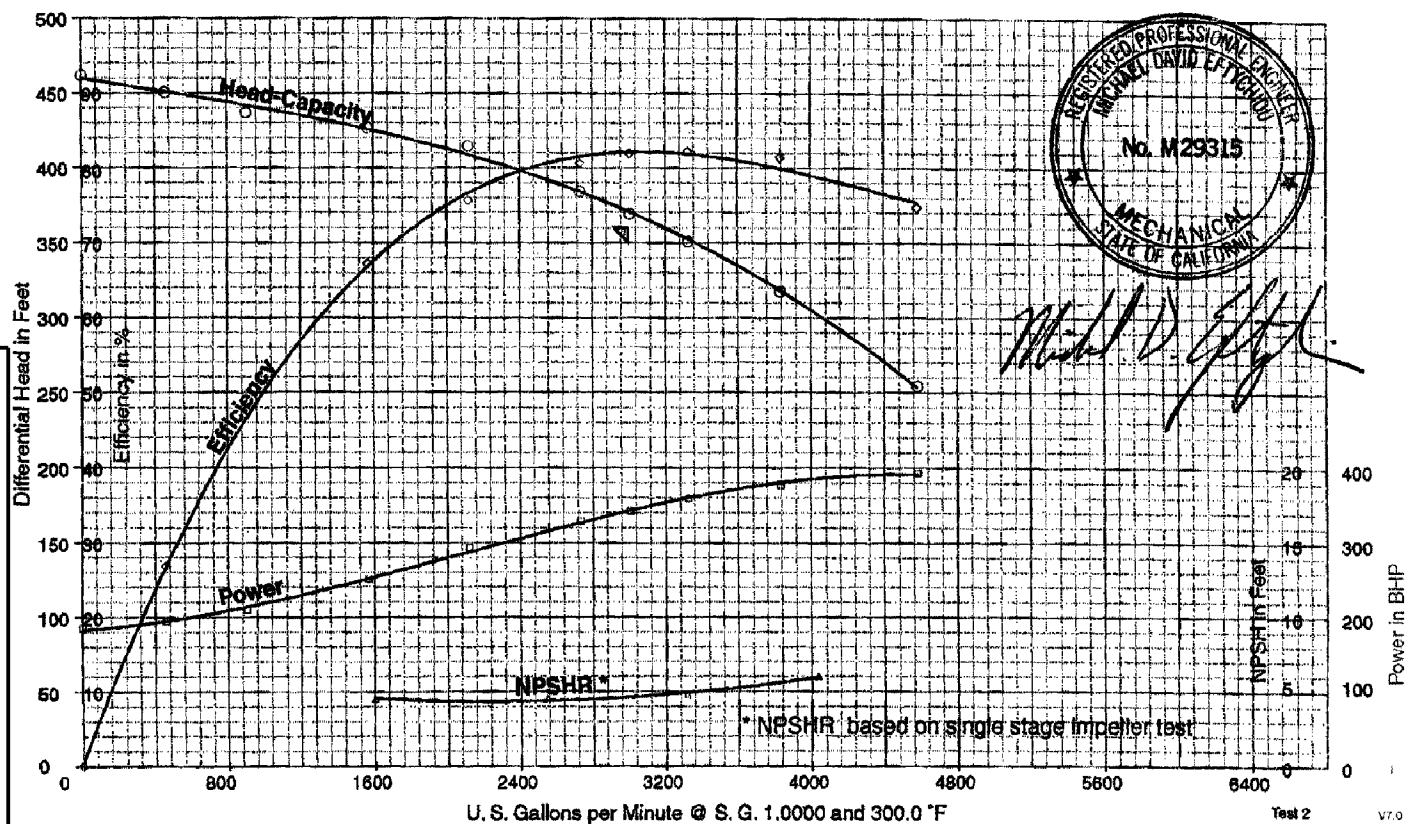
Michael D. Tichauer

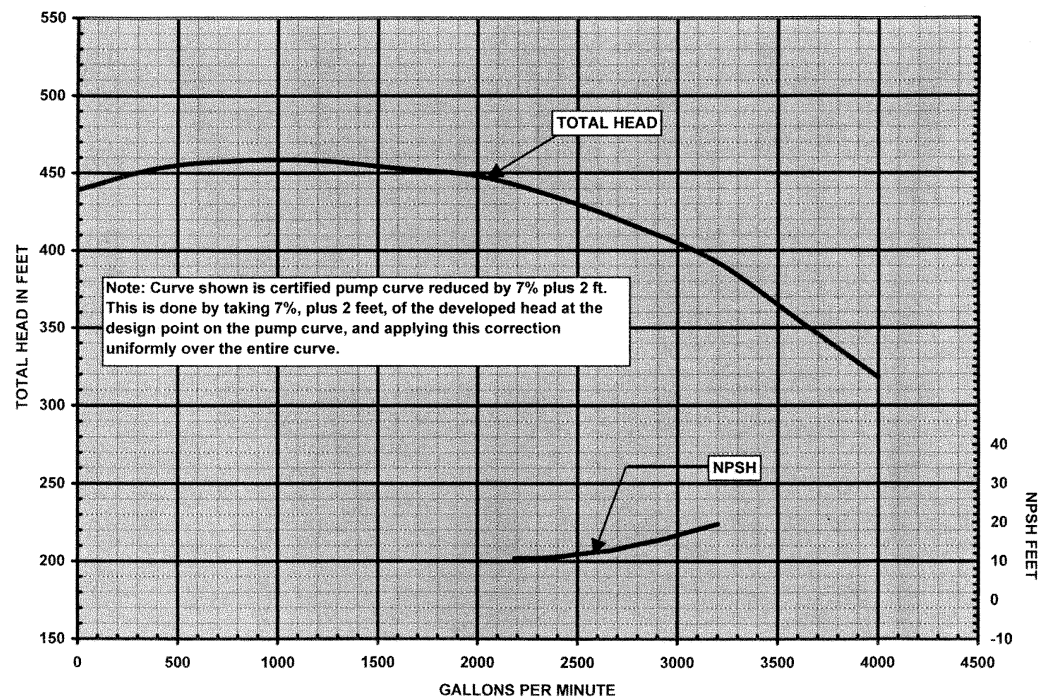


UFSAR FIGURE 6.2-4B REV. NO. 02

RECIRCULATION PUMP
SERIAL #2 - PUMP 32
PERFORMANCE

INDIAN POINT UNIT NO. 3



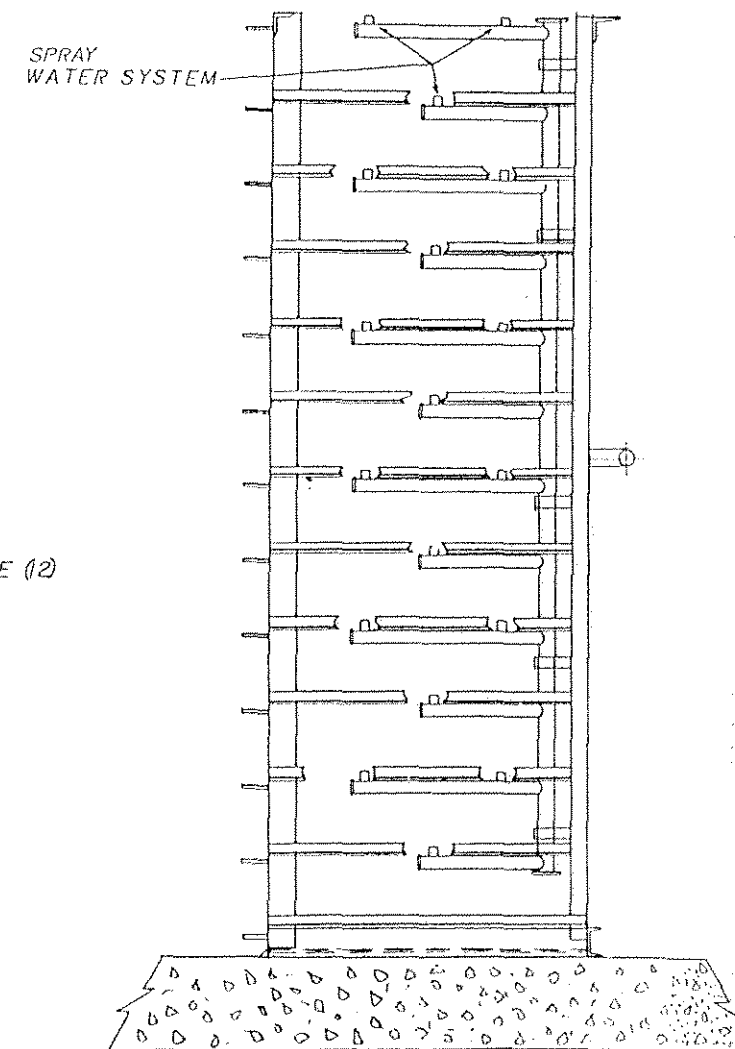
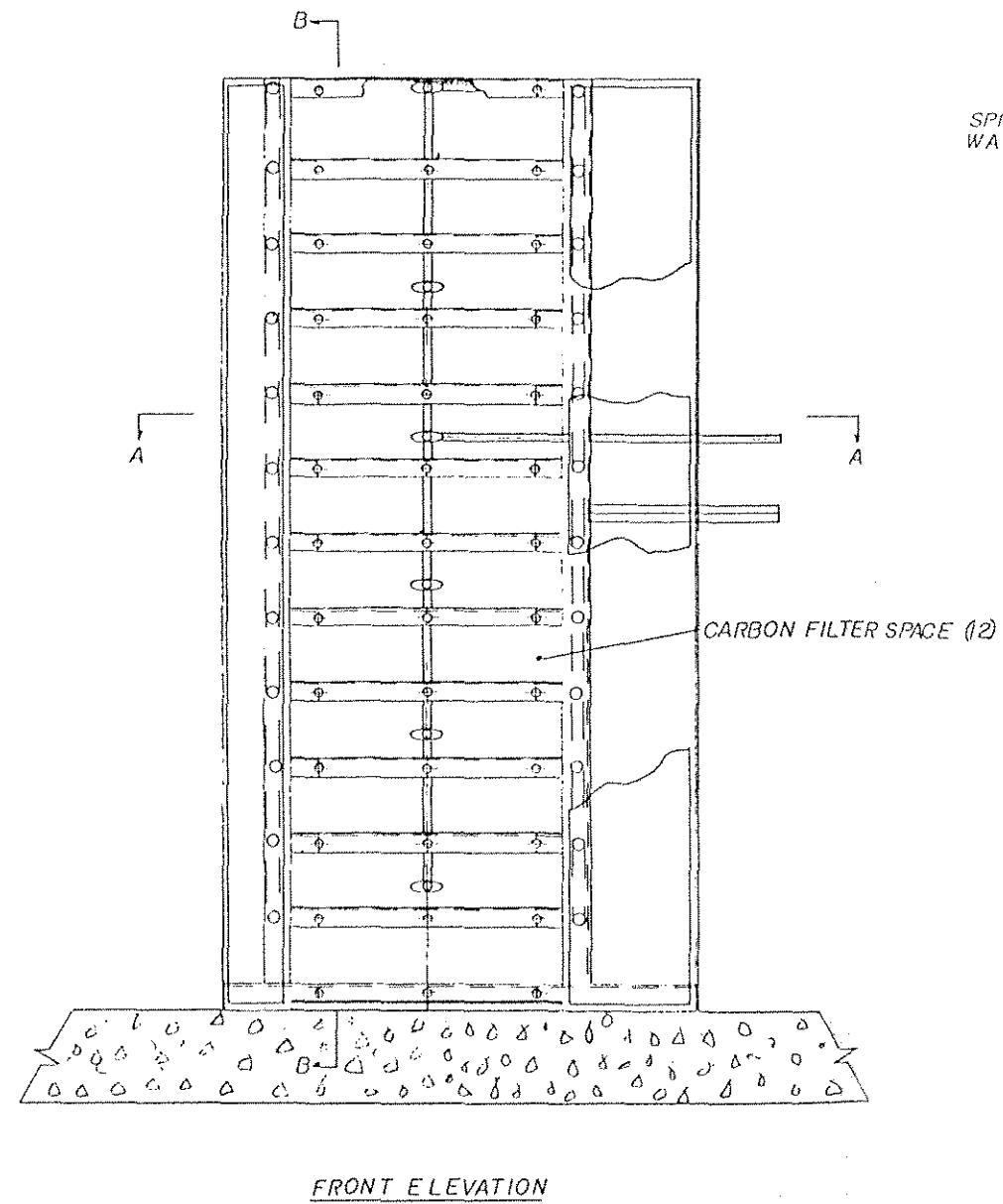
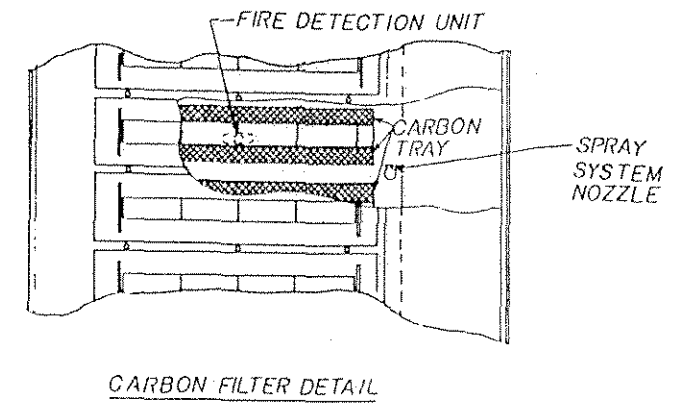
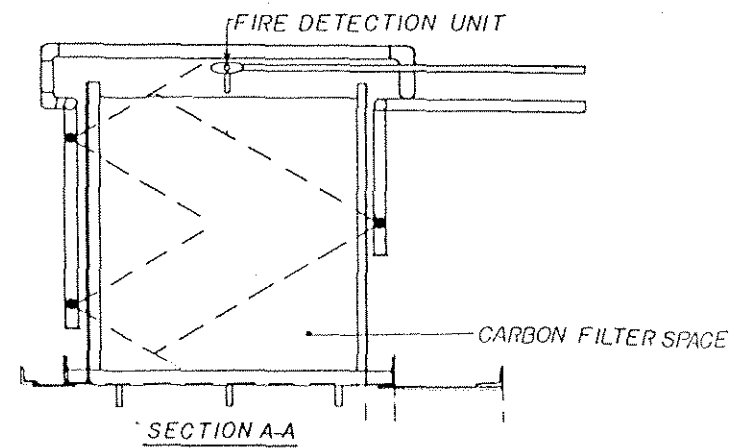


INDIAN POINT UNIT No. 3

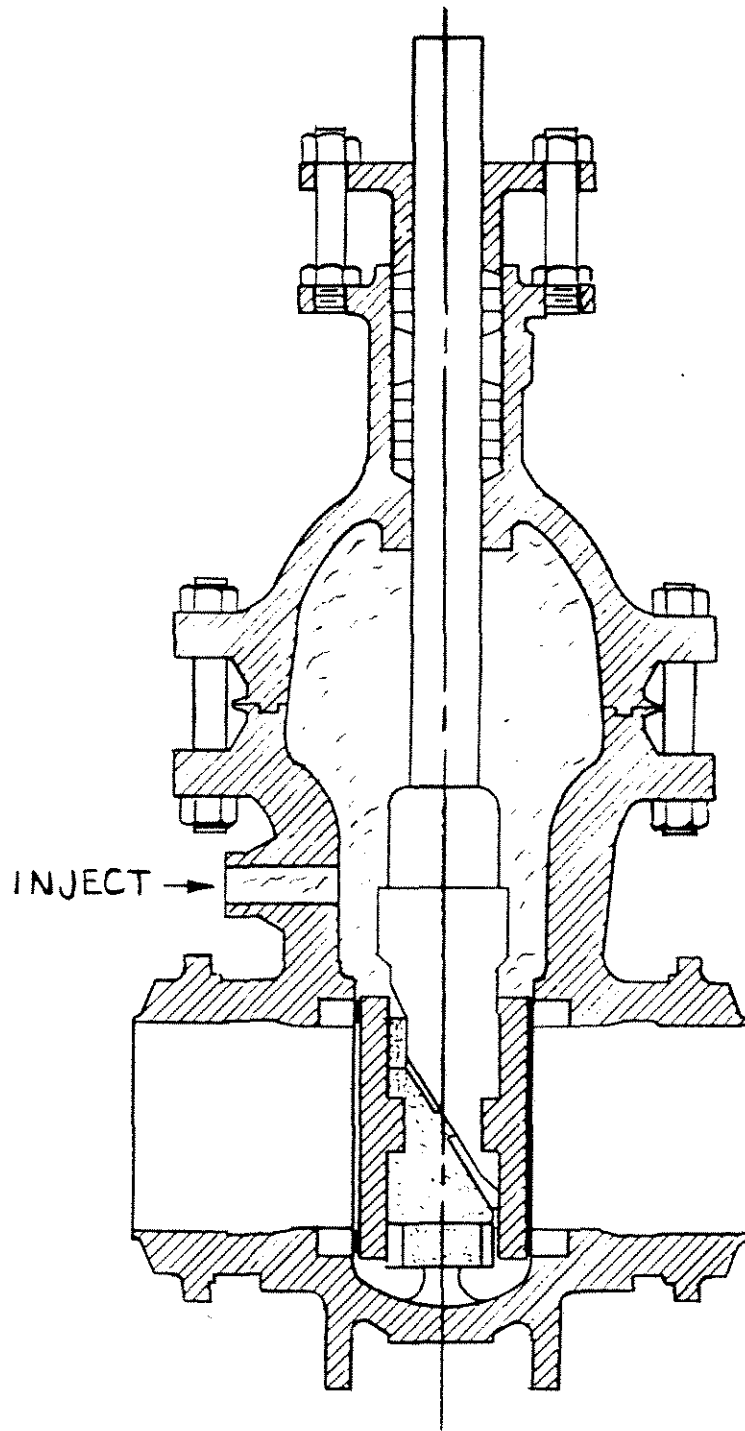
CONTAINMENT SPRAY PUMP
PERFORMANCE CHARACTERISTICS

UFSAR FIGURE 6.3-1

REV. No. 01



INDIAN POINT 3		FSAR UPDATE	
FIRE DETECTION, SPRAY WATER AND CARBON CELL BANKING ARRANGEMENT			
REV. 0	JULY, 1982	FIGURE NO.	6.4-4



DOUBLE DISK ISOLATION VALVE WITH SEAL WATER
INJECTION

INDIAN POINT 3

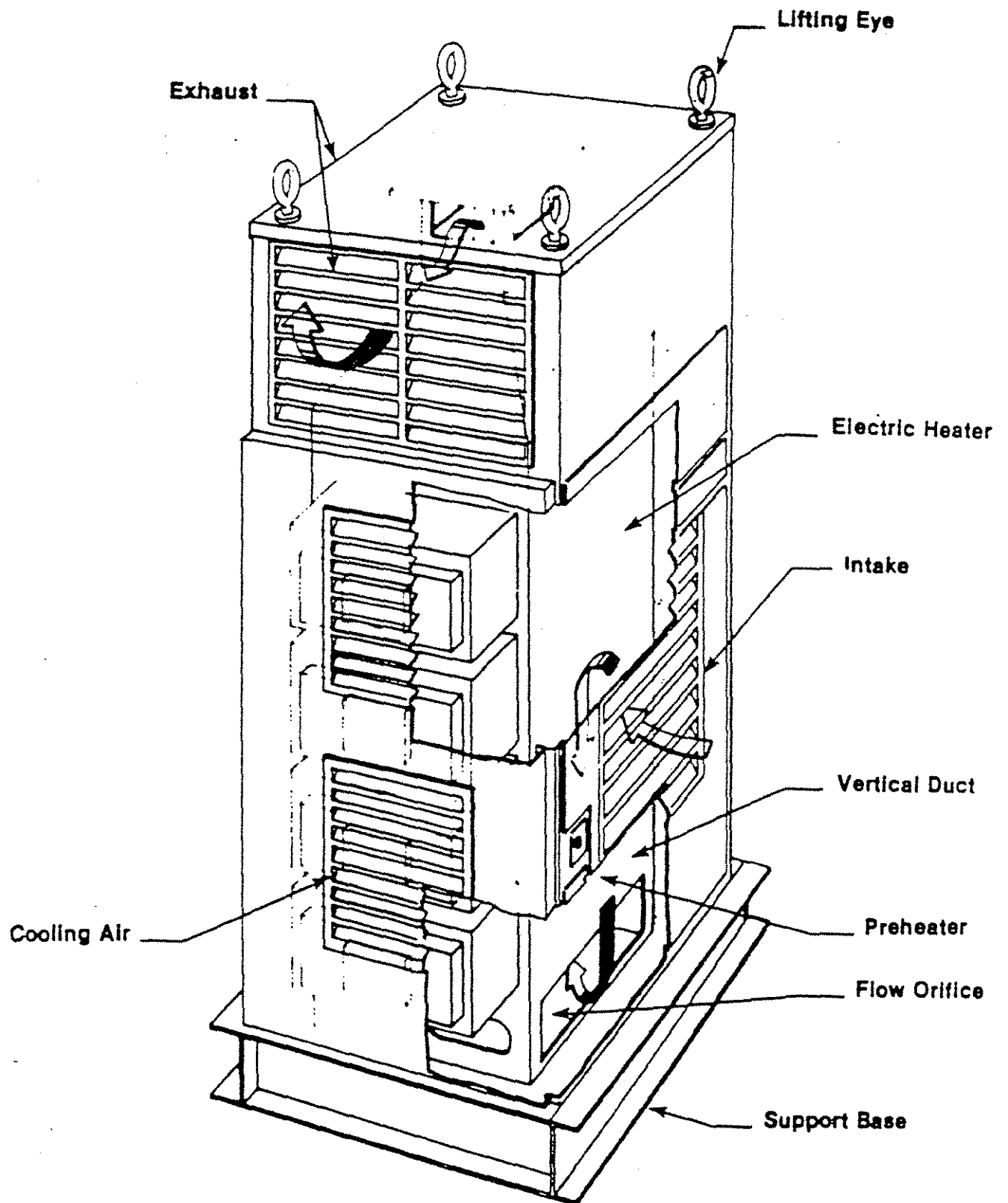
FSAR UPDATE

DOUBLE DISK ISOLATION VALVE
WITH SEAL WATER INJECTION

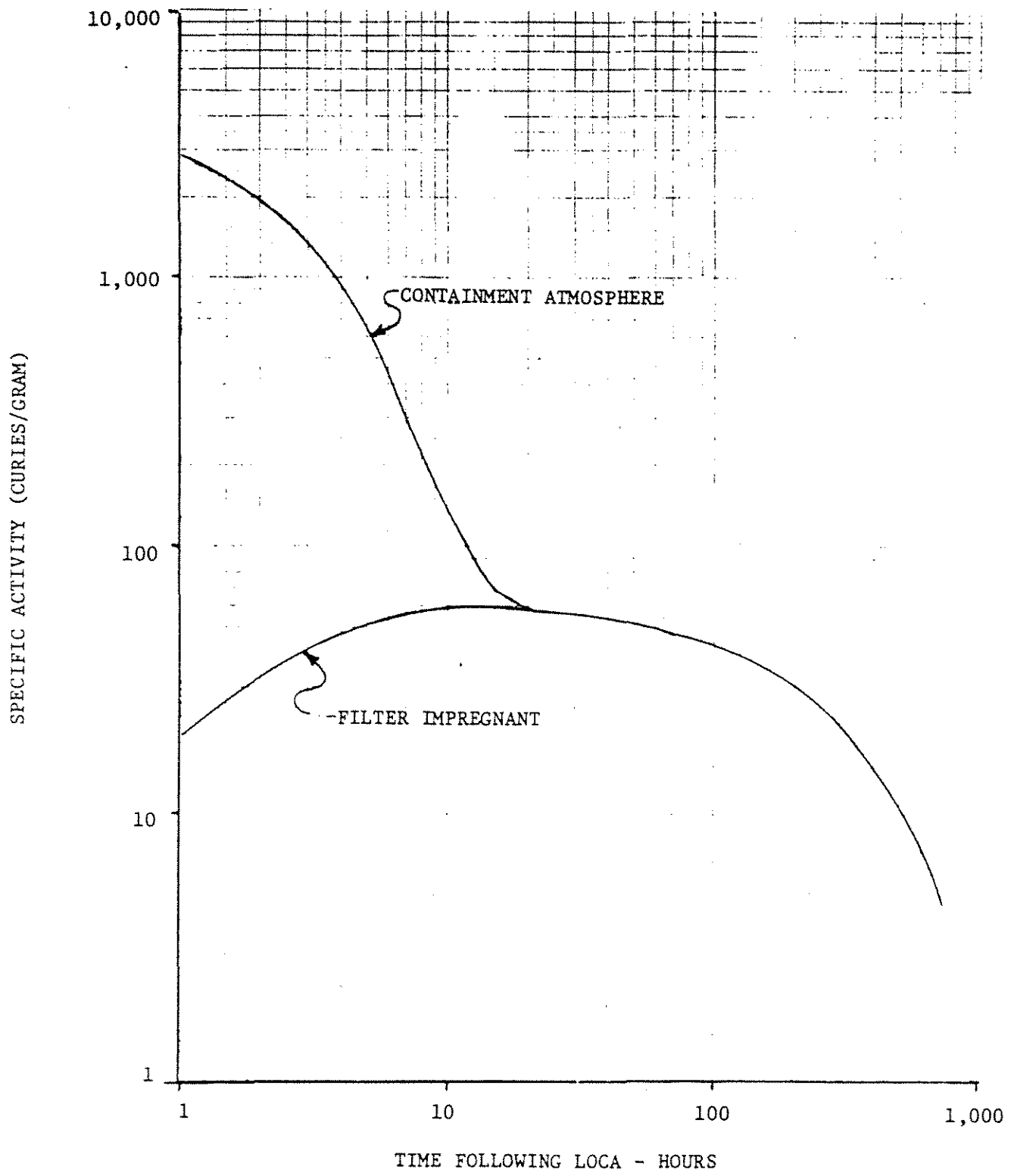
REV. 0

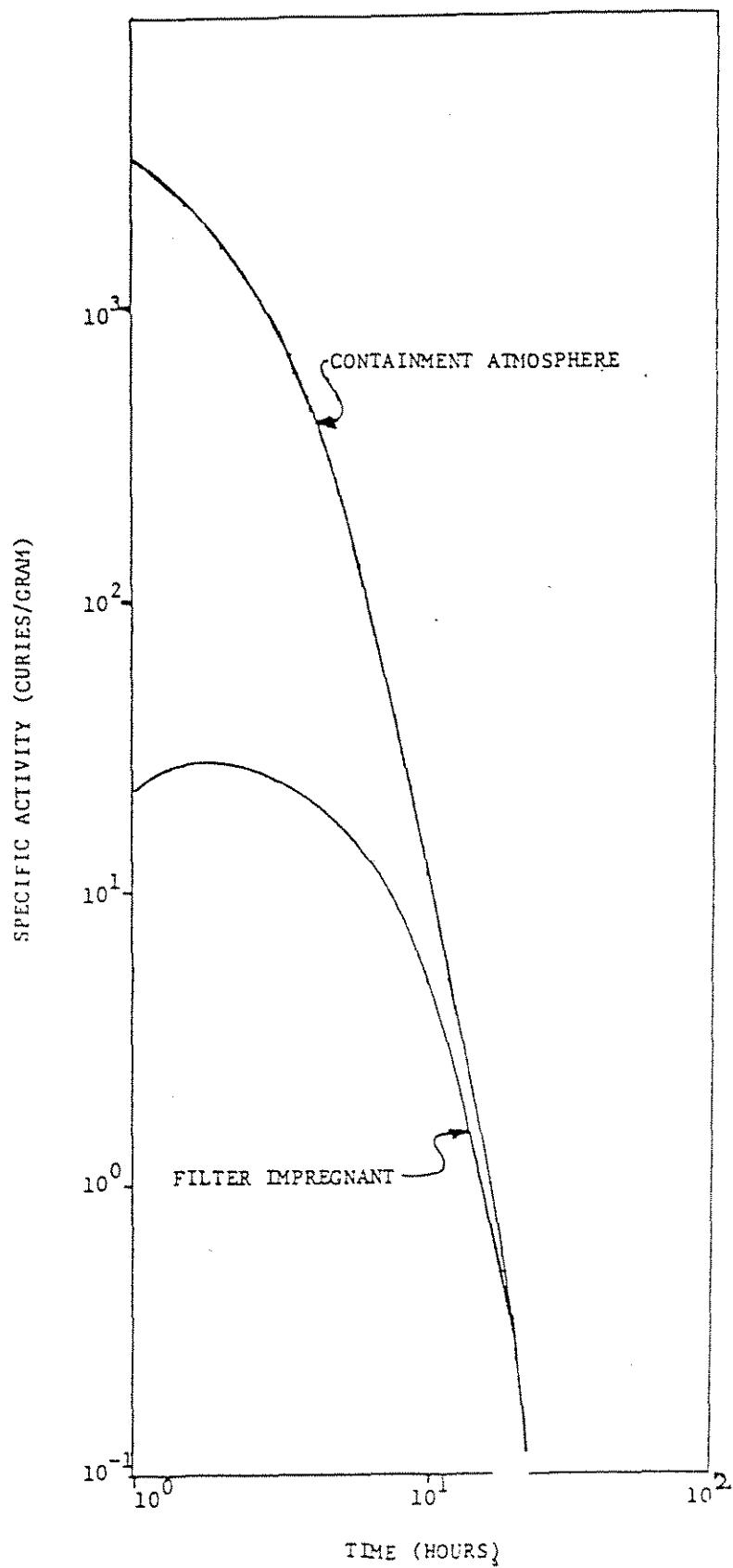
JULY, 1982

FIGURE NO. 6.5-2

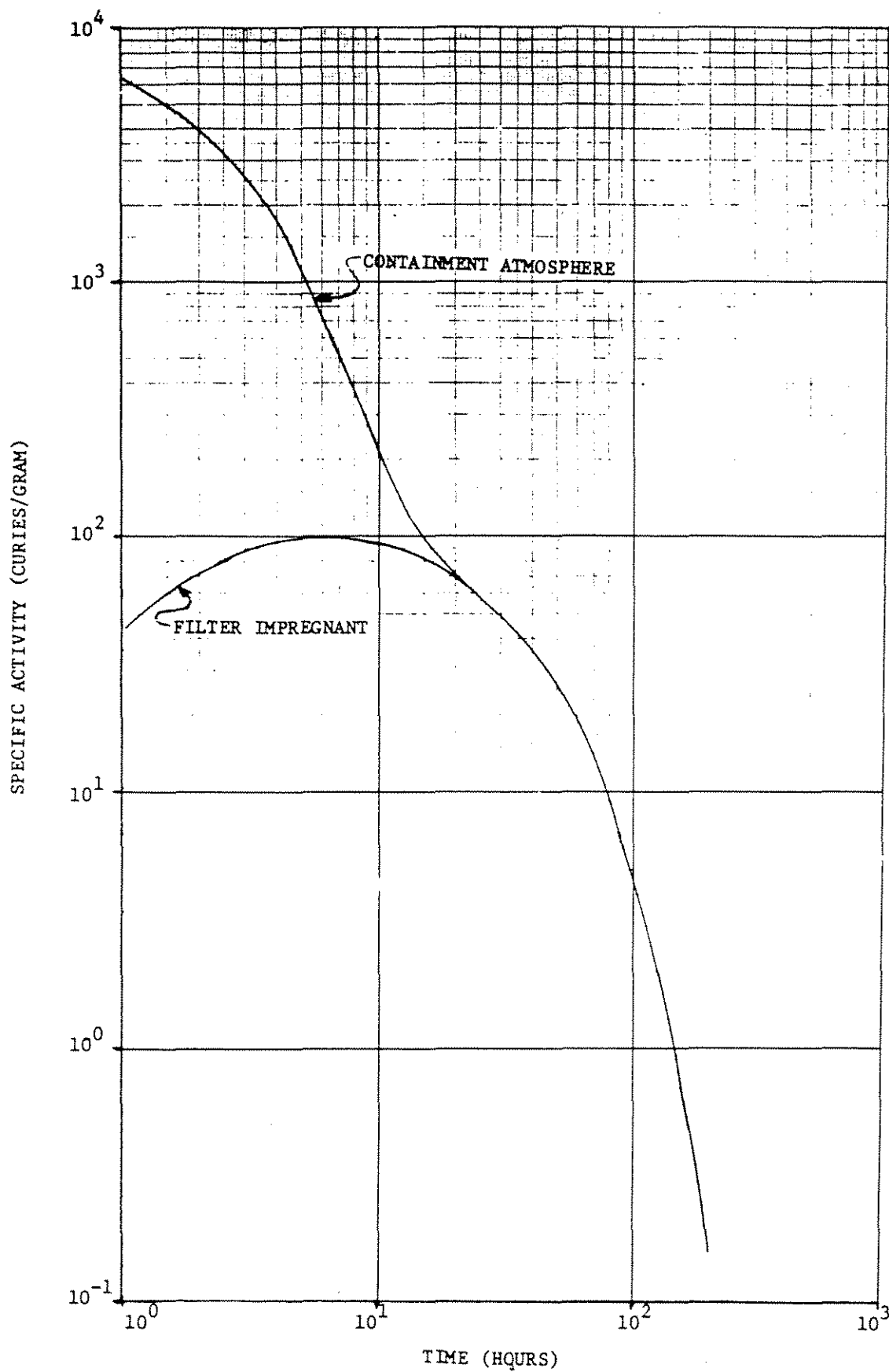


INDIAN POINT 3		FSAR UPDATE	
MODEL B ELECTRIC HYDROGEN RECOMBINER			
REV. 1, JULY 1993		FIGURE NO. 6.8-1	





INDIAN POINT 3		FSAR UPDATE
SPECIFIC ACTIVITY OF I-132 - 70% FILTER		
REV. 0	JULY, 1982	FIGURE NO. 6C-2



INDIAN POINT 3

FSAR UPDATE

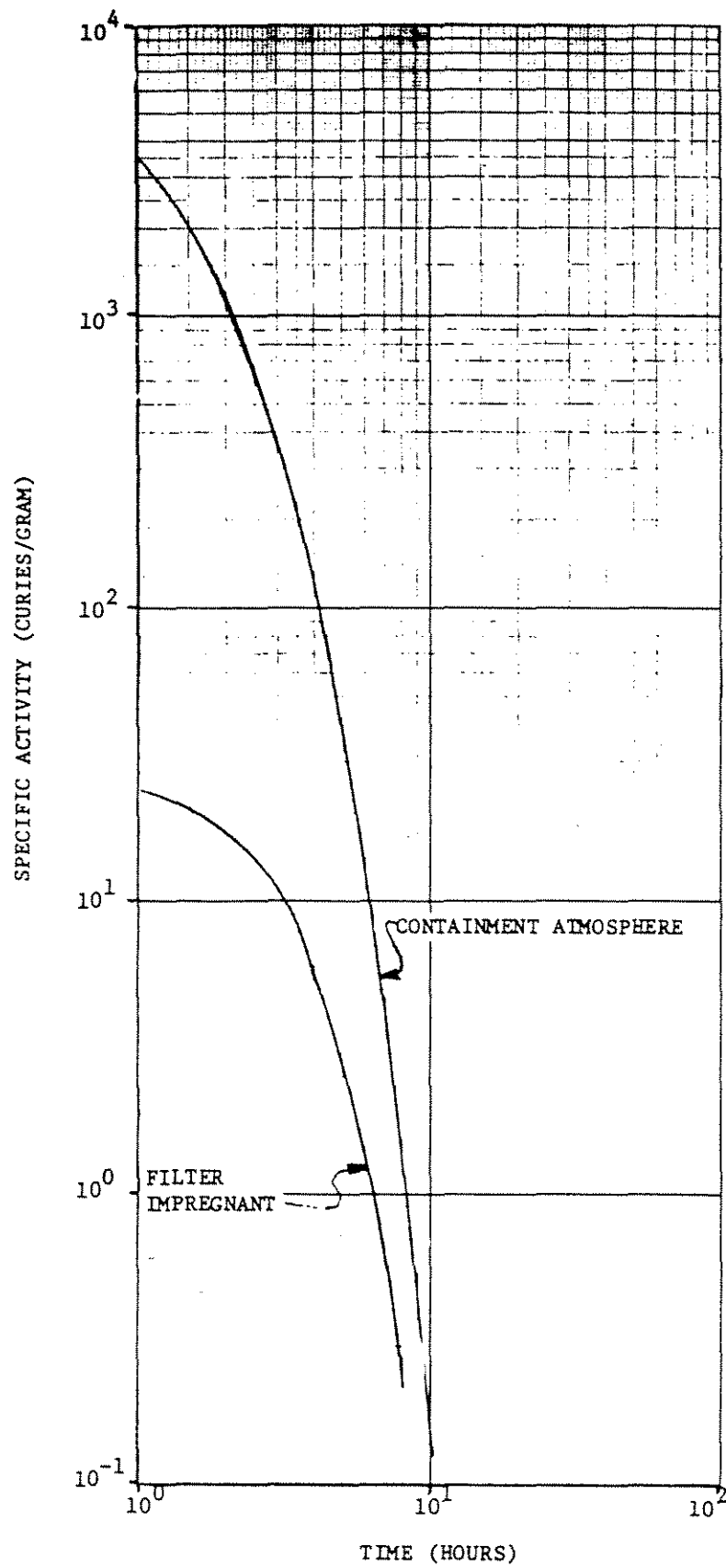
SPECIFIC ACTIVITY OF I-133 - 70% FILTER

REV. 0

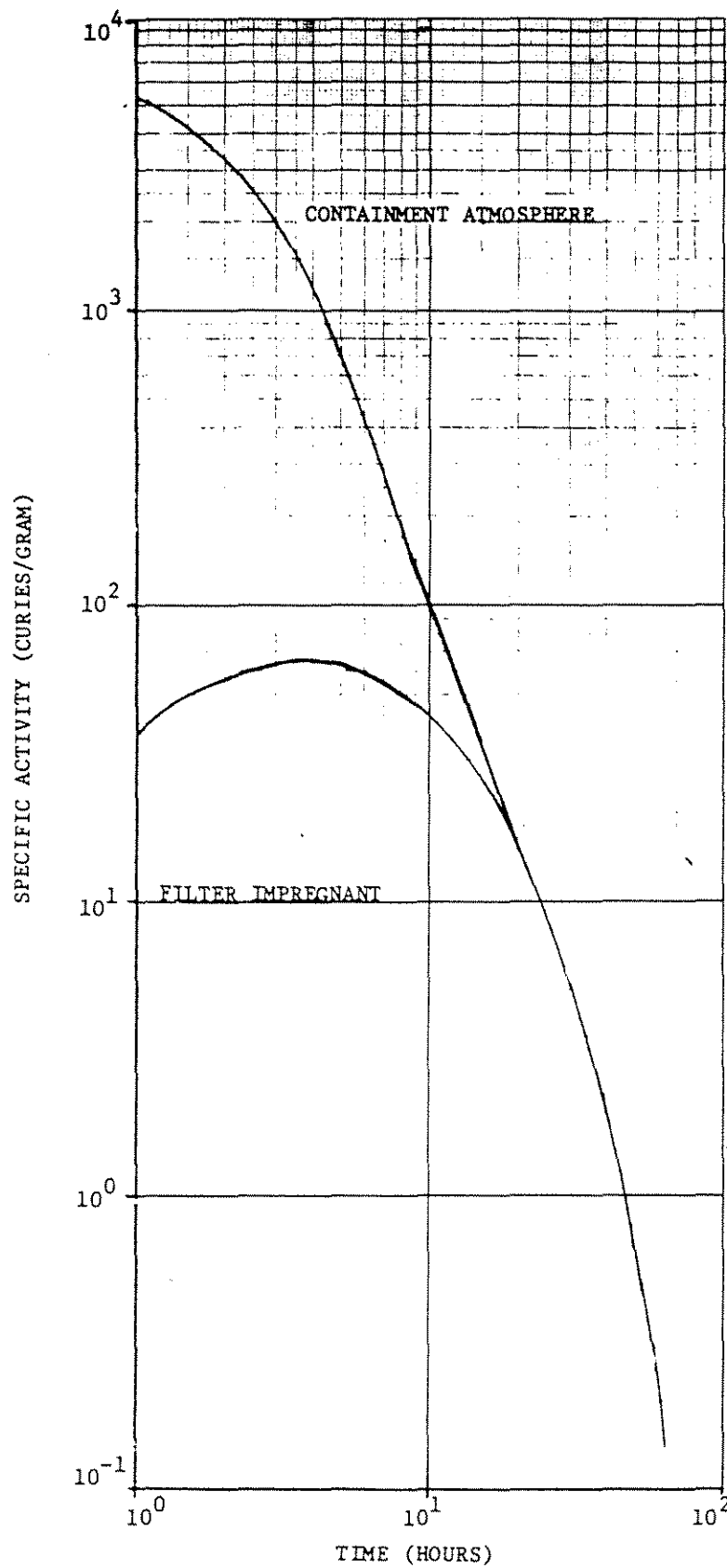
JULY, 1982

FIGURE NO.

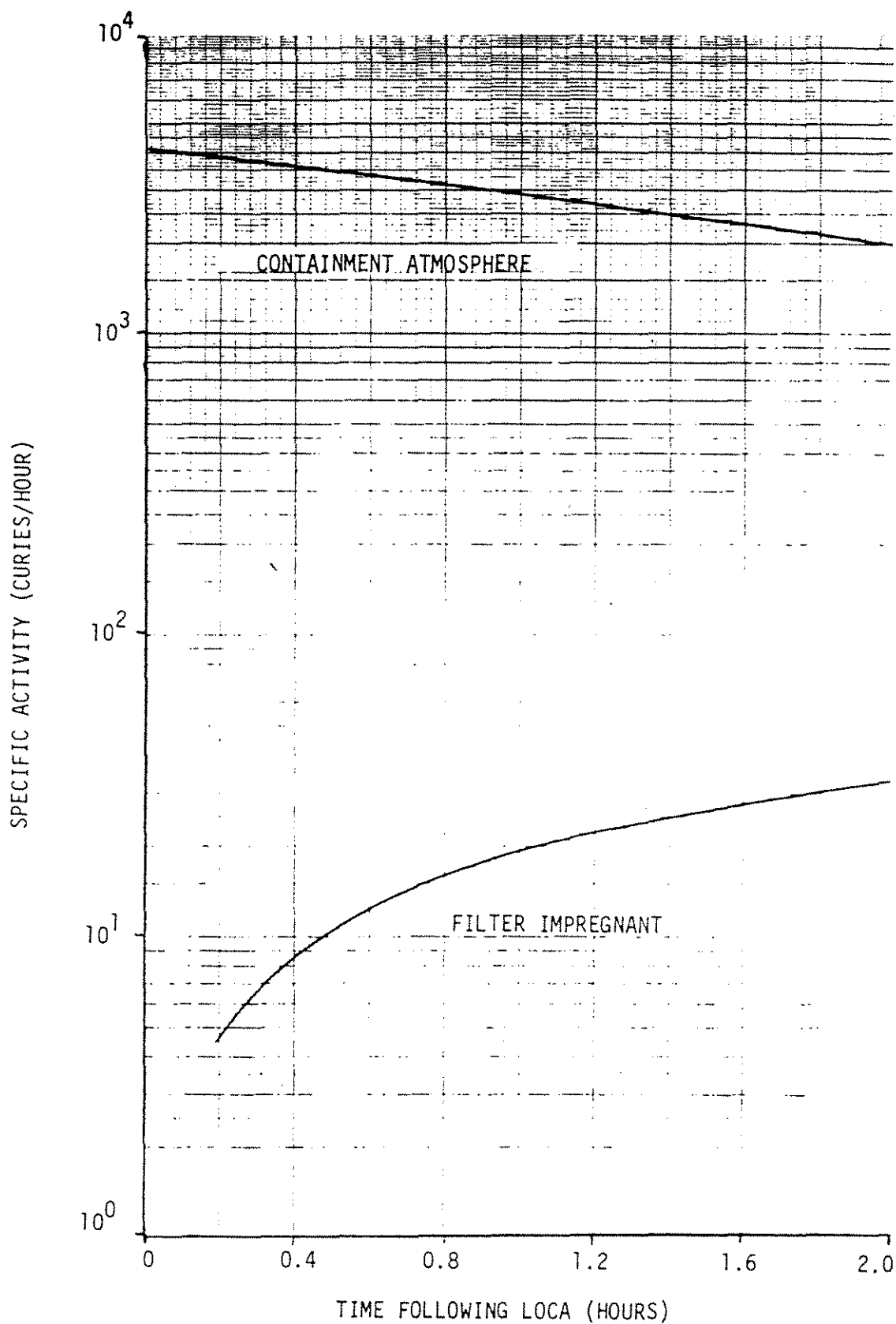
6C-3



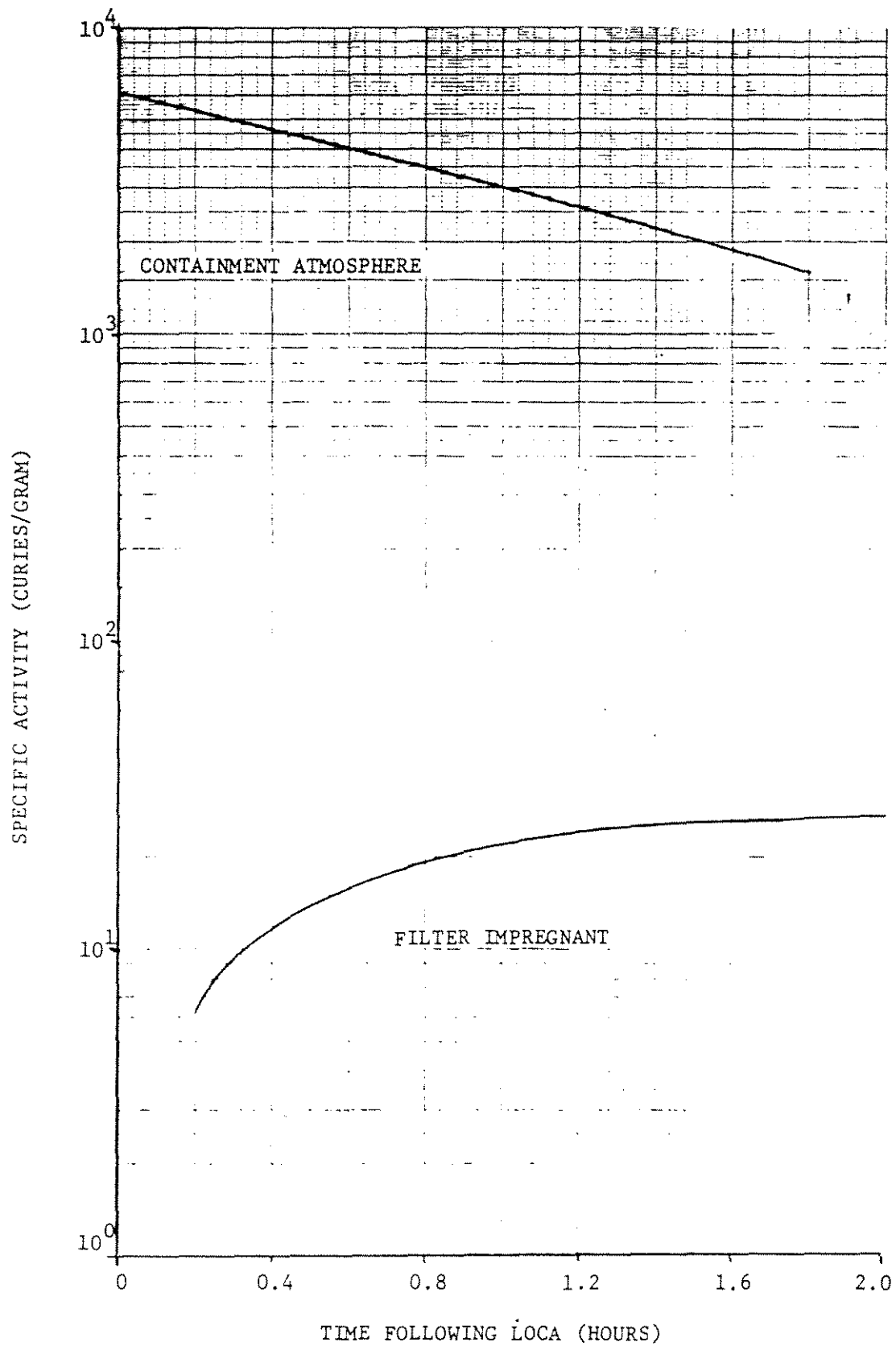
INDIAN POINT 3		FSAR UPDATE	
SPECIFIC ACTIVITY OF I-134 - 70% FILTER			
REV. 0	JULY, 1982	FIGURE NO.	6C-4



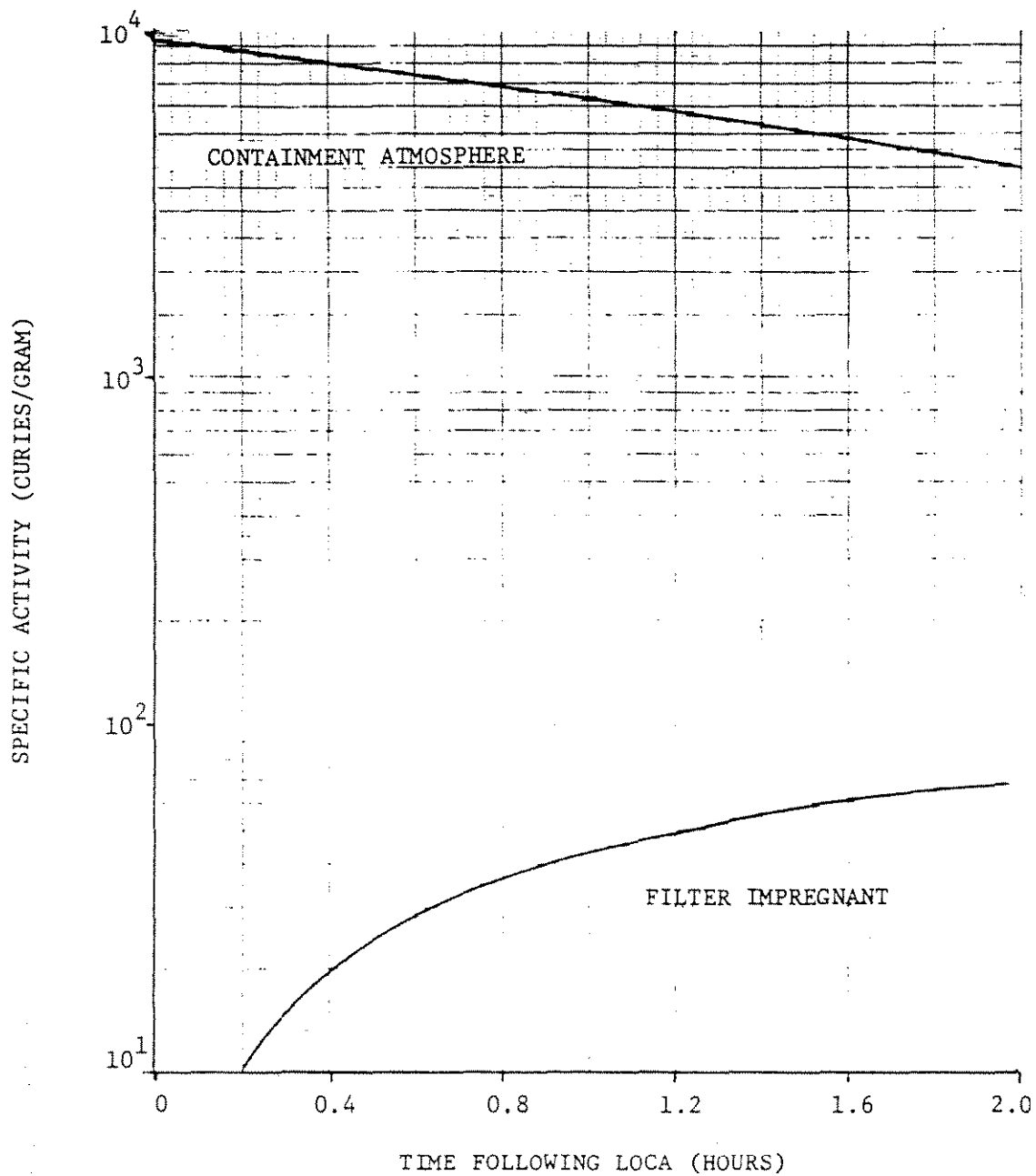
INDIAN POINT 3		FSAR UPDATE	
SPECIFIC ACTIVITY OF I-135 - 70% FILTER			
REV. 0	JULY, 1982	FIGURE NO.	6C-5



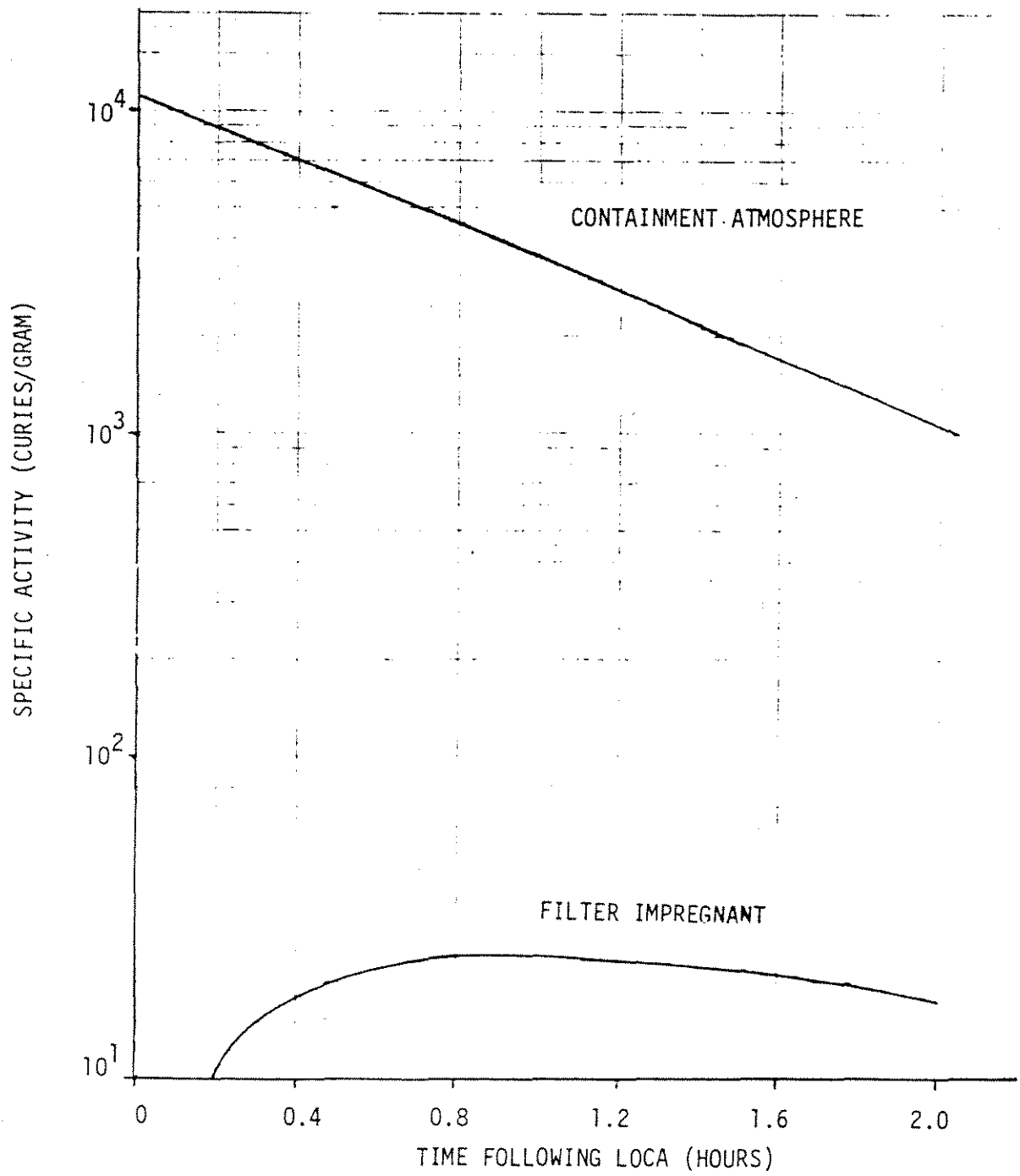
INDIAN POINT 3		FSAR UPDATE
SPECIFIC ACTIVITY OF I-131 - 70% FILTER		
REV. 0	JULY, 1982	FIGURE NO. 6C-6



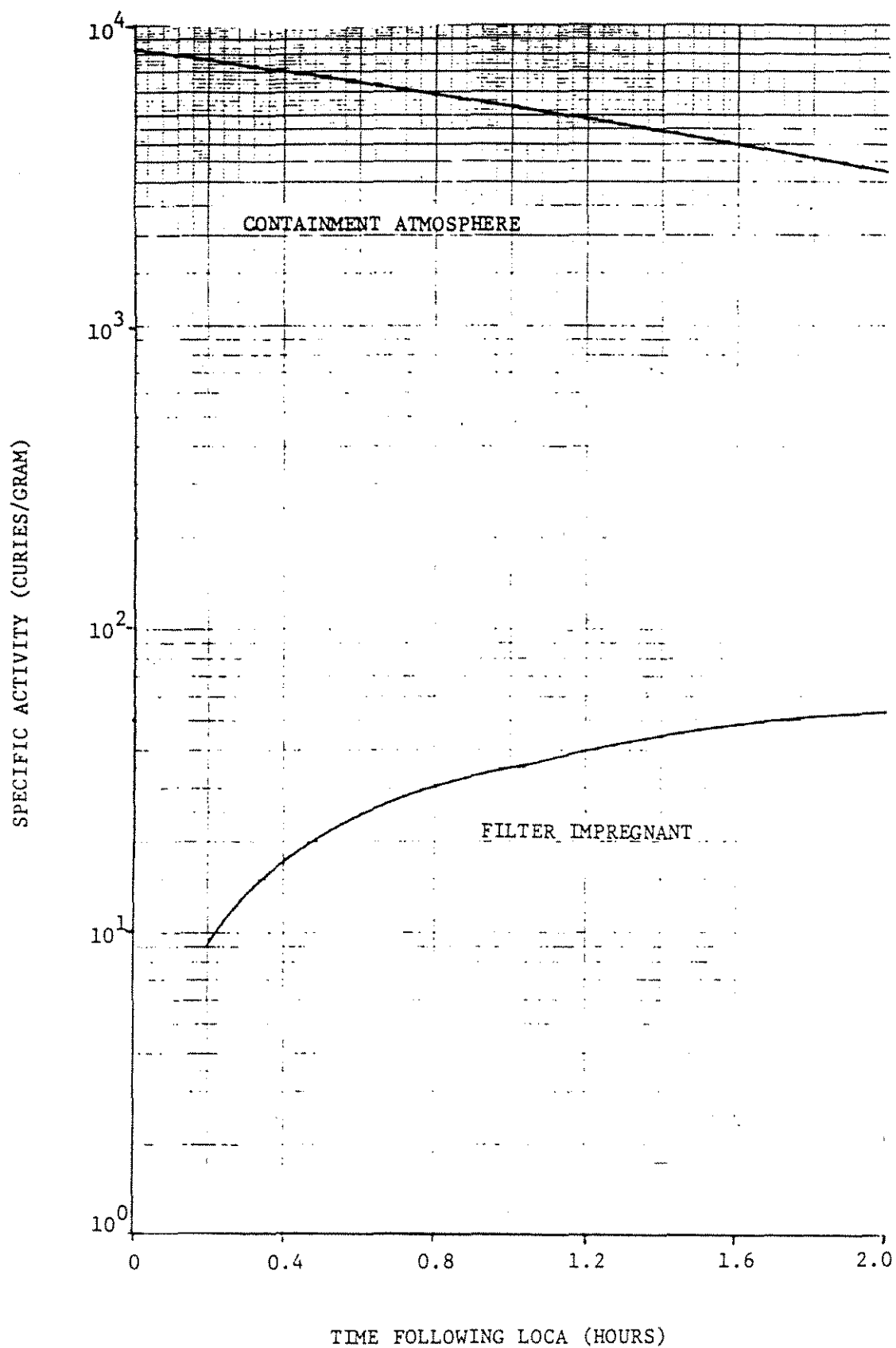
INDIAN POINT 3		FSAR UPDATE	
SPECIFIC ACTIVITY OF I-132 — 70% FILTER			
REV. 0	JULY, 1982	FIGURE NO. 6C-7	



INDIAN POINT 3		FSAR UPDATE
SPECIFIC ACTIVITY OF I-133 - 70% FILTER		
REV. 0	JULY, 1982	FIGURE NO. 6C-8



INDIAN POINT 3		FSAR UPDATE
SPECIFIC ACTIVITY OF I-134 - 70% FILTER		
REV. 0	JULY, 1982	FIGURE NO. 6C-9



INDIAN POINT 3

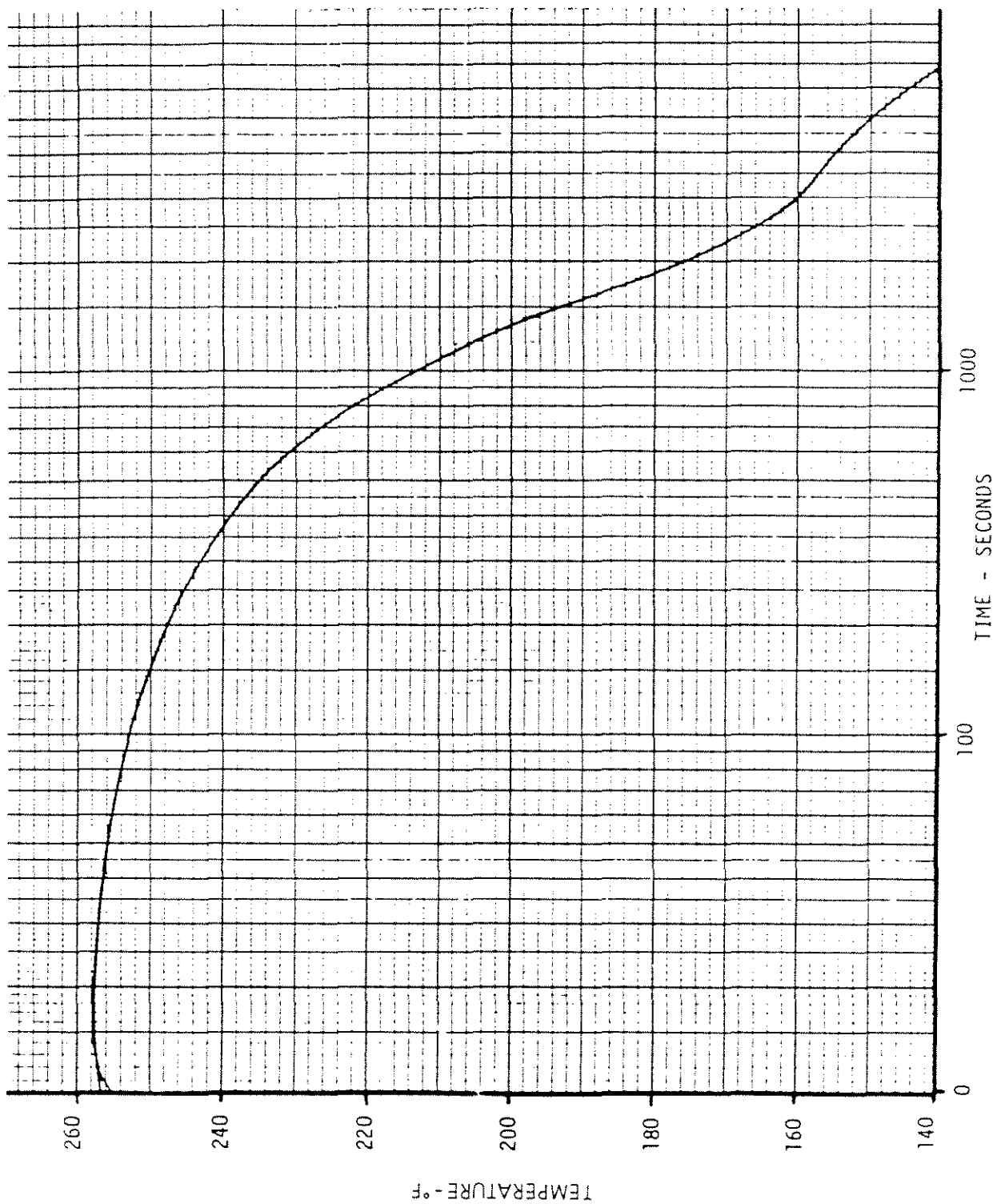
FSAR UPDATE

SPECIFIC ACTIVITY OF I-135 - 70% FILTER

REV. 0

JULY, 1982

FIGURE NO. 6C-10



INDIAN POINT 3

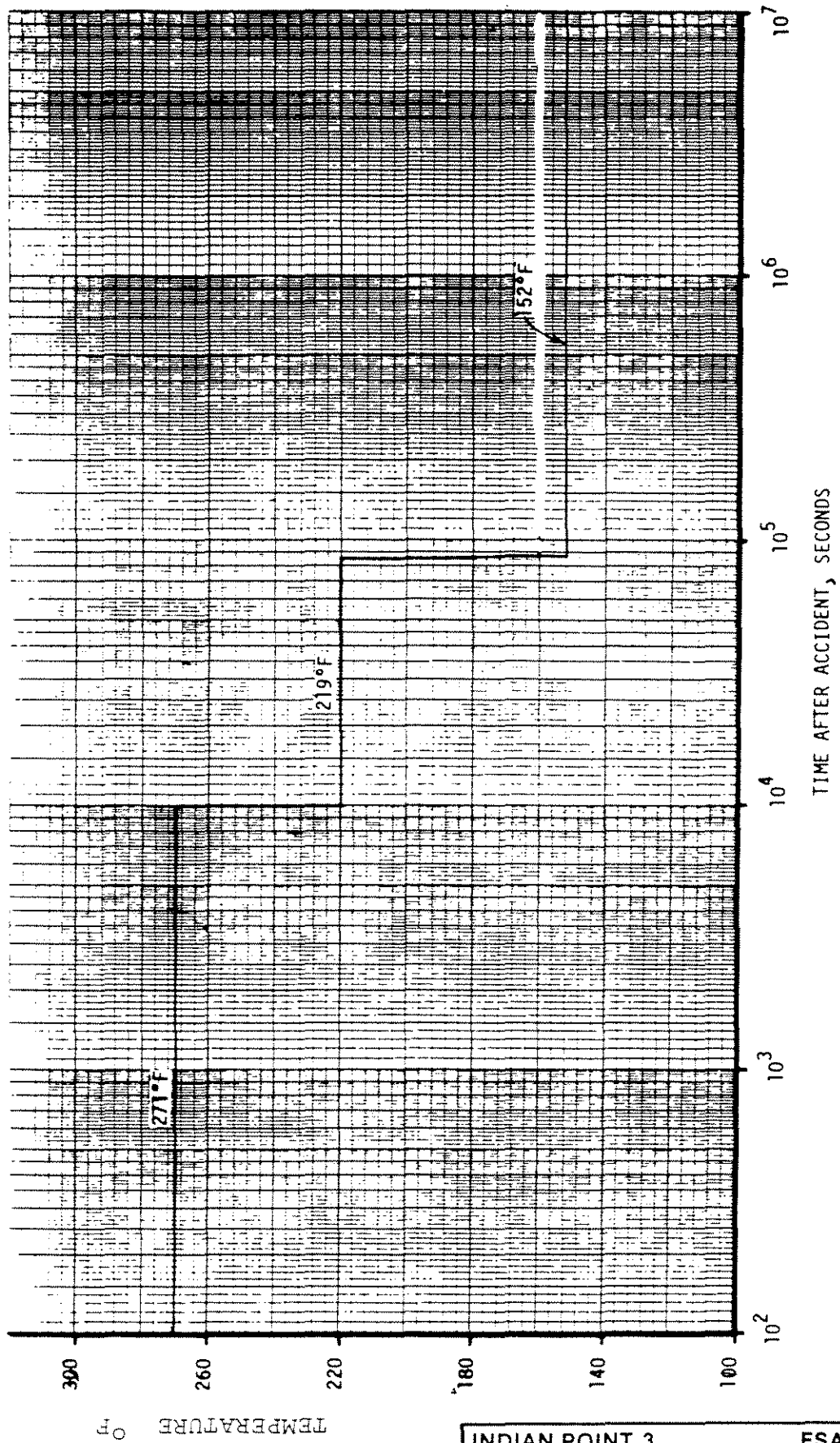
FSAR UPDATE

CONTAINMENT ATMOSPHERE TEMPERATURE
DESIGN BASES SAFETY INJECTION

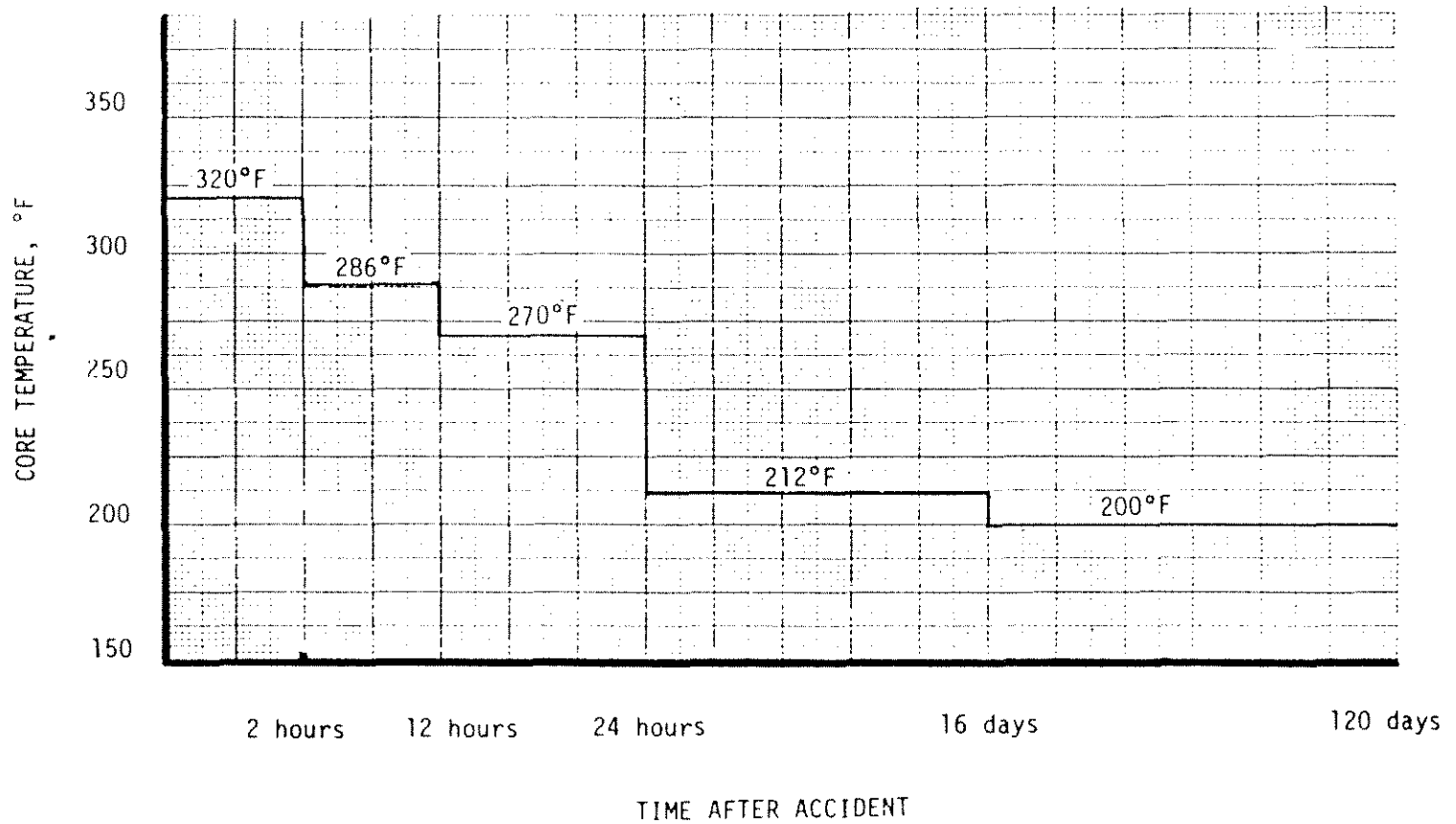
REV 0

JULY, 1982

FIGURE NO 6D-1

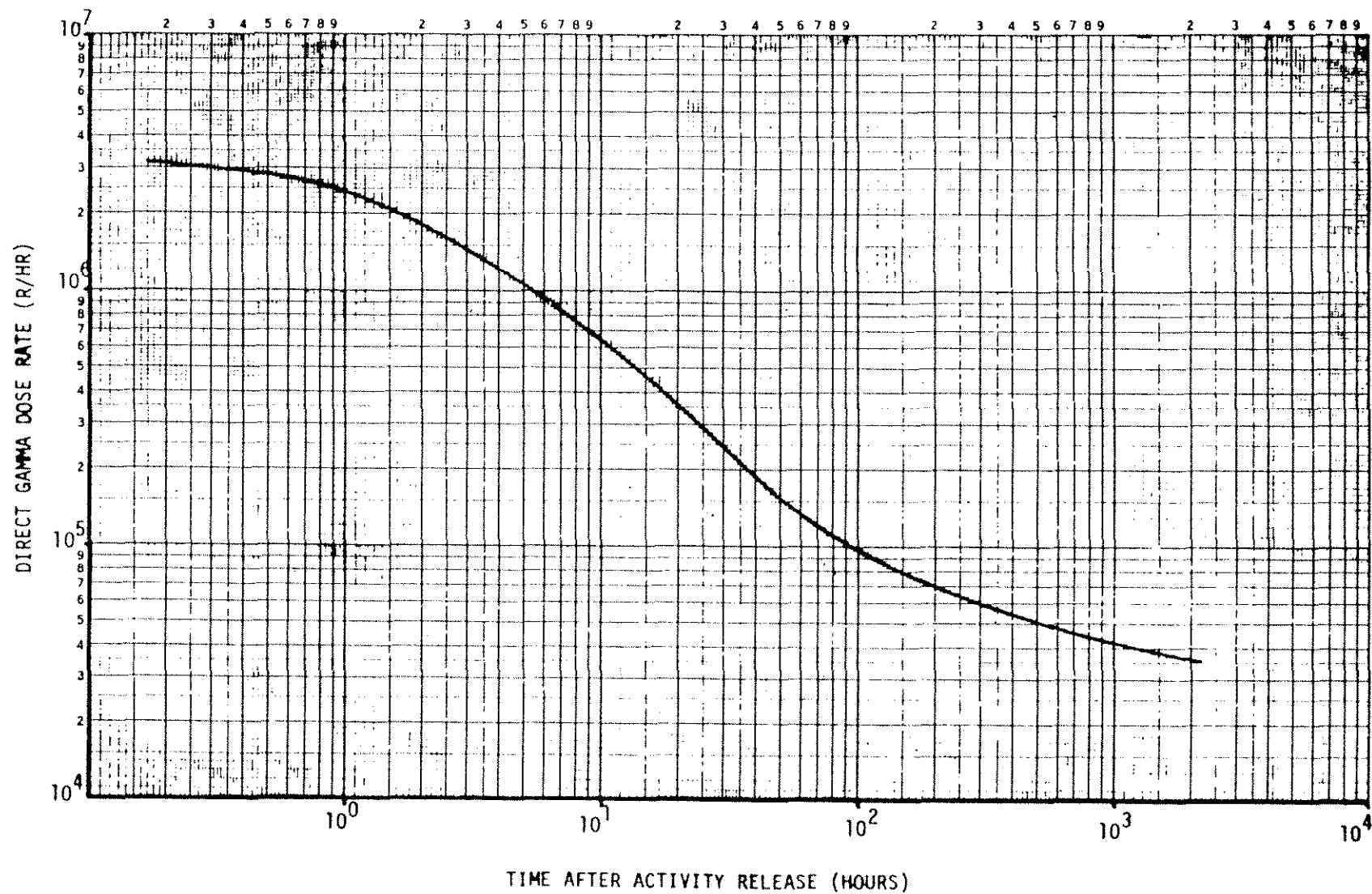


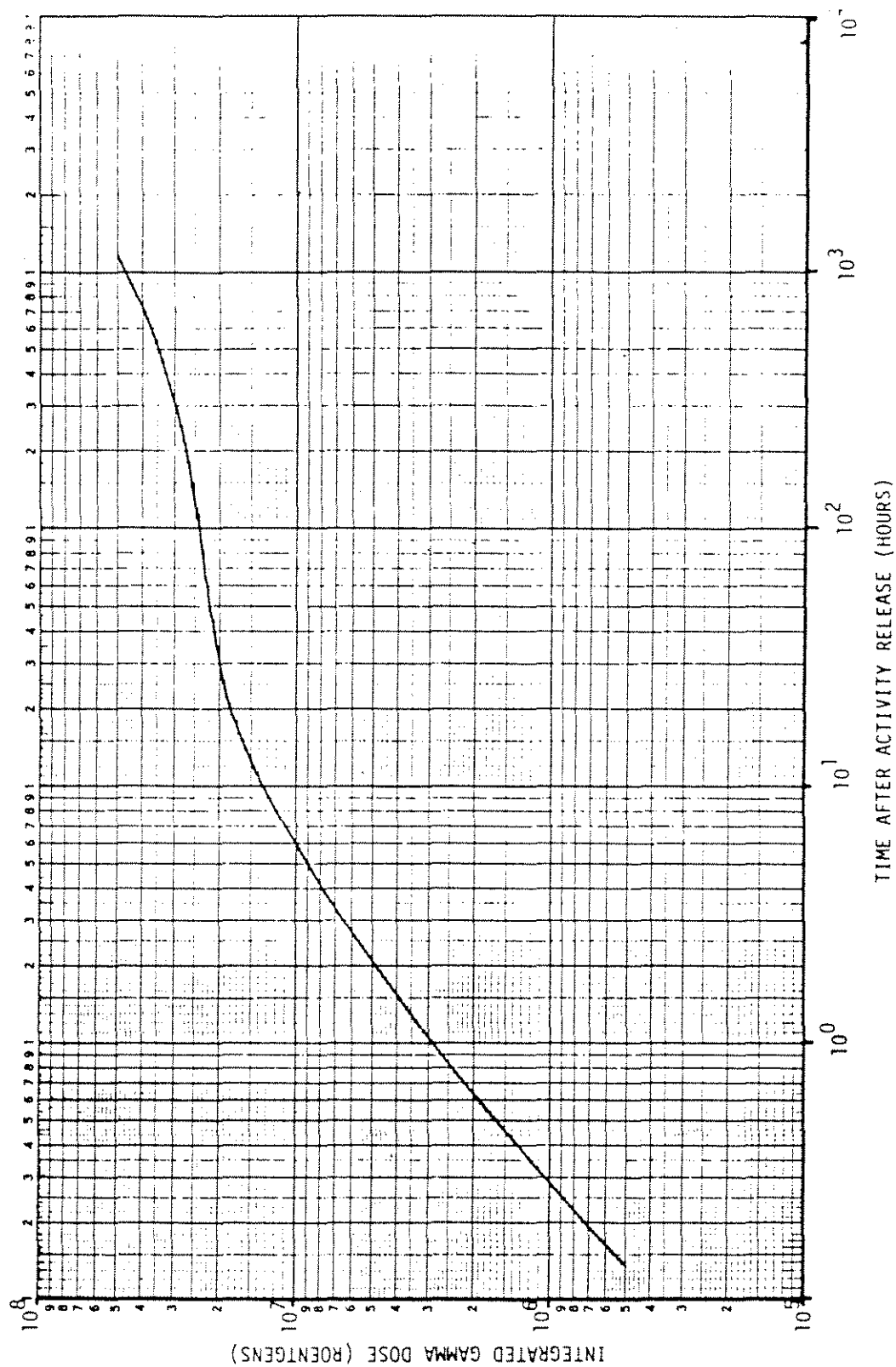
INDIAN POINT 3		FSAR UPDATE	
POST-ACCIDENT CONTAINMENT MATERIALS DESIGN CONDITIONS			
REV 0	JULY, 1982	FIGURE NO	6D-2



INDIAN POINT 3	FSAR UPDATE
POST-ACCIDENT CORE MATERIALS DESIGN CONDITIONS	
REV. 0	FIGURE NO. 6D-3
JULY, 1982	

INDIAN POINT 3	FSAR UPDATE
CONTAINMENT ATMOSPHERE DIRECT GAMMA DOSE LEVEL	
REV 0	FIGURE NO. 6D-4
JULY 1982	





INDIAN POINT 3

FSAR UPDATE

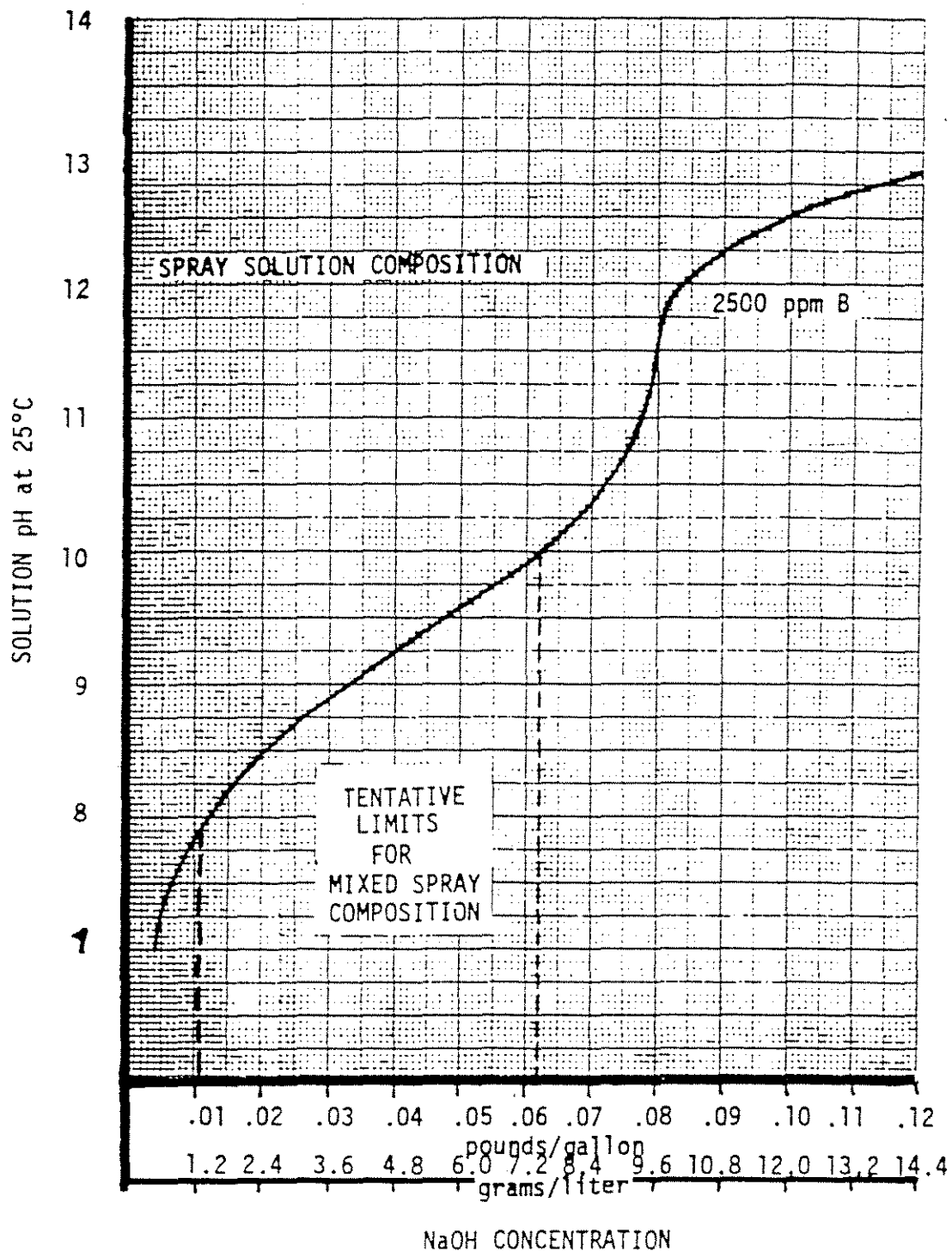
CONTAINMENT ATMOSPHERE
INTEGRATED GAMMA DOSE LEVEL

REV. 0

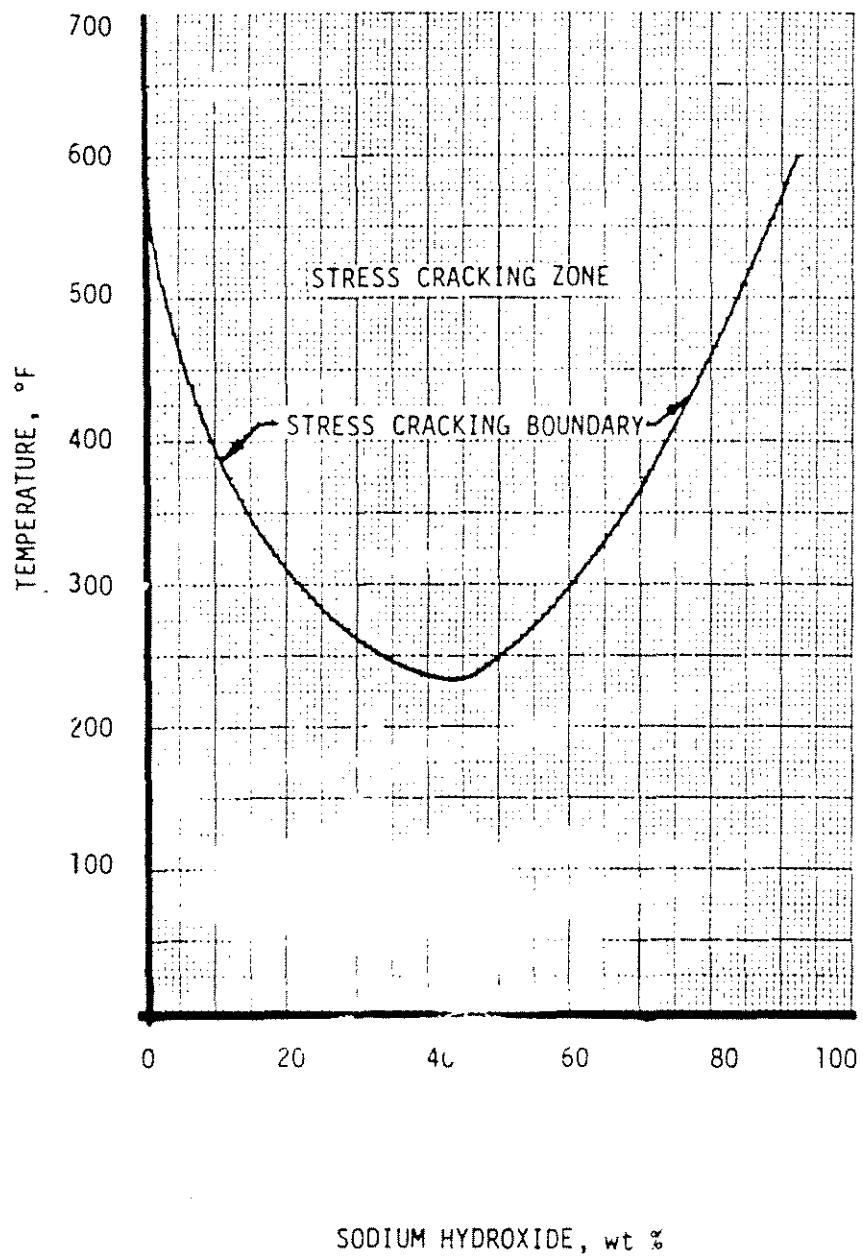
JULY, 1982

FIGURE NO.

6D-5

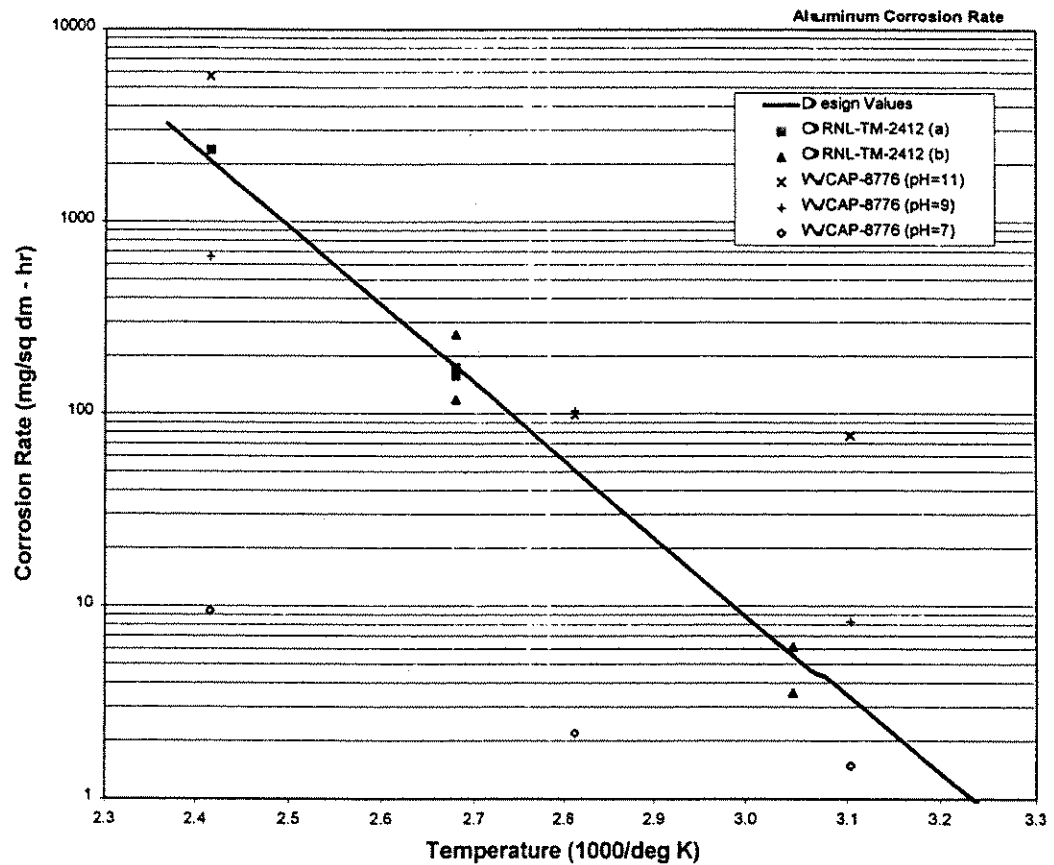


INDIAN POINT 3	FSAR UPDATE
TITRATION CURVE FOR BORIC ACID WITH SODIUM HYDROXIDE	
REV. 1, JULY 1993	FIGURE NO. 6D-6



INDIAN POINT 3		FSAR UPDATE	
TEMPERATURE - CONCENTRATION RELATION FOR CAUSTIC CORROSION OF AUSTENITIC STAINLESS STEEL			
REV. 0	JULY, 1982	FIGURE NO.	6D-7

Aluminum Corrosion Rates In LOCA Environment

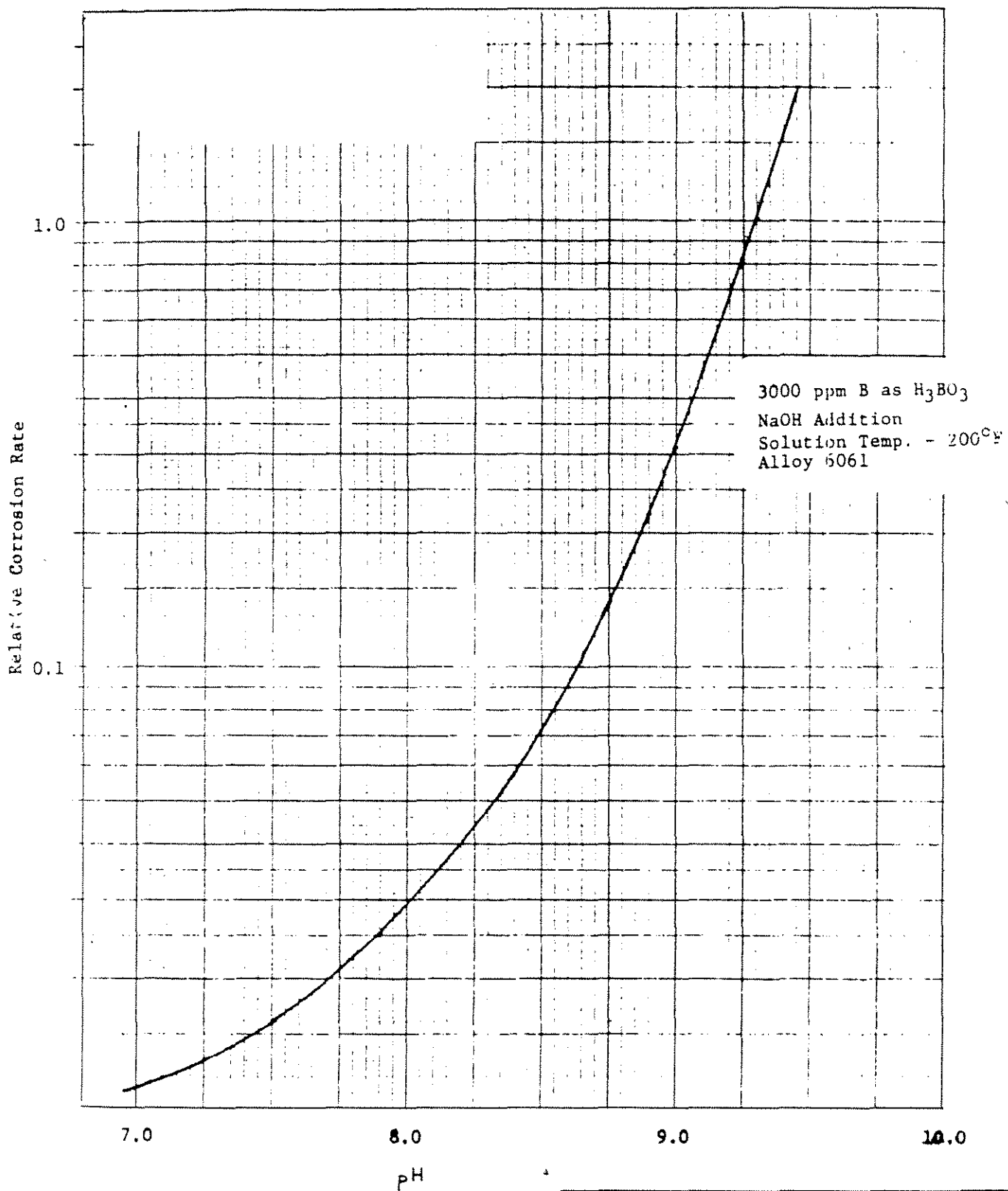


INDIAN POINT 3 FSAR UPDATE

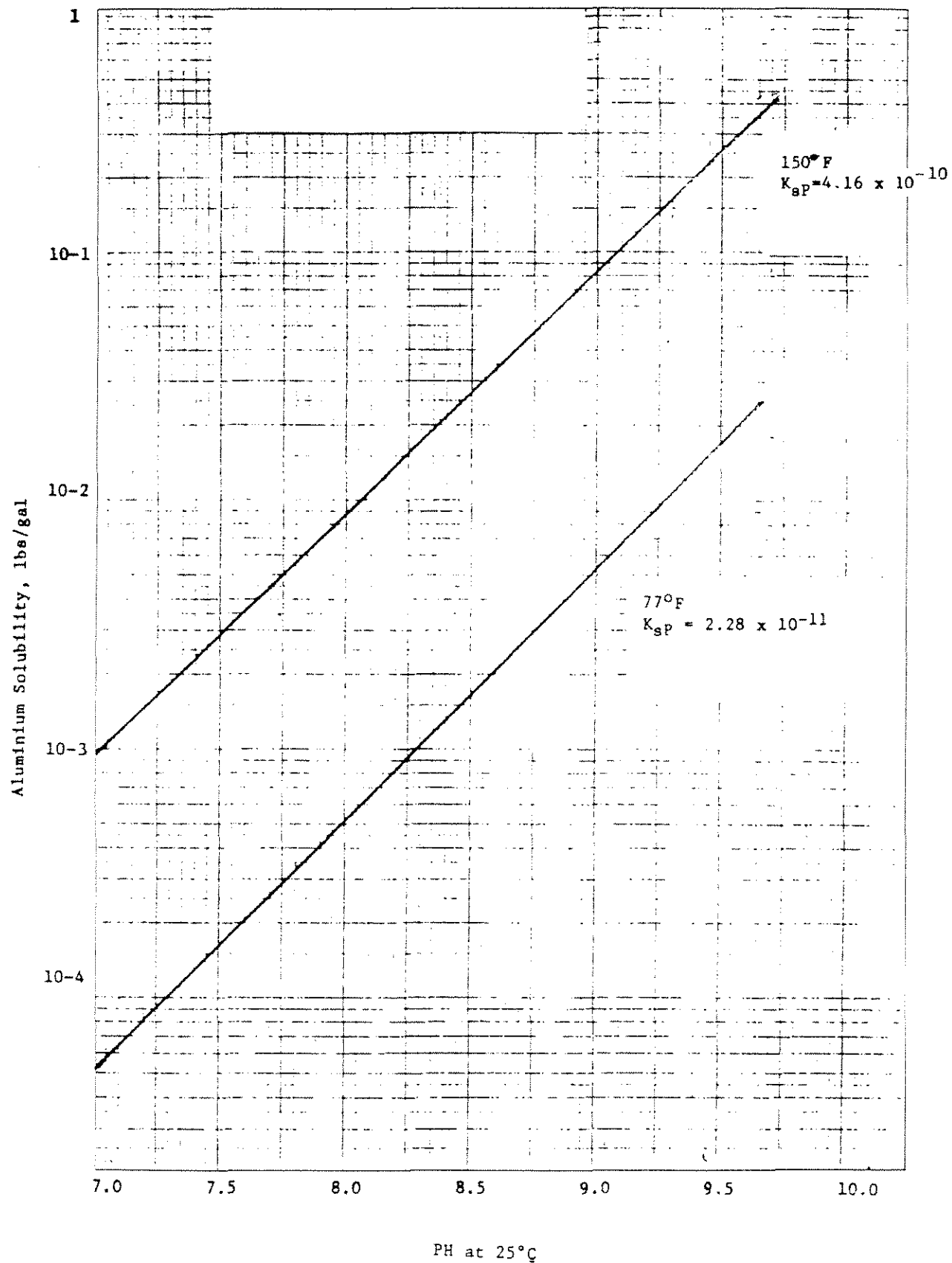
ALUMINUM CORROSION
IN DBA ENVIROMENT

REV. 1 NOV 2001

FIG. NO. 6D-8



INDIAN POINT 3		FSAR UPDATE	
ALUMINUM CORROSION AS A FUNCTION OF PH			
REV 0	JULY, 1982	FIGURE NO.	6D-9



INDIAN POINT 3

FSAR UPDATE

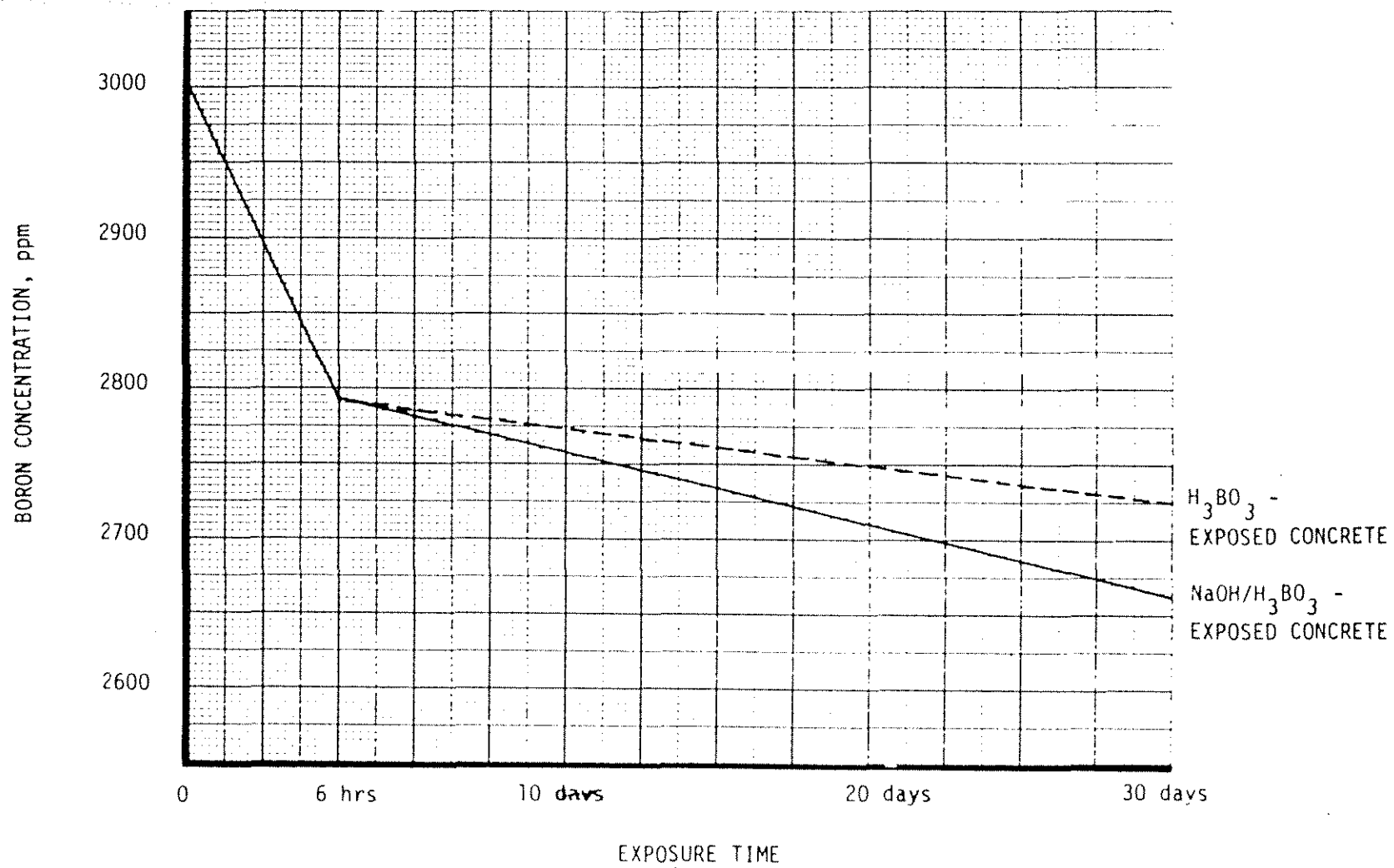
SOLUBILITY OF ALUMINUM
CORROSION PRODUCTS AS A FUNCTION OF
pH AT 77°F AND 150°F

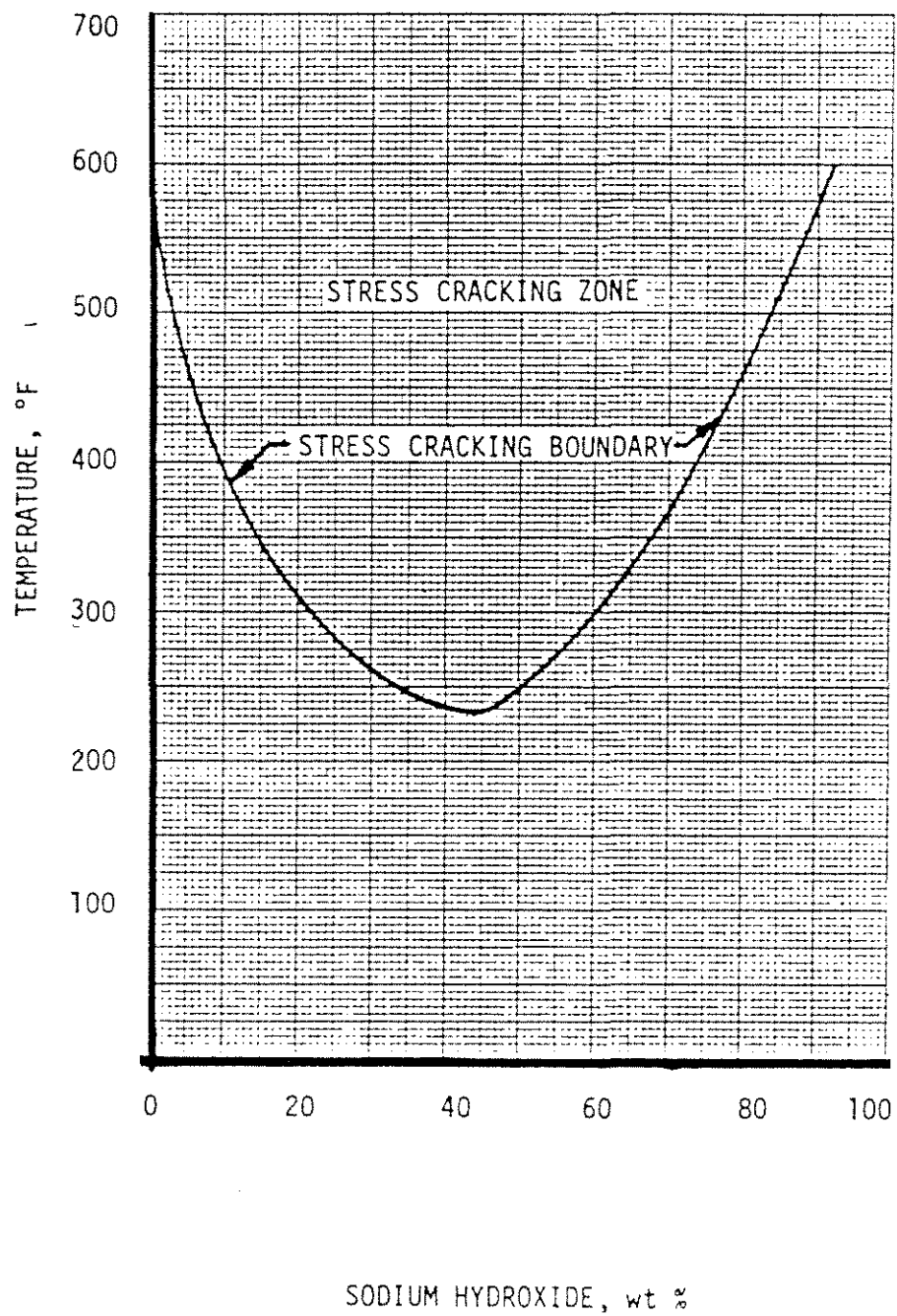
REV 0

JULY, 1982

FIGURE NO 6D-10

INDIAN POINT 3	FSAR UPDATE
BORON LOSS OF BORON - CONCRETE REACTION FOLLOWING A DBA	
REV. 0	FIGURE NO. 6D-11
JULY 1982	





INDIAN POINT 3

FSAR UPDATE

TEMPERATURE - CONCENTRATION RELATION
FOR CAUSTIC CORROSION OF AUSTENITIC
STAINLESS STEEL

REV 0

JULY, 1982

FIGURE NO 6E-1

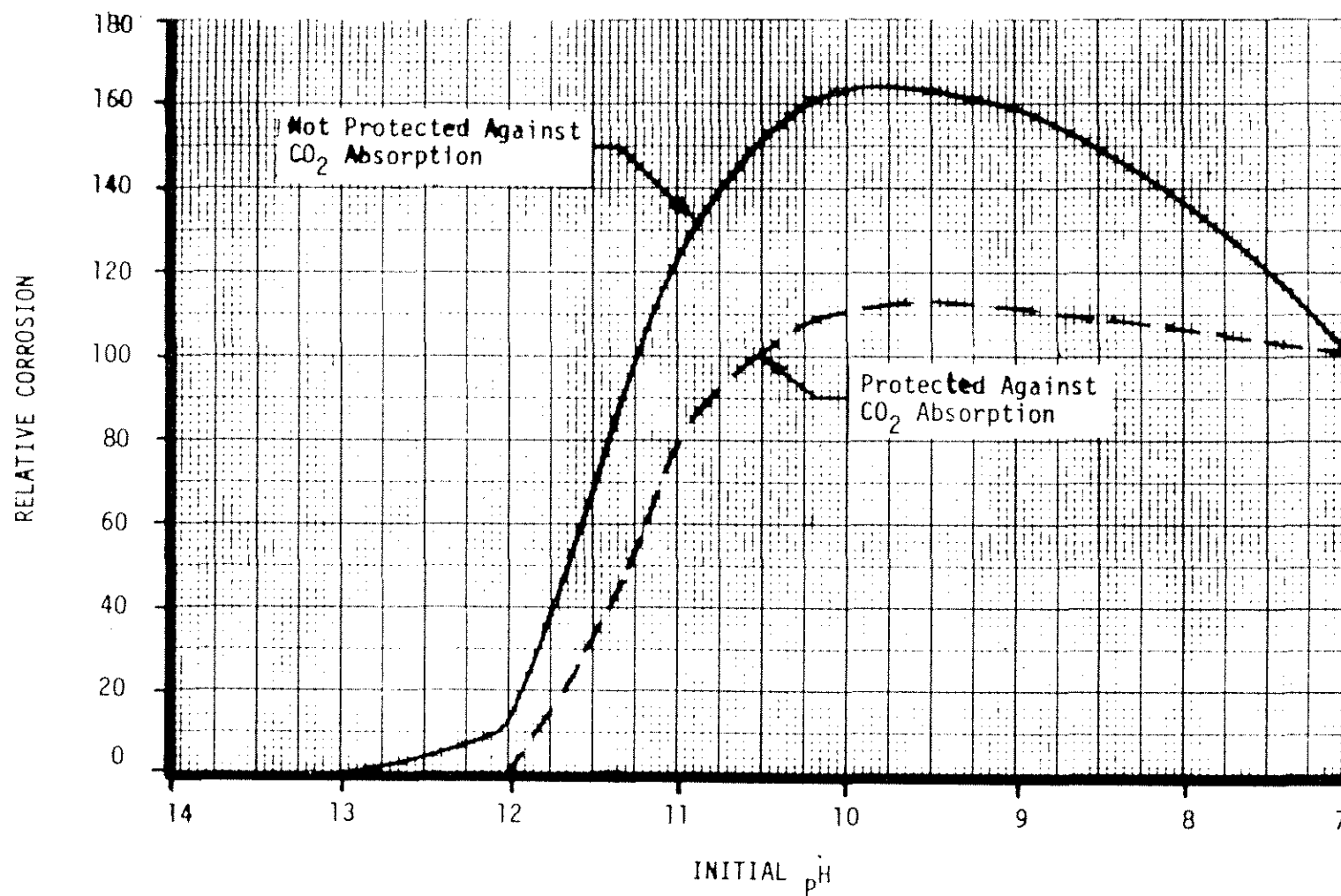
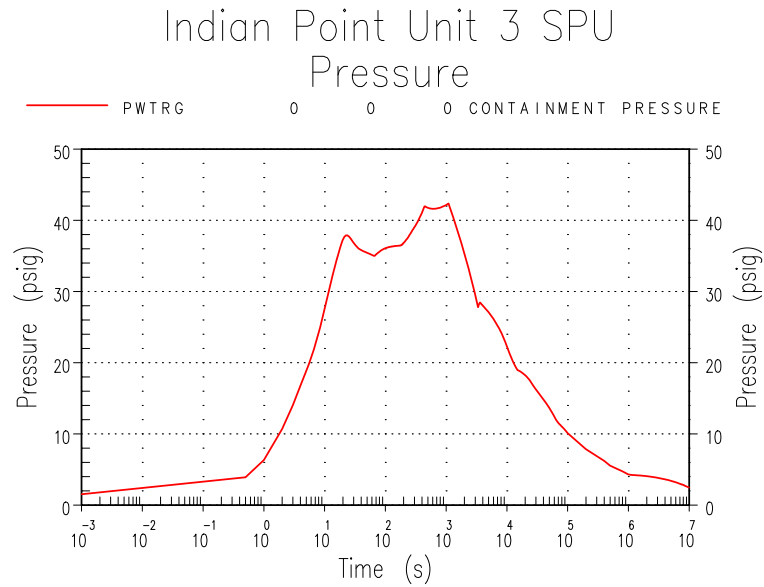
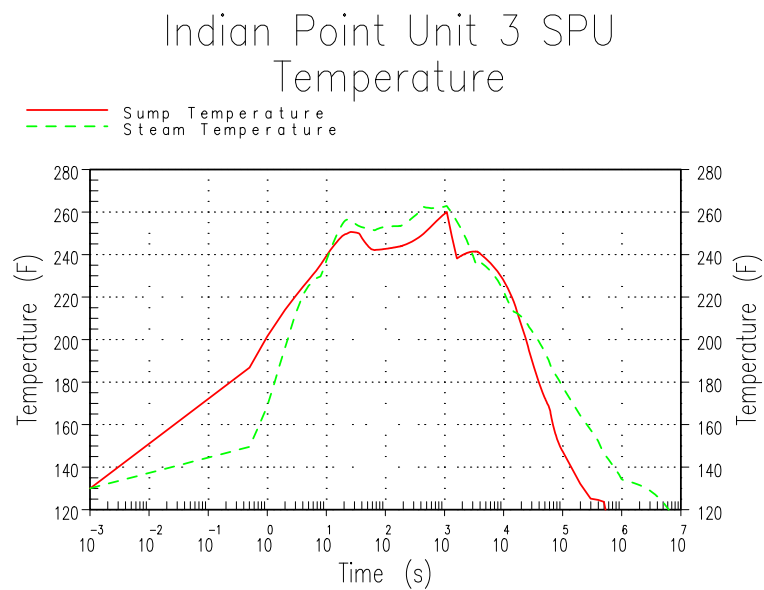


Figure 6F-1 Containment Pressure and Temperature for Design Basis LOCA

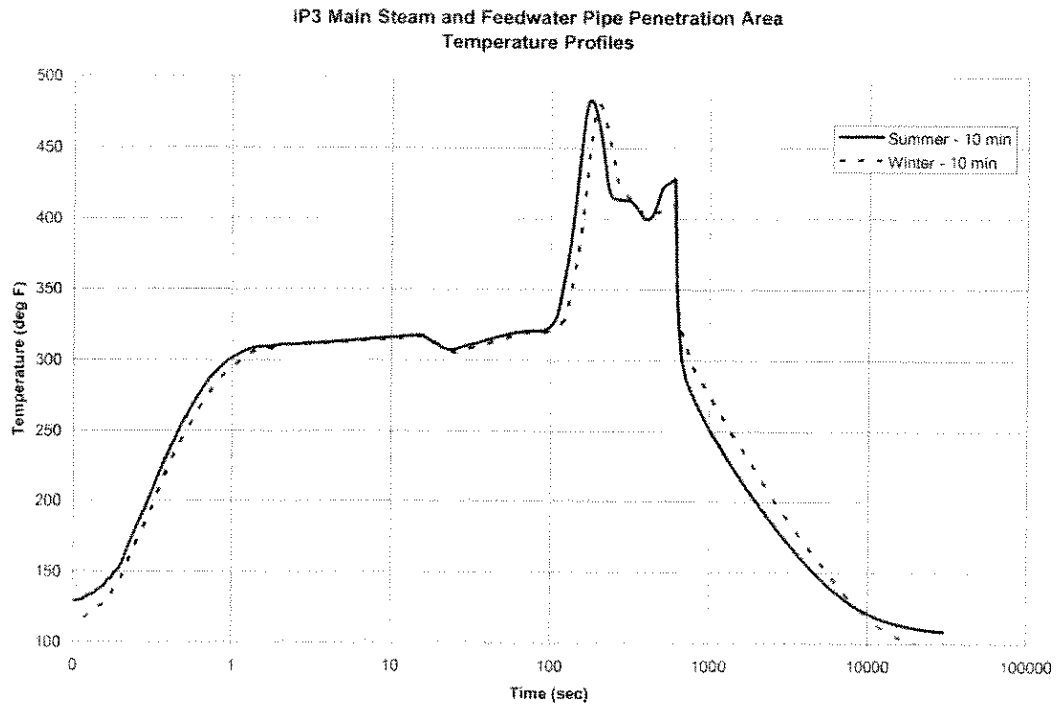


DEPS Minimum Safeguards Pressure Transient



DEPS Minimum Safeguards Temperature Transient

Figure 6F-4



Notes:

1. The winter case was generated with the 1.2 ft² header break at 102% initial power.
2. The summer case was generated with the 1.4 ft² header break at 102% initial power.

Figure 6F-9B

Pressure and Temperature Profile from a 4 inch Steam Line Break
in the Auxiliary Feedwater Pump (AFWP) Room

