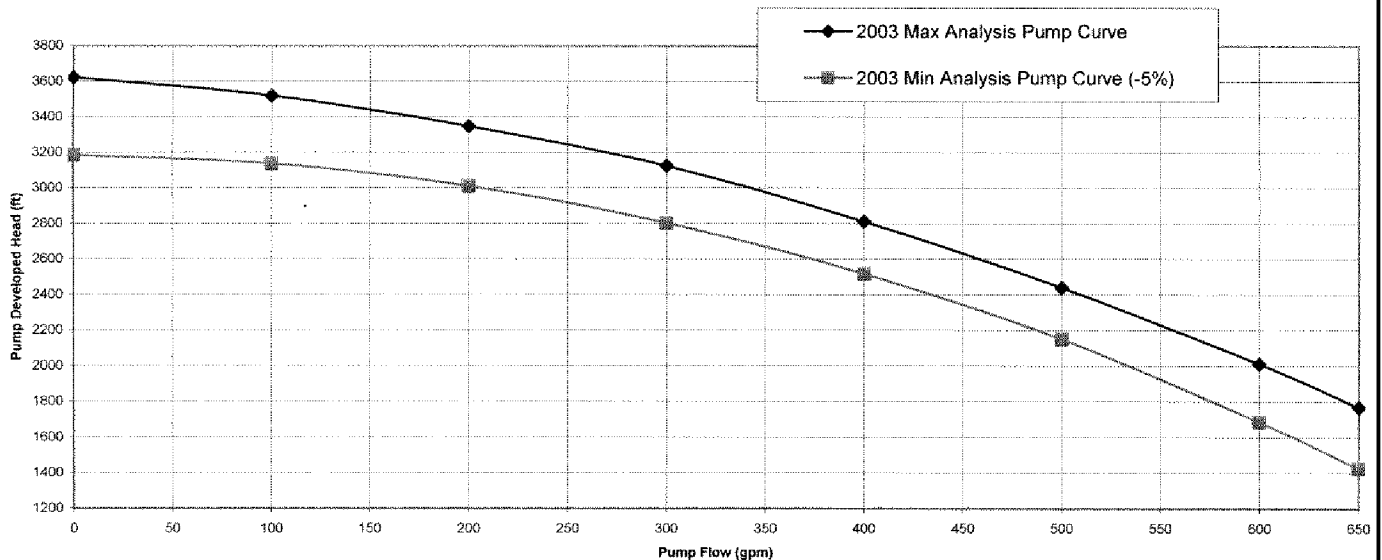


INDIAN POINT 3 HIGH HEAD SAFETY INJECTION PUMP

2003 HHSI Pump Analysis Curves



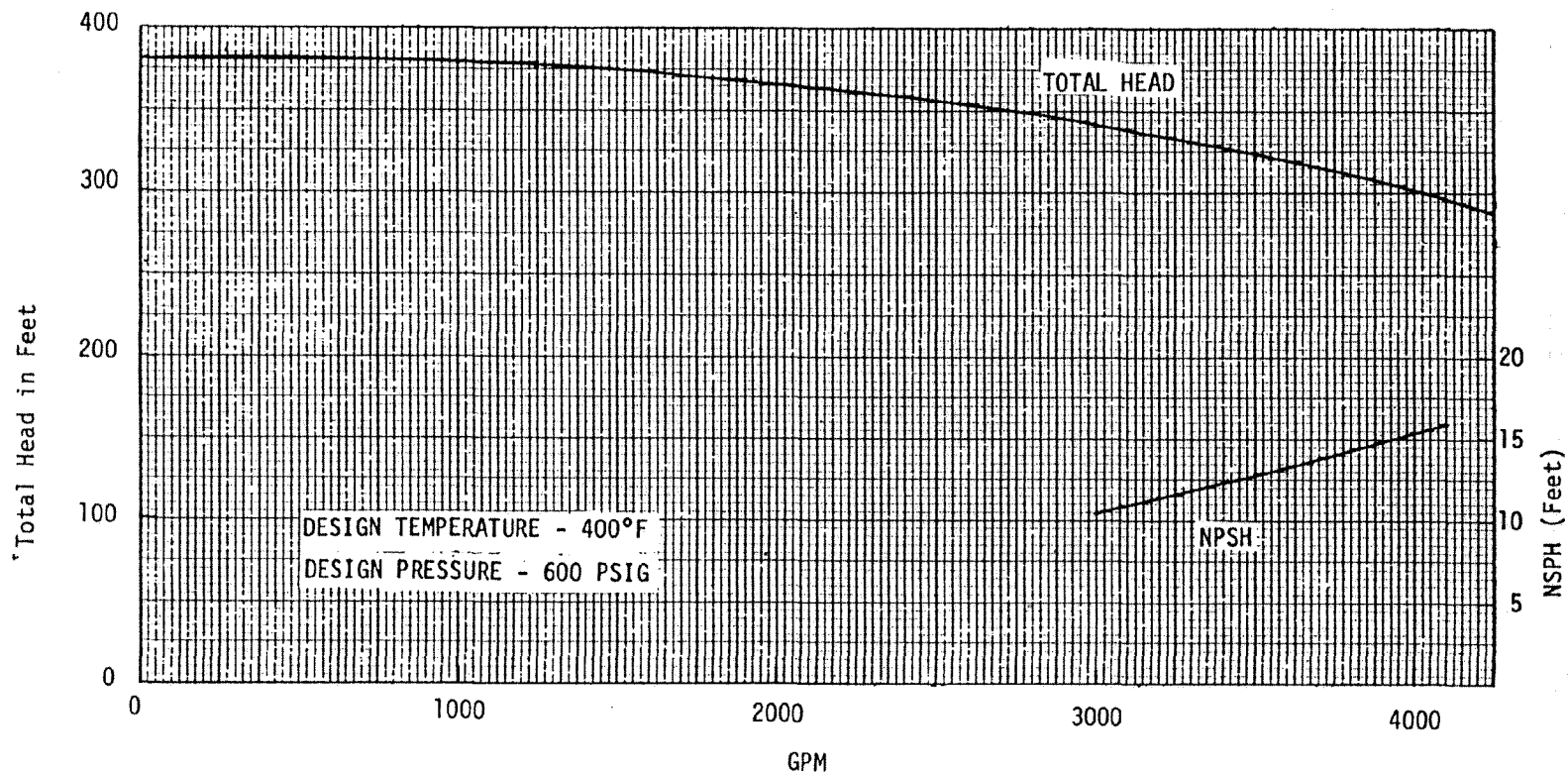
NOTE: CURVES SHOWN ARE BASED ON COMPOSITE DATA CONSIDERING VARIATIONS IN THE CERTIFIED PUMP CURVES OR THE AS TESTED PUMP CURVES FOR ALL THREE PUMPS. THE MAXIMUM CURVE IS A COMPOSITE OF THE THREE PUMP CERTIFIED CURVES ENHANCED FROM 1 TO 3 PERCENT AT EACH FLOW POINT. THE MINIMUM CURVE IS BASED ON THE LOWEST 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

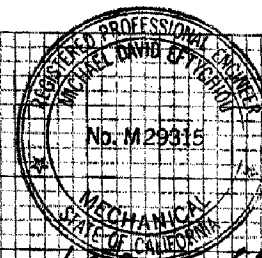
REV. No. 01



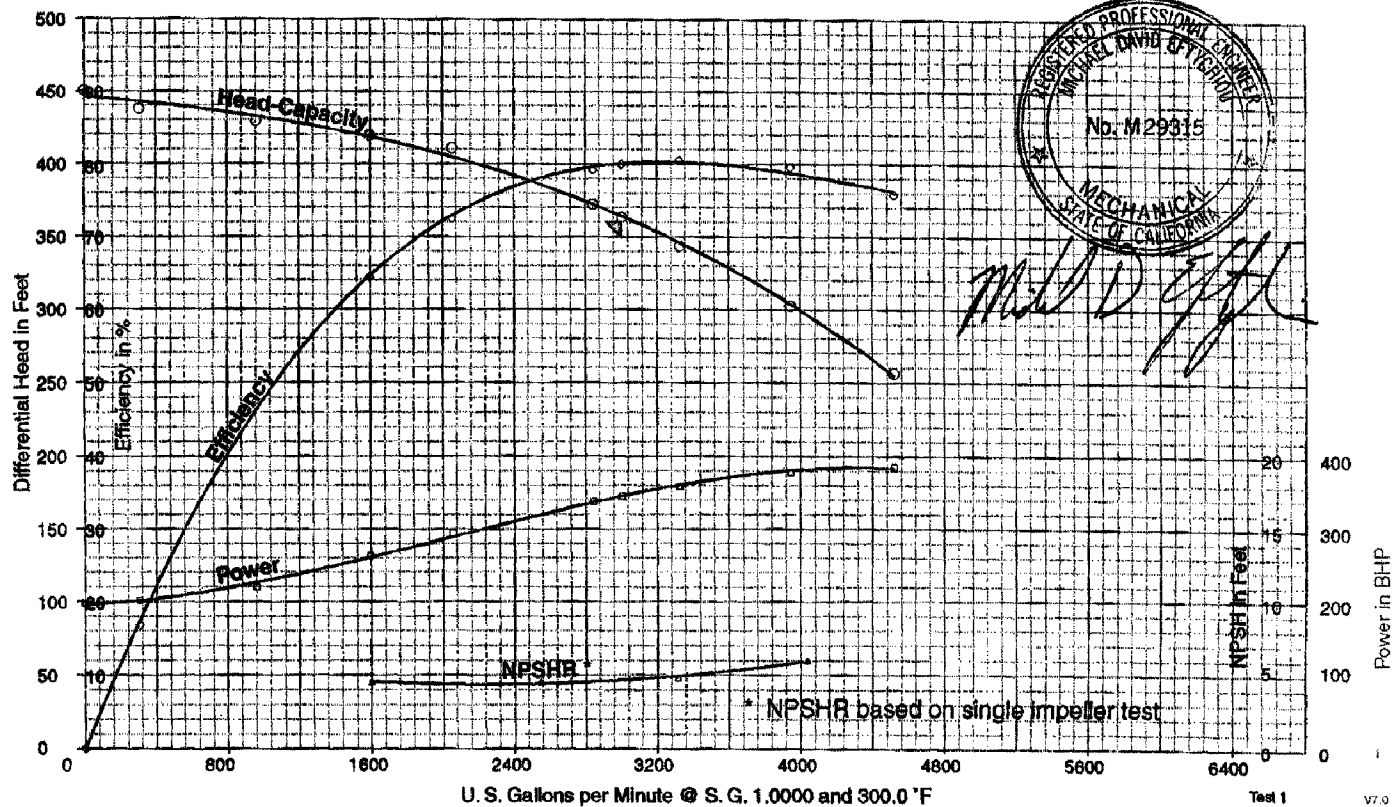
NOTE:

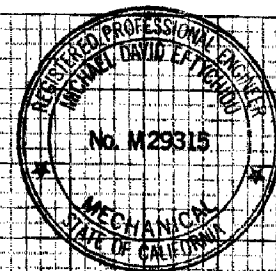
CURVE SHOWN IS CERTIFIED PUMP CURVE REDUCED BY 5% (18 FT.) THIS IS DONE BY TAKING 5% OF THE DEVELOPED HEAD AT THE DESIGN POINT ON THE PUMP CURVE AND APPLYING THIS CORRECTION (18 FT.) UNIFORMLY OVER THE ENTIRE CURVE.

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

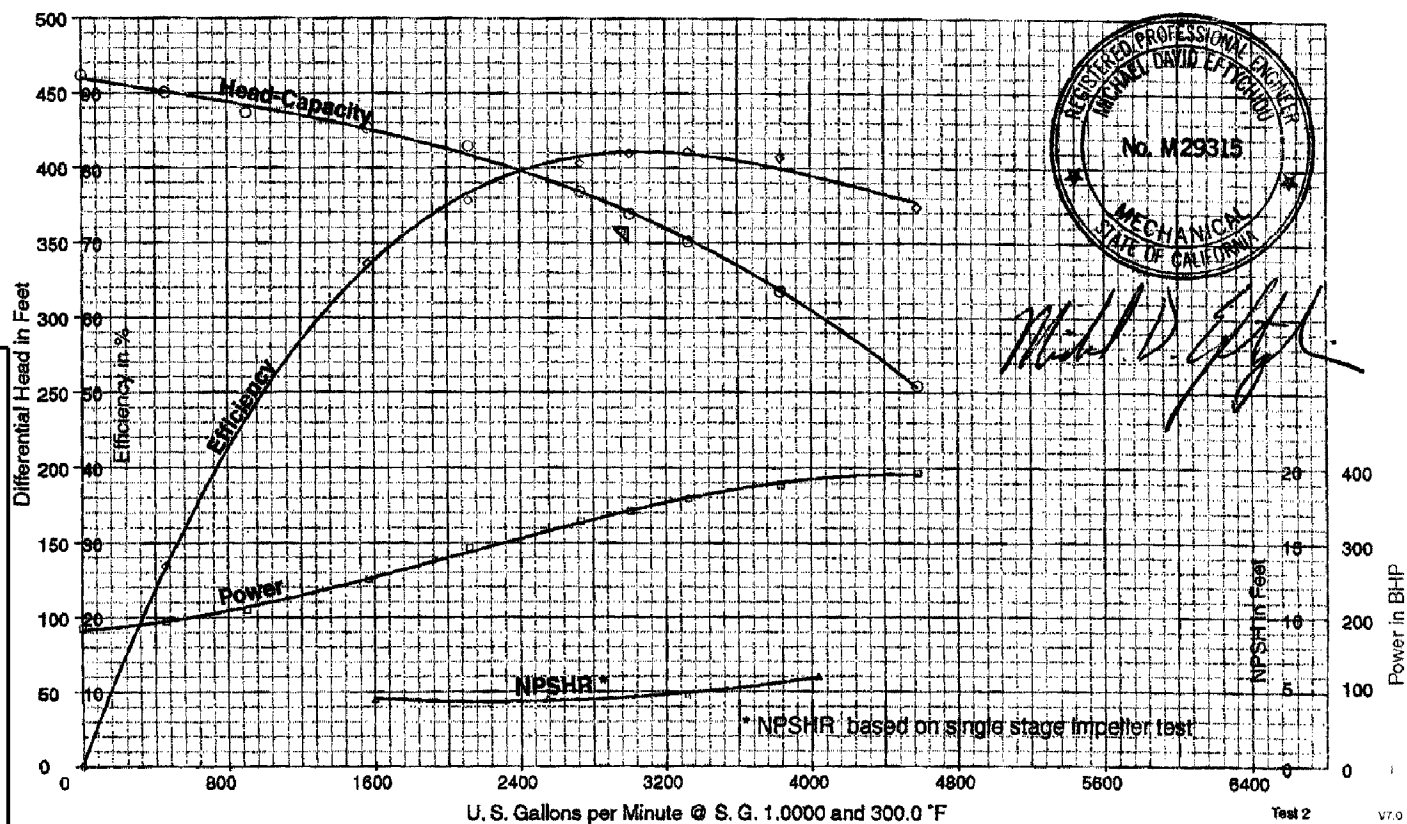


Michael D. Tichauer





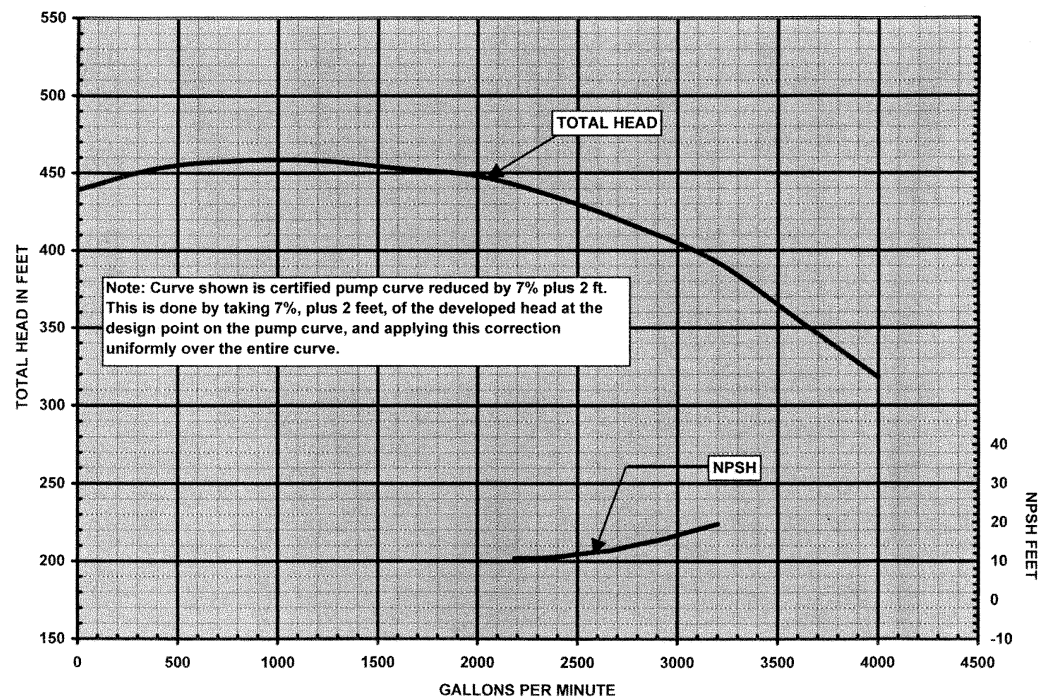
Michael D. Eftychidis



INDIAN POINT UNIT No. 3

RECIRCULATION PUMP
SERIAL #2 - PUMP 32
PERFORMANCE

UFSAR FIGURE 6.2-4B REV. No. 02

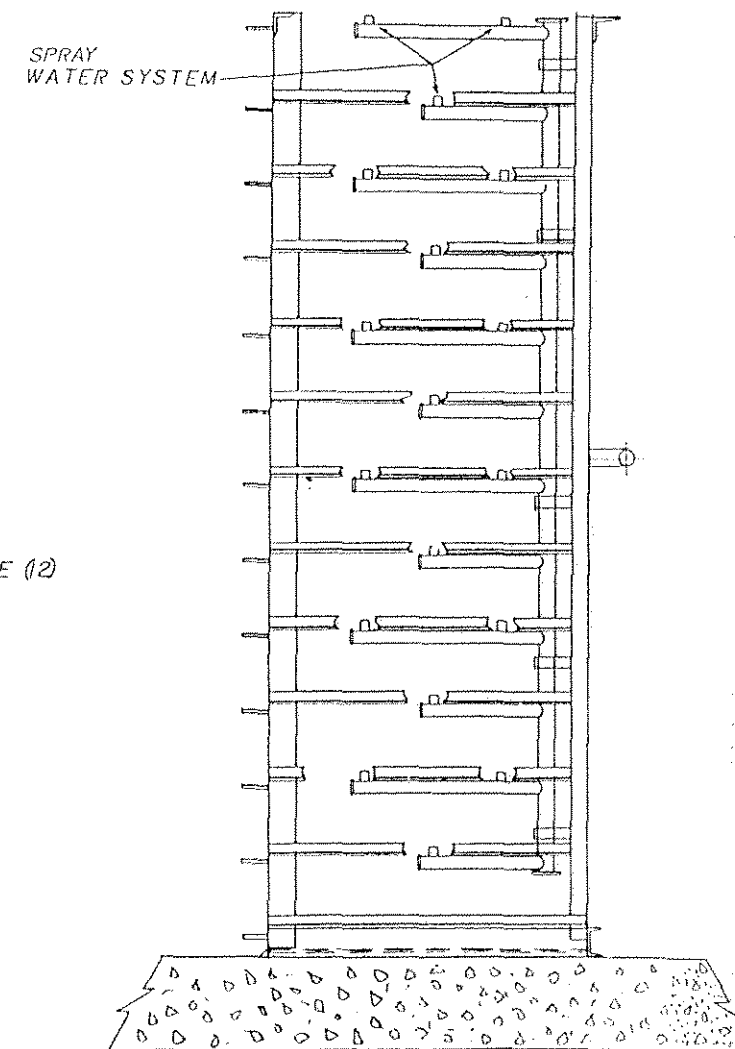
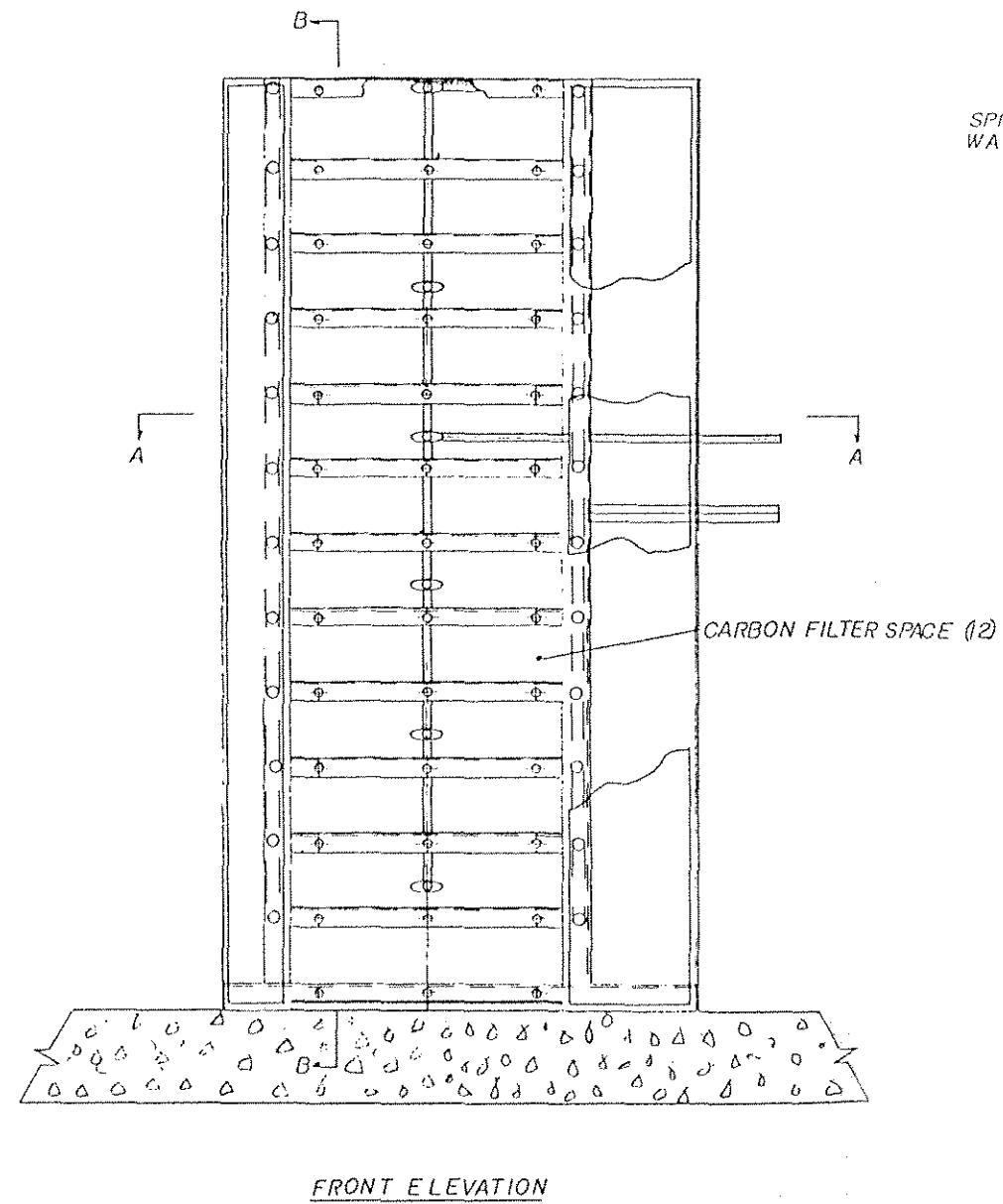
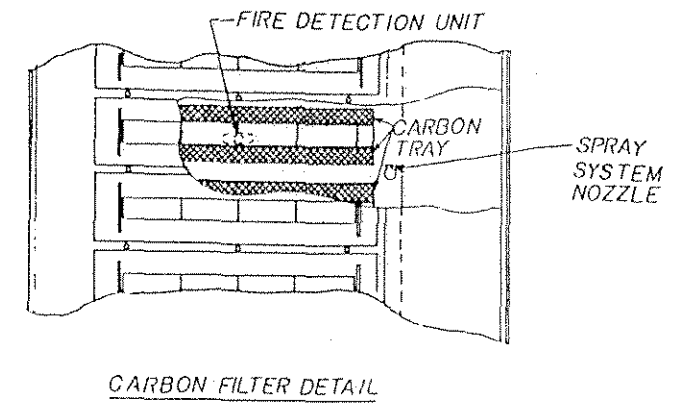
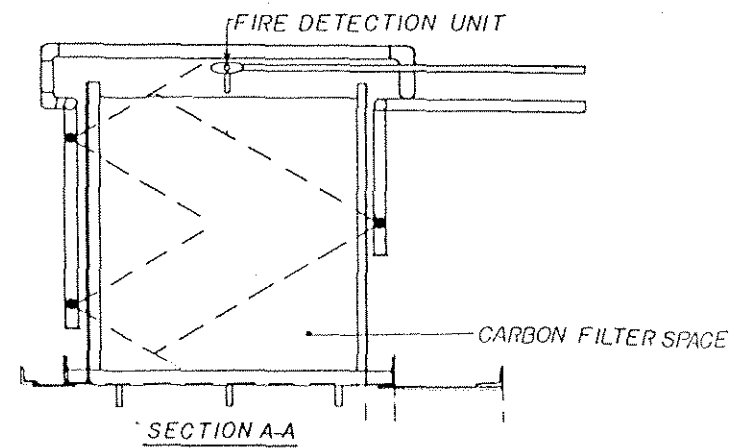


INDIAN POINT UNIT No. 3

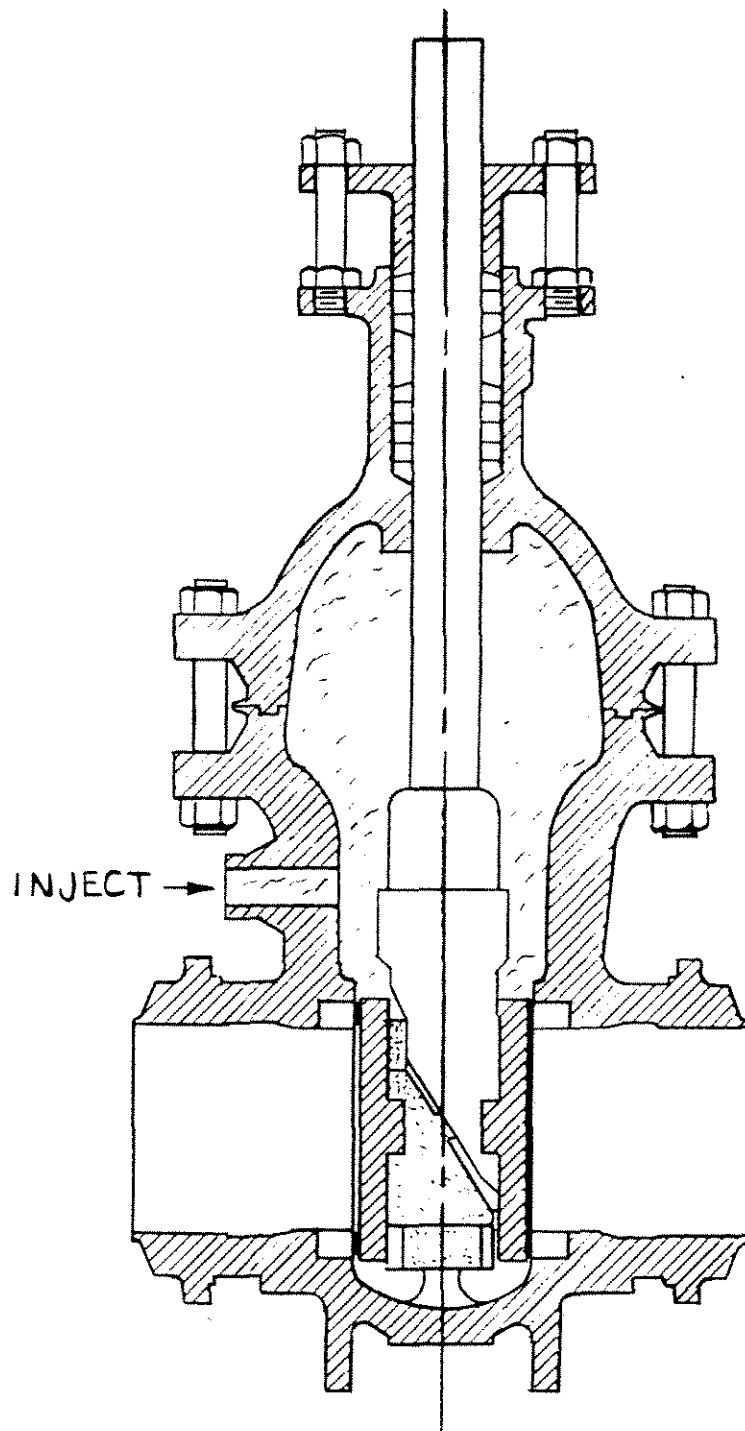
CONTAINMENT SPRAY PUMP
PERFORMANCE CHARACTERISTICS

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

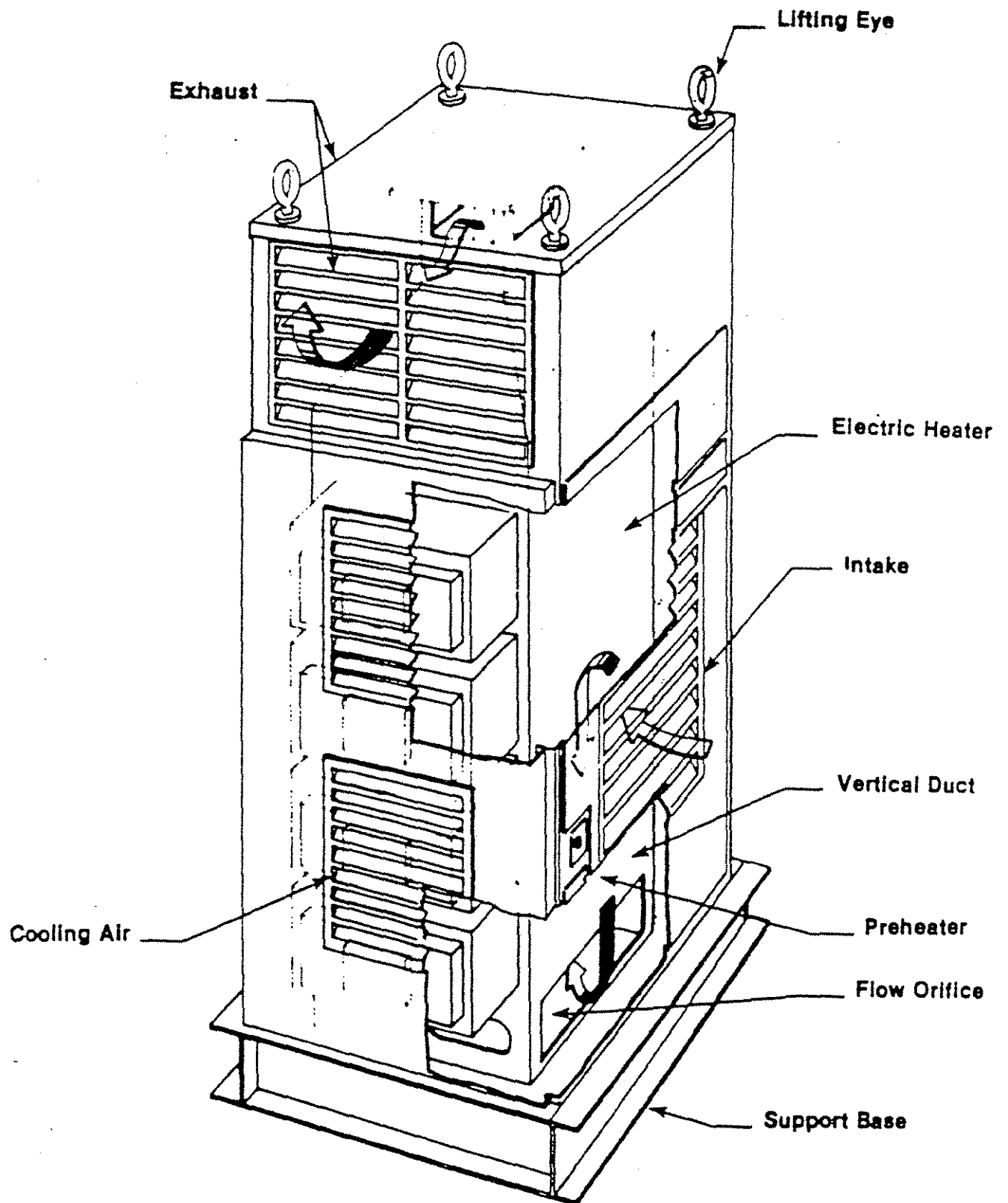
FSAR UPDATE

DOUBLE DISK ISOLATION VALVE
WITH SEAL WATER INJECTION

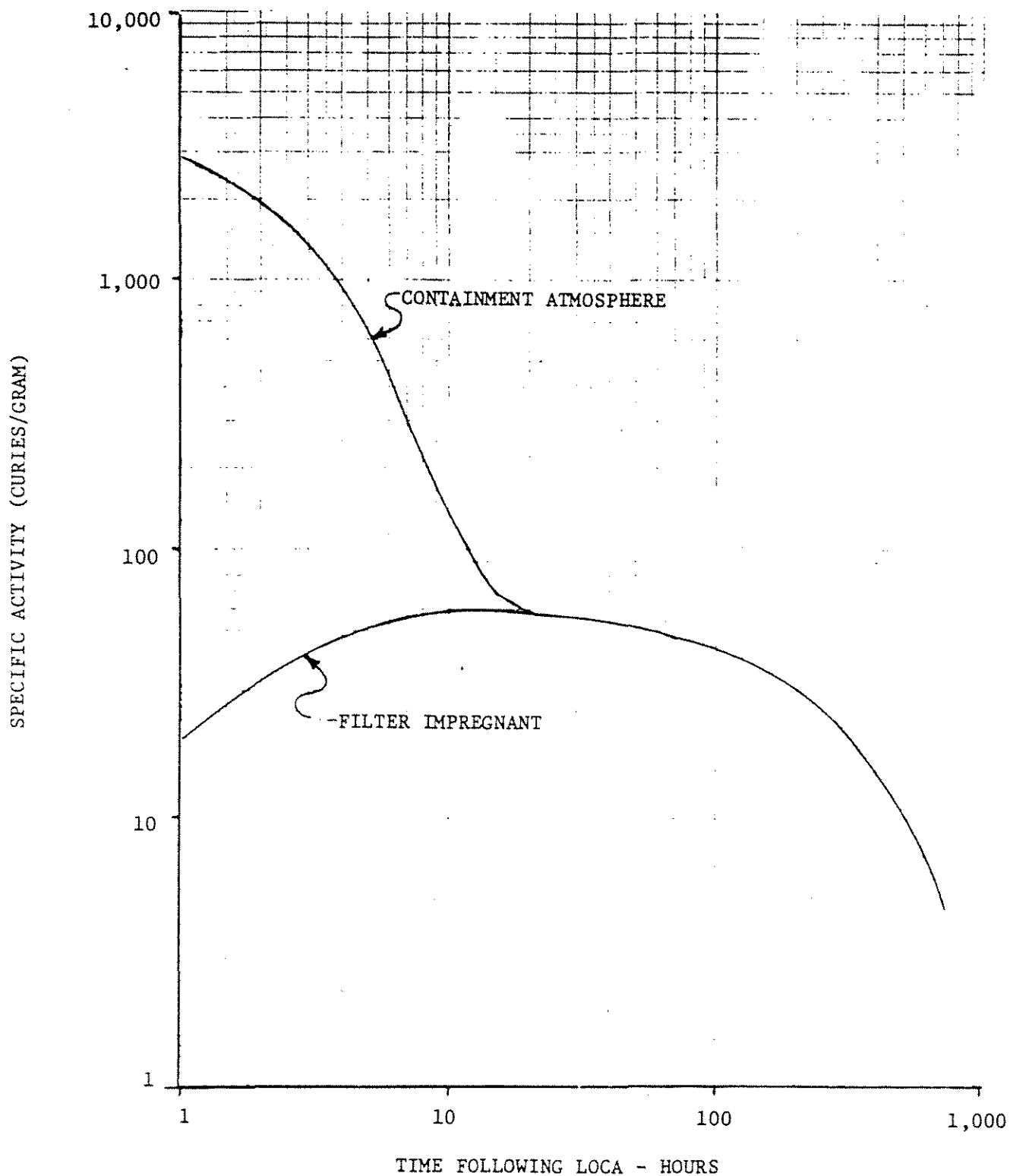
REV. 0

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

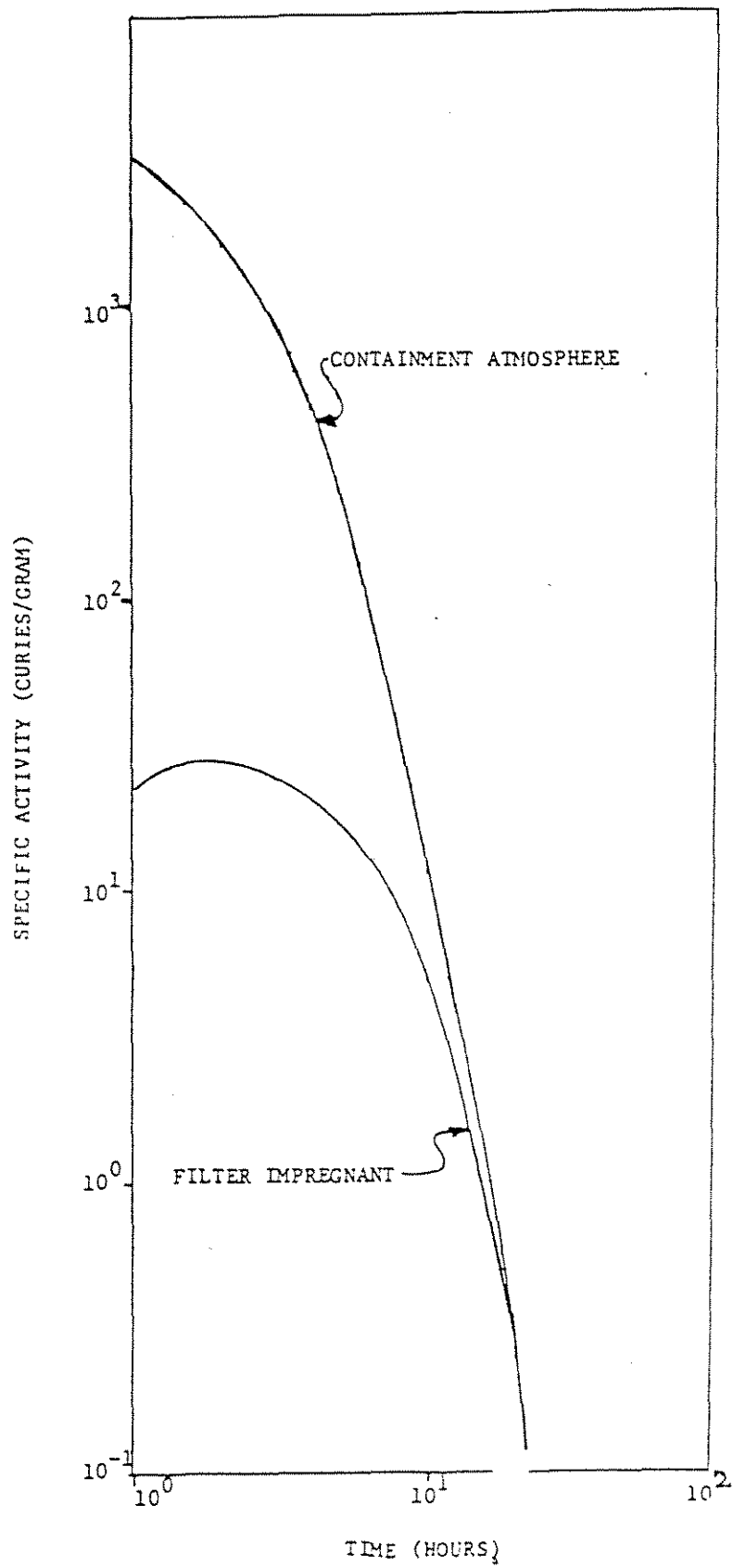
FSAR UPDATE

SPECIFIC ACTIVITY VS. TIME - 70%
FILTER EFFICIENCY FOR I-131

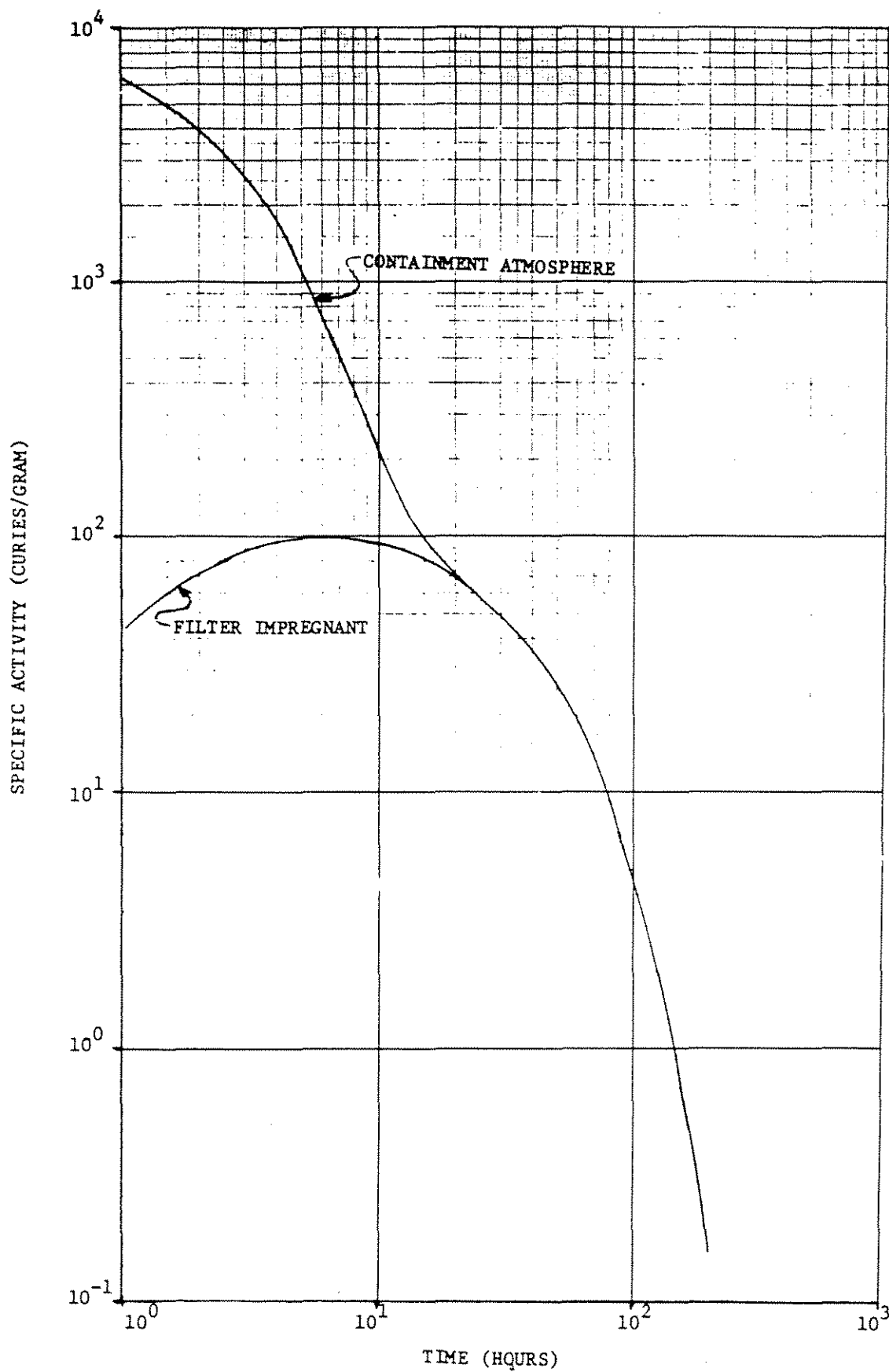
REV. 0

JULY 1982

FIGURE NO. 60-1



| | | | |
|---|------------|-----------------|--|
| 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

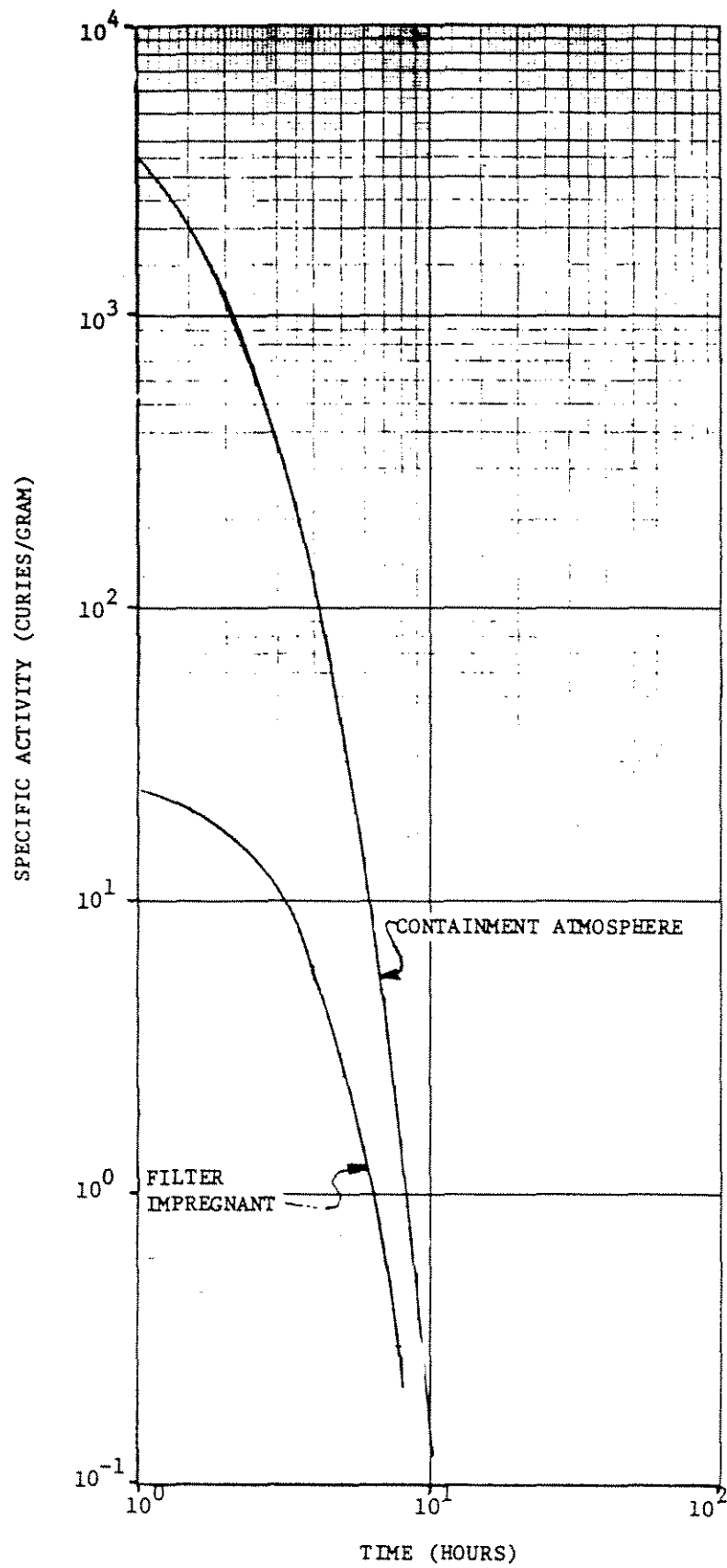
SPECIFIC ACTIVITY OF I-133 - 70% FILTER

REV. 0

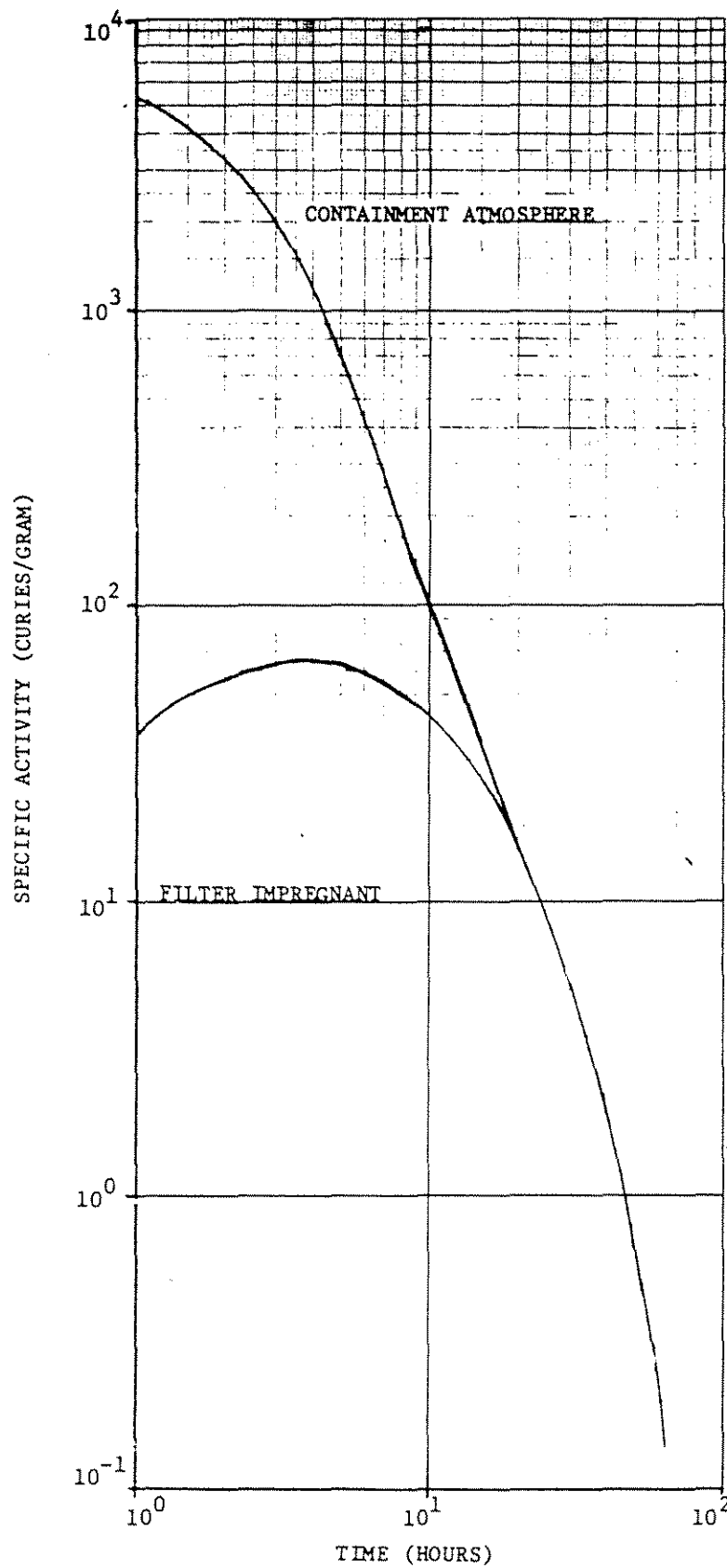
JULY, 1982

FIGURE NO.

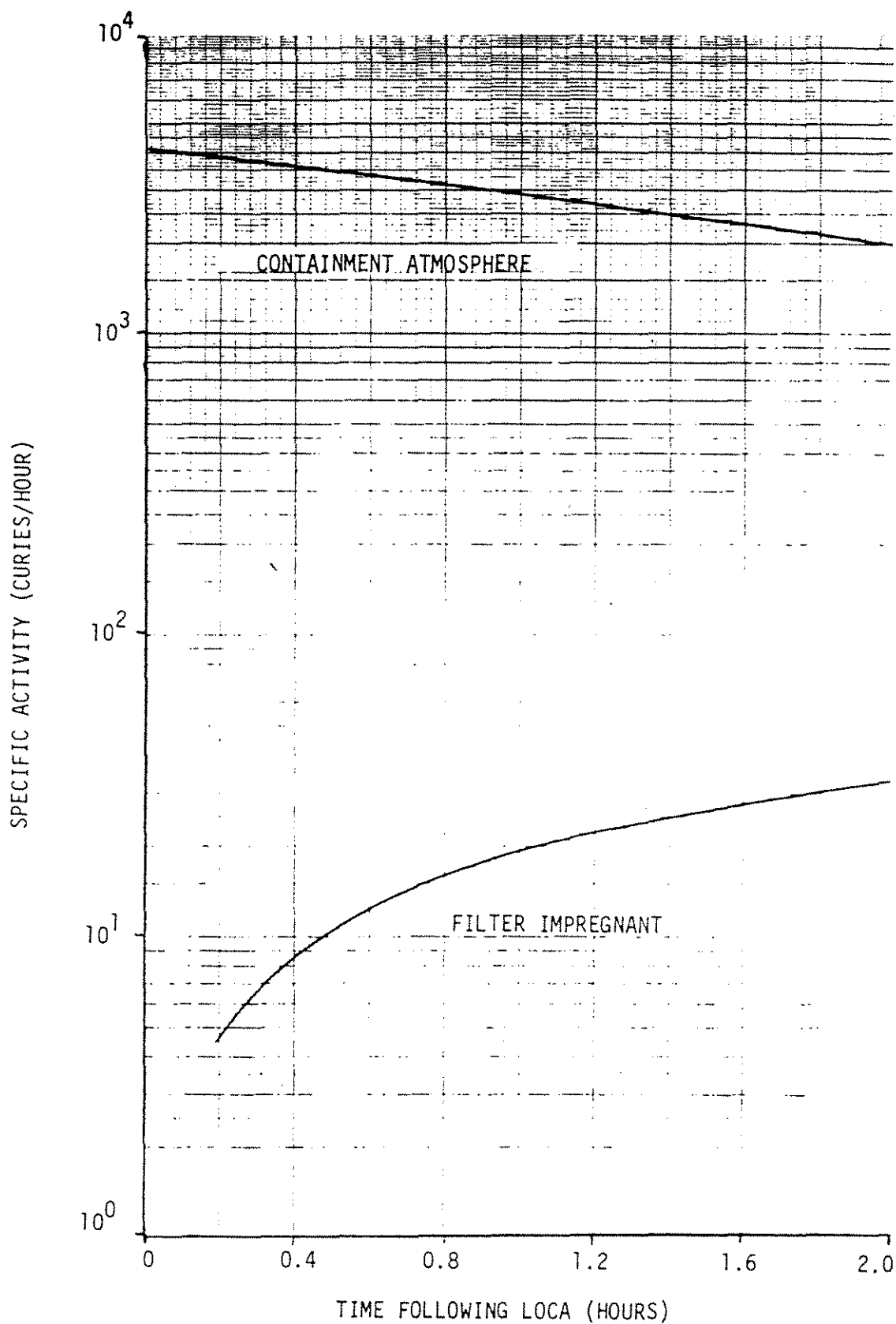
6C-3



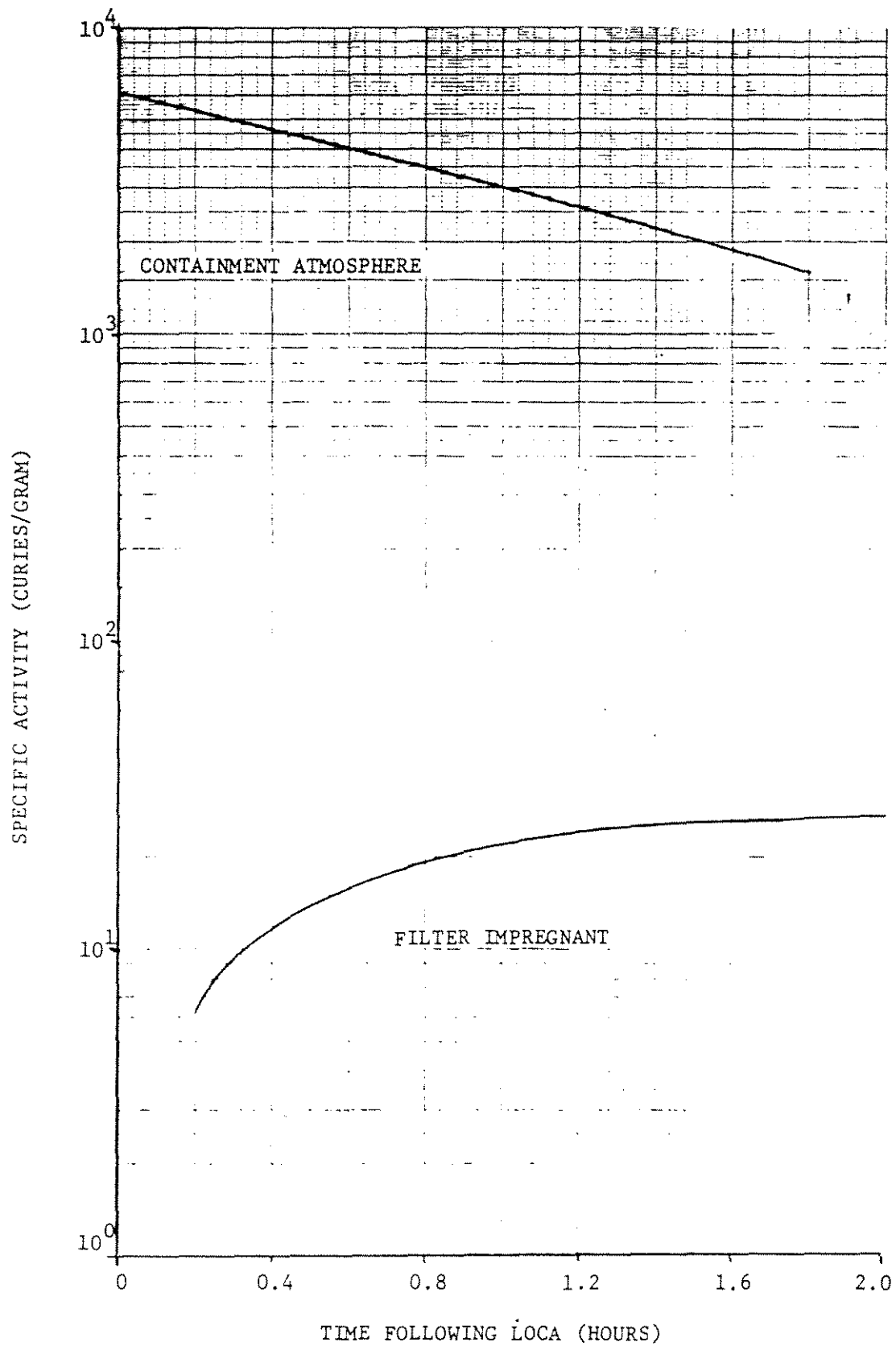
| INDIAN POINT 3 | | FSAR UPDATE | |
|---|------------|-------------|------|
| SPECIFIC ACTIVITY OF I-134 - 70% FILTER | | | |
| REV. 0 | JULY, 1982 | FIGURE NO. | 6C-4 |



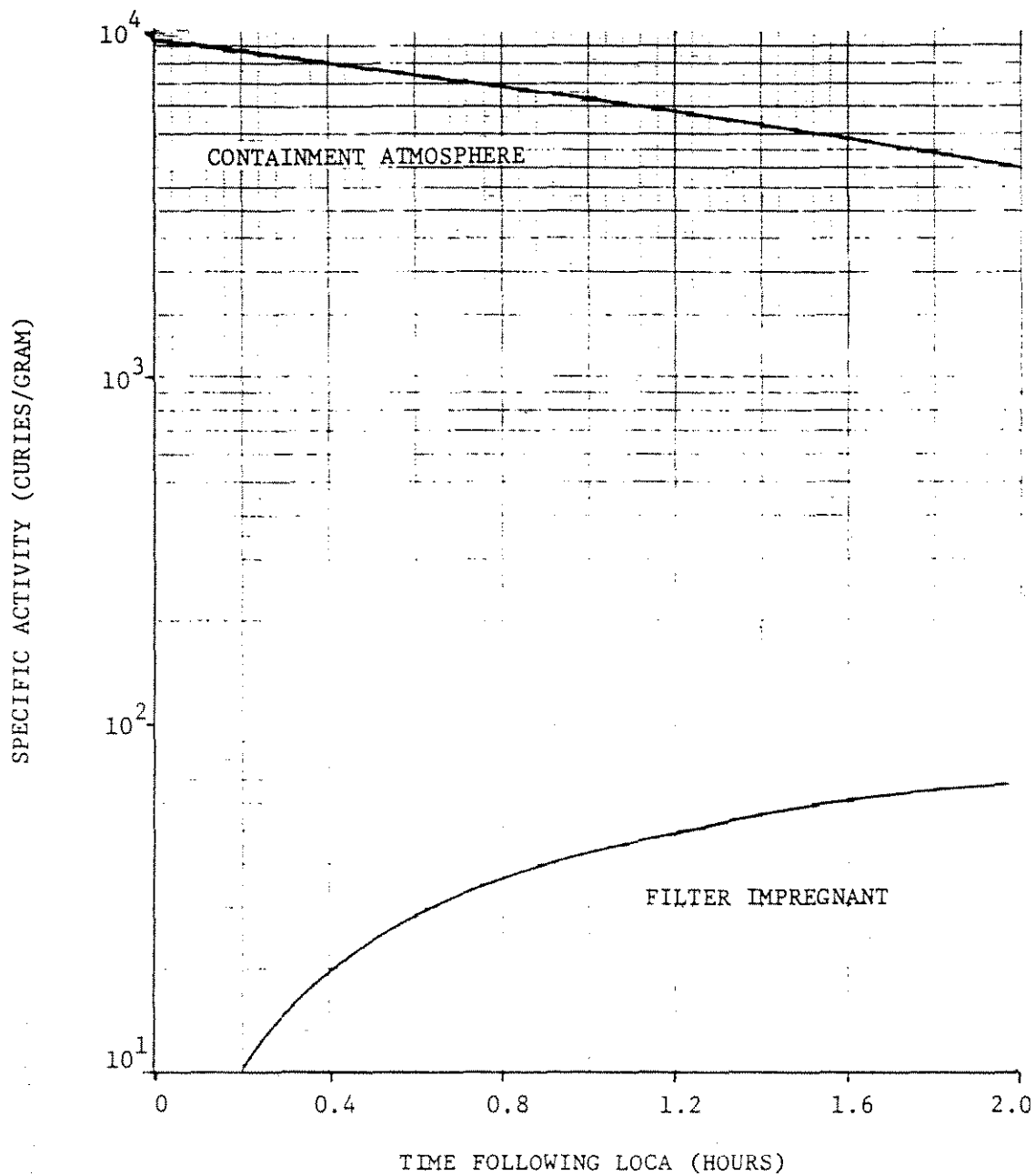
| | | | |
|---|------------|-------------|------|
| INDIAN POINT 3 | | FSAR UPDATE | |
| SPECIFIC ACTIVITY OF I-135 - 70% FILTER | | | |
| REV. 0 | JULY, 1982 | FIGURE NO. | 6C-5 |



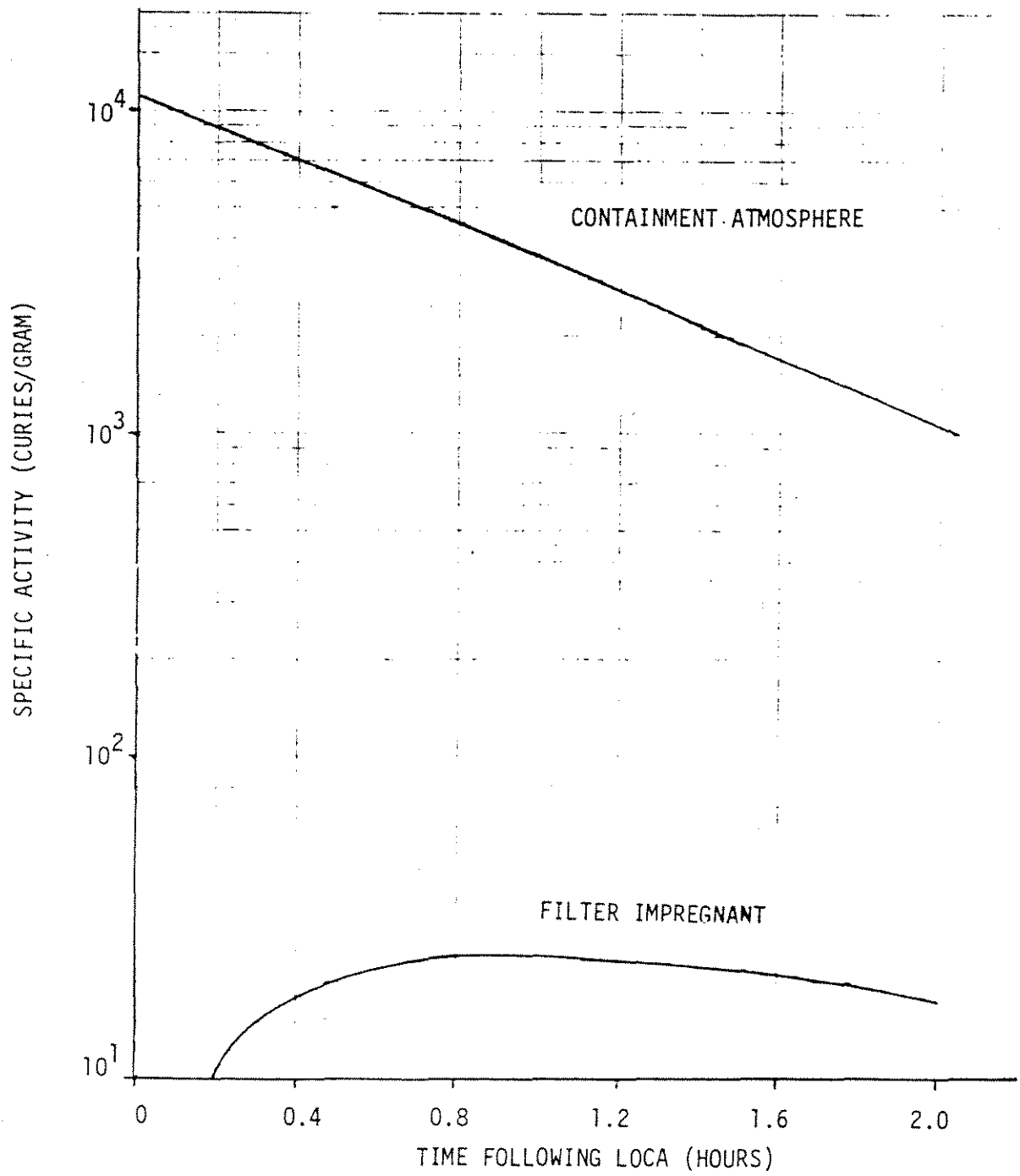
| | | |
|---|------------|-----------------|
| INDIAN POINT 3 | | FSAR UPDATE |
| SPECIFIC ACTIVITY OF I-131 - 70% FILTER | | |
| REV. 0 | JULY, 1982 | FIGURE NO. 6C-6 |



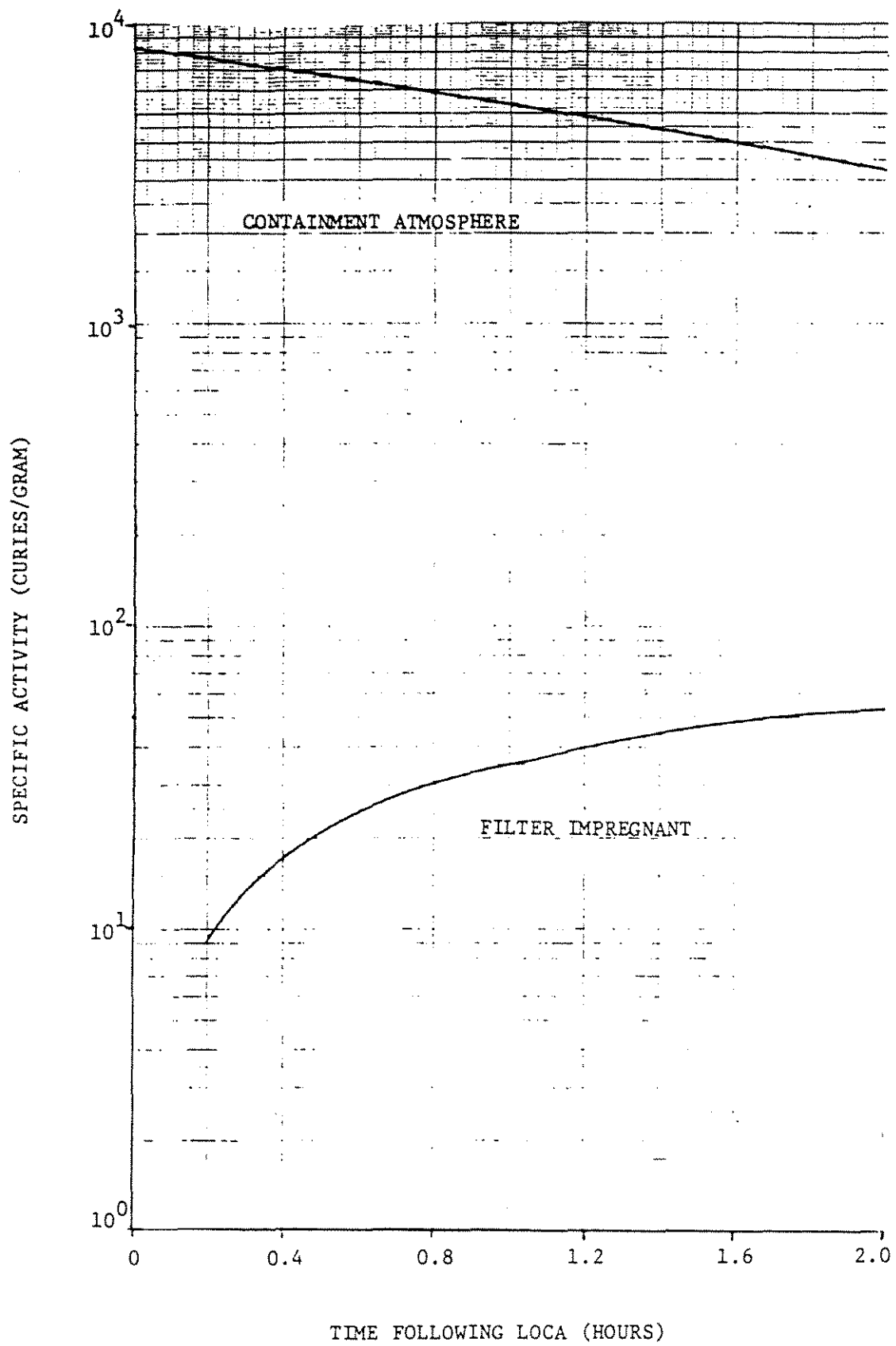
| | | |
|---|------------|-----------------|
| INDIAN POINT 3 | | FSAR UPDATE |
| SPECIFIC ACTIVITY OF I-132 — 70% FILTER | | |
| REV. 0 | JULY, 1982 | FIGURE NO. 6C-7 |



| | | |
|---|------------|-----------------|
| 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

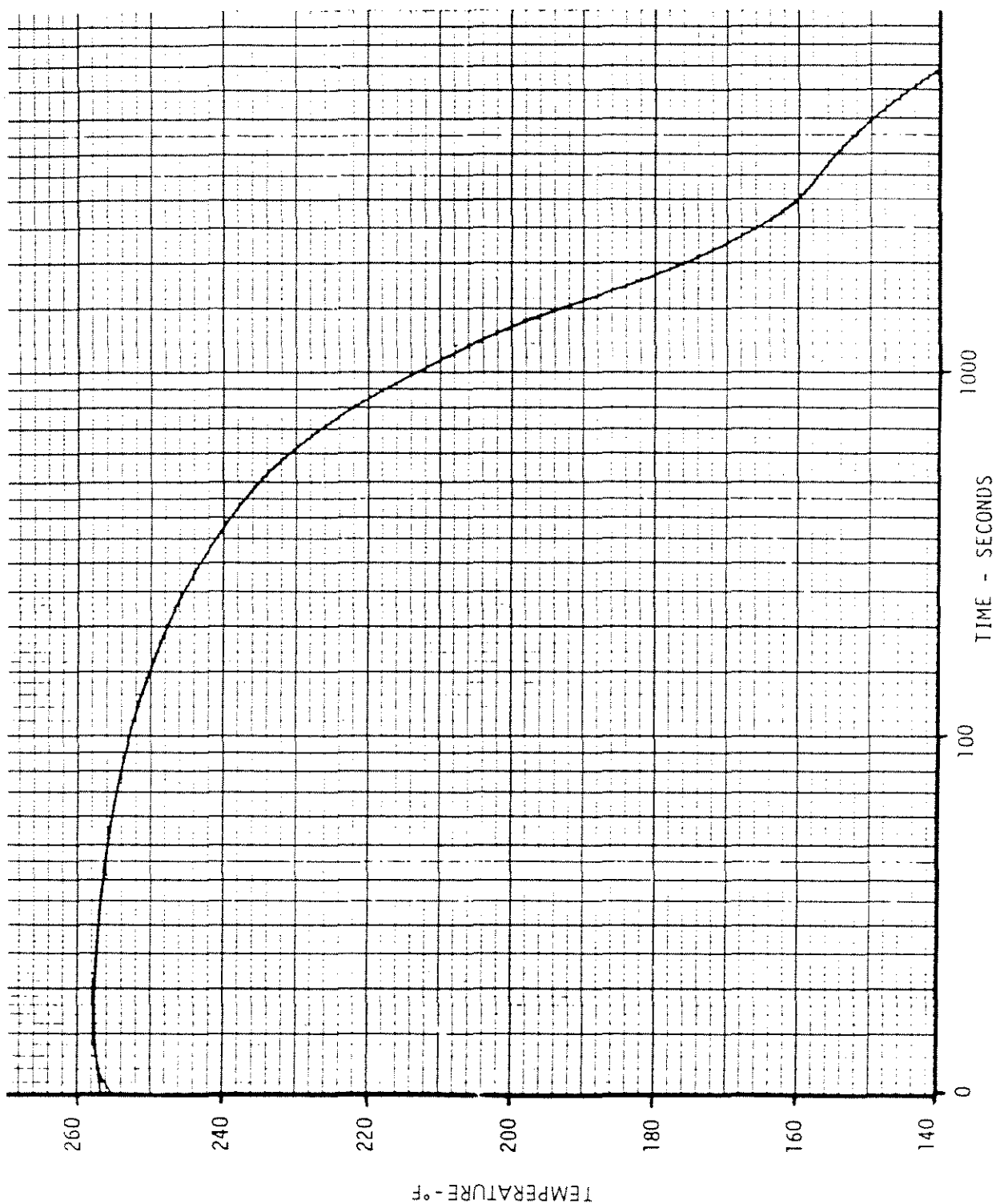
FSAR UPDATE

SPECIFIC ACTIVITY OF I-135 - 70% FILTER

REV. 0

JULY, 1982

FIGURE NO. 6C-10



INDIAN POINT 3

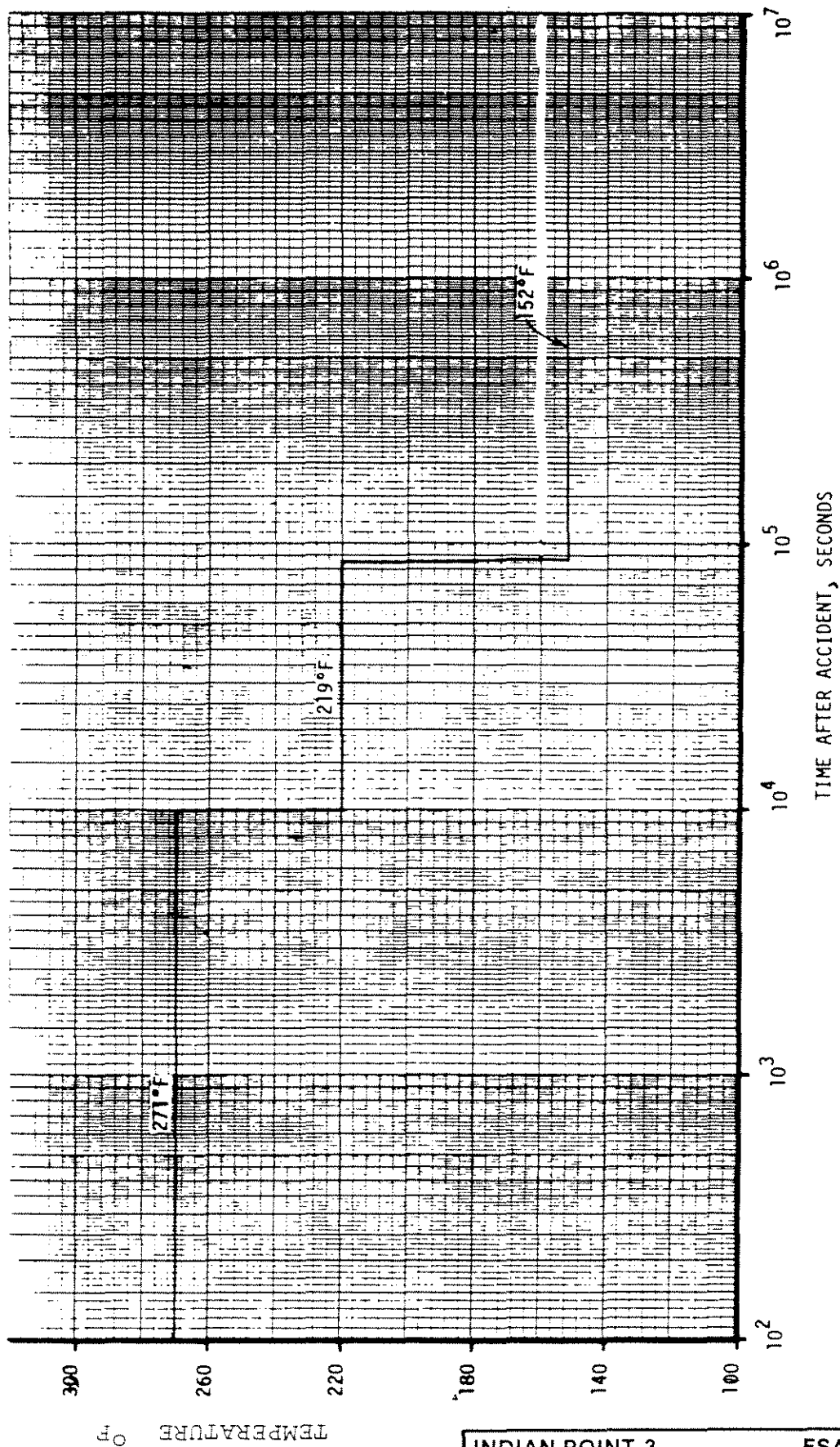
FSAR UPDATE

CONTAINMENT ATMOSPHERE TEMPERATURE
DESIGN BASES SAFETY INJECTION

REV 0

JULY, 1982

FIGURE NO 6D-1



INDIAN POINT 3

FSAR UPDATE

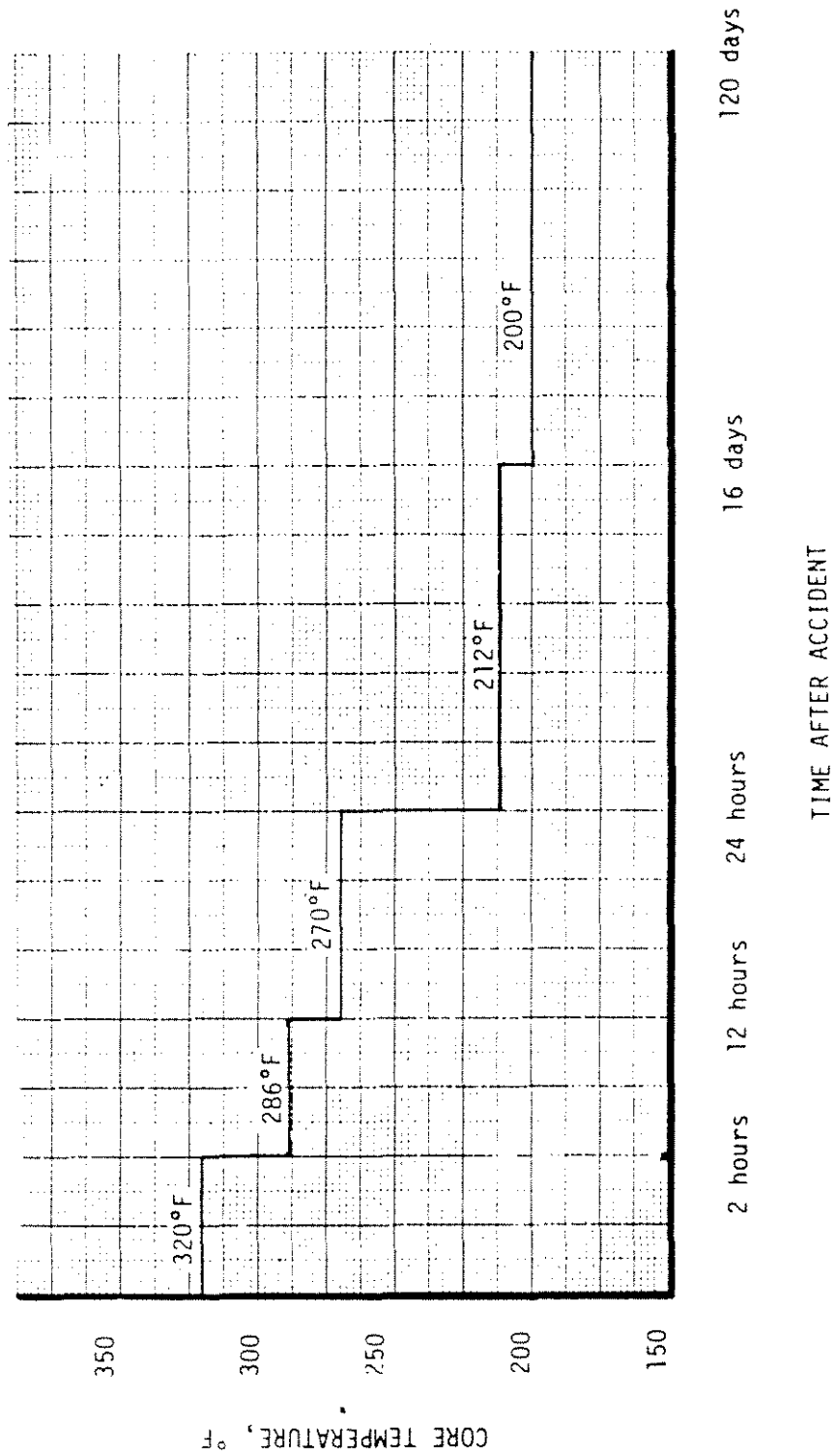
POST-ACCIDENT CONTAINMENT
MATERIALS DESIGN CONDITIONS

REV 0

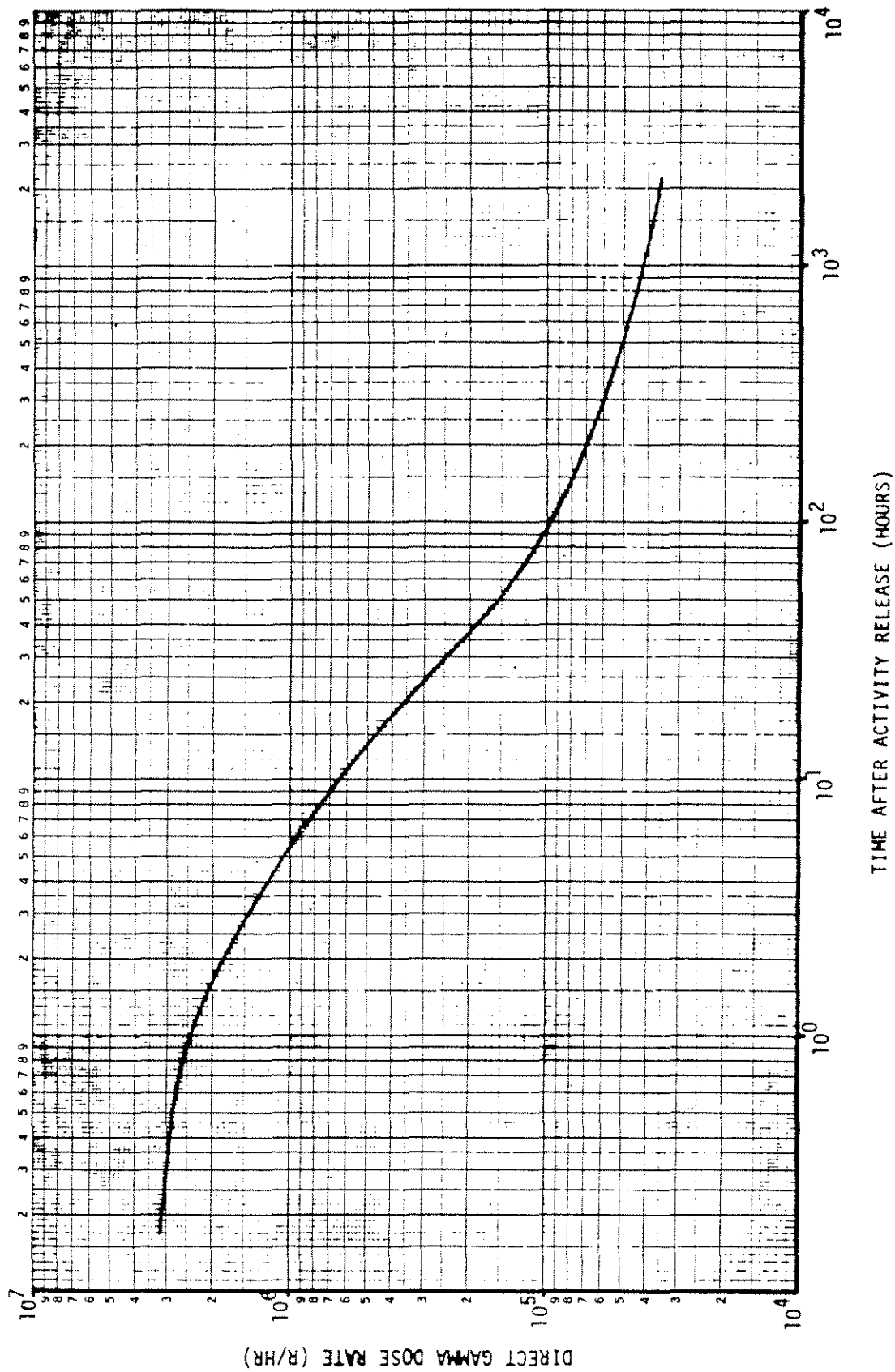
JULY, 1982

FIGURE NO

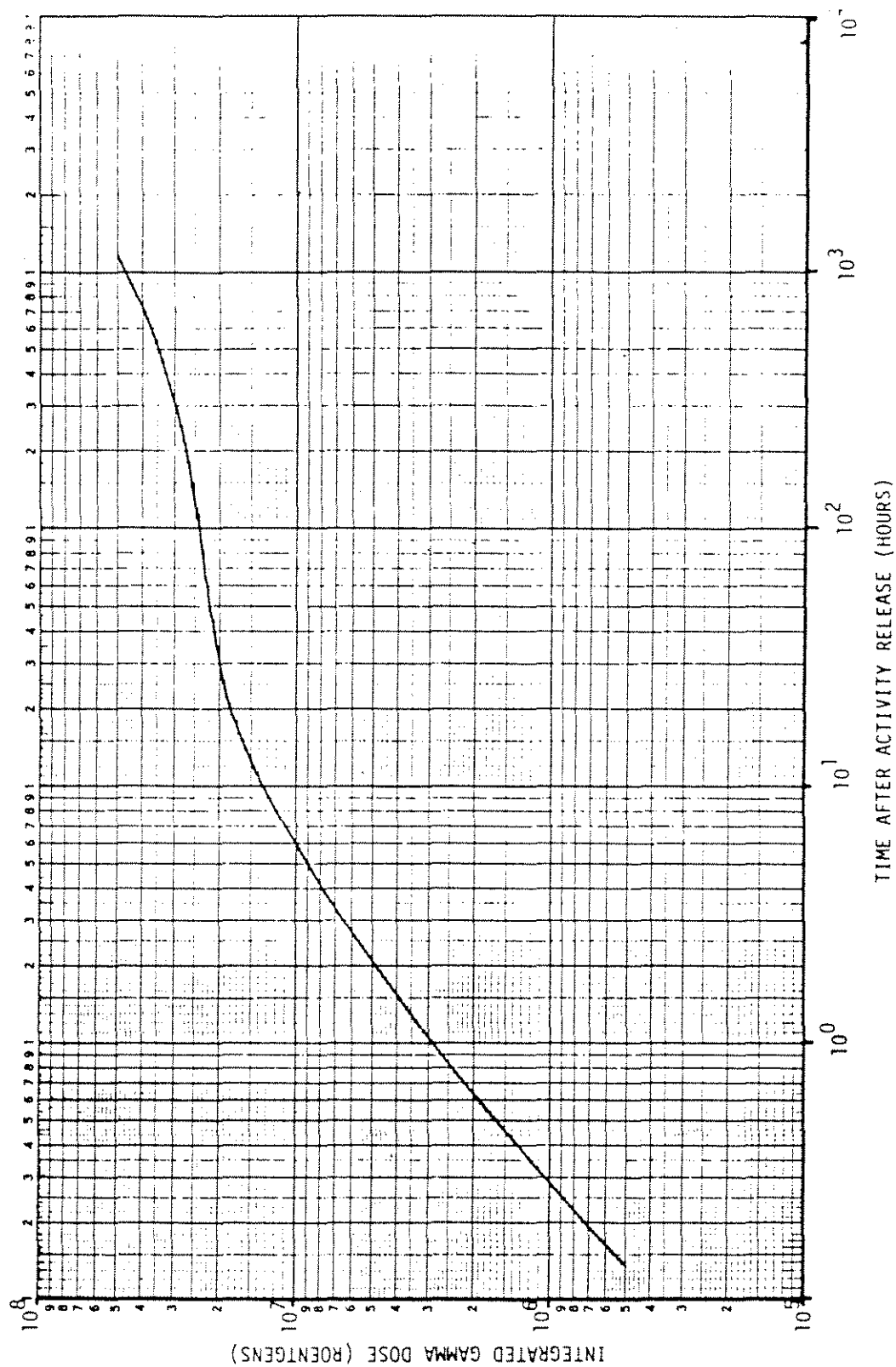
6D-2



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



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



INDIAN POINT 3

FSAR UPDATE

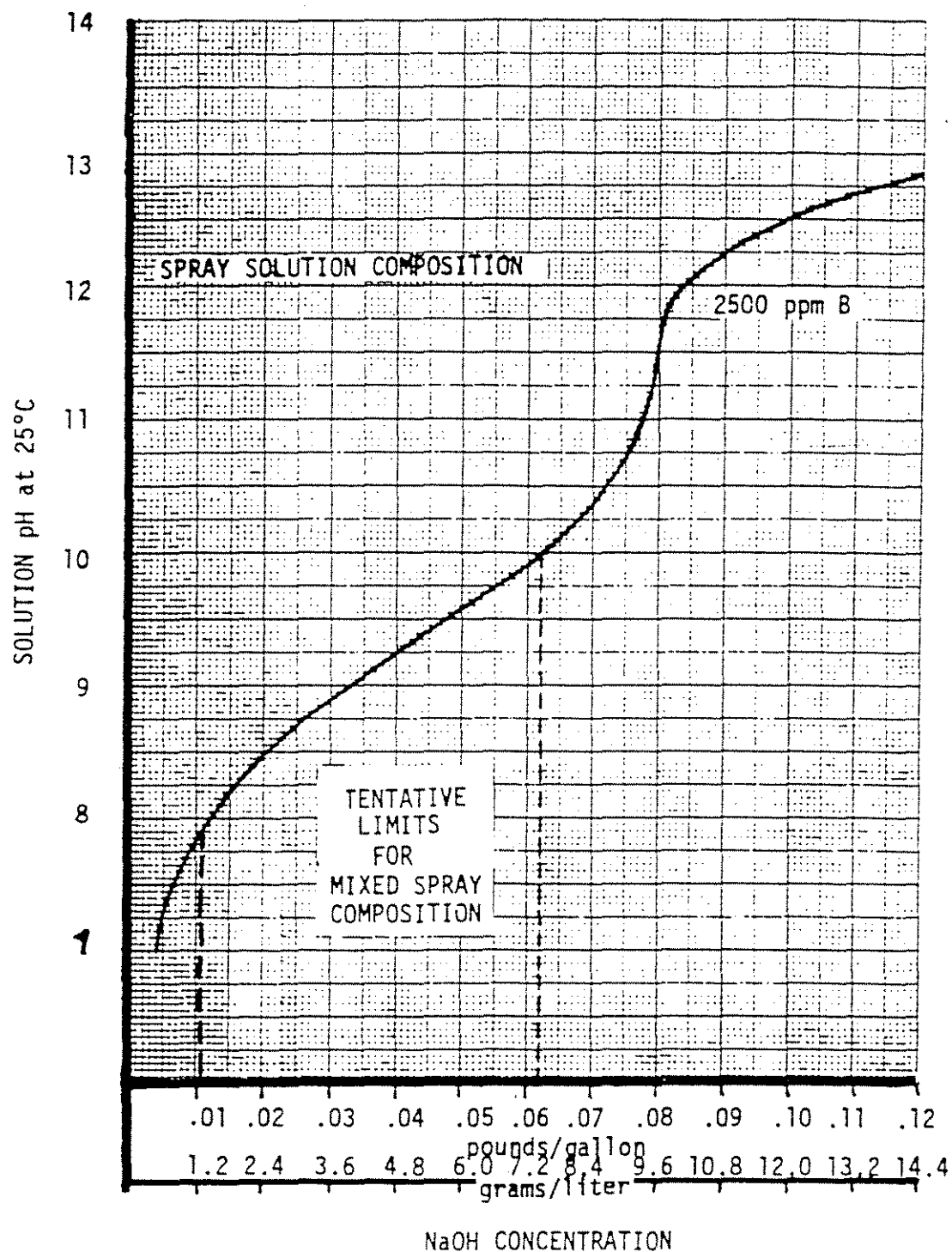
CONTAINMENT ATMOSPHERE
INTEGRATED GAMMA DOSE LEVEL

REV. 0

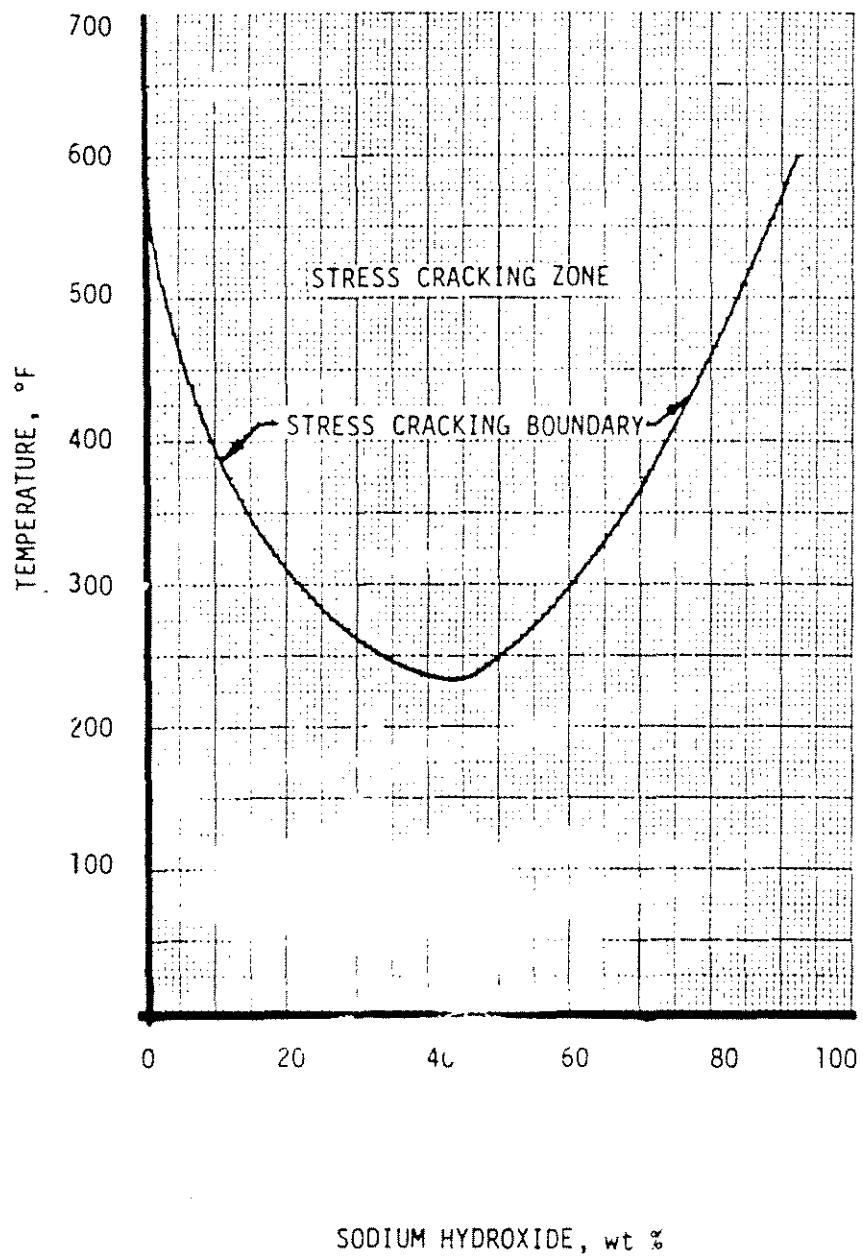
JULY, 1982

FIGURE NO.

6D-5

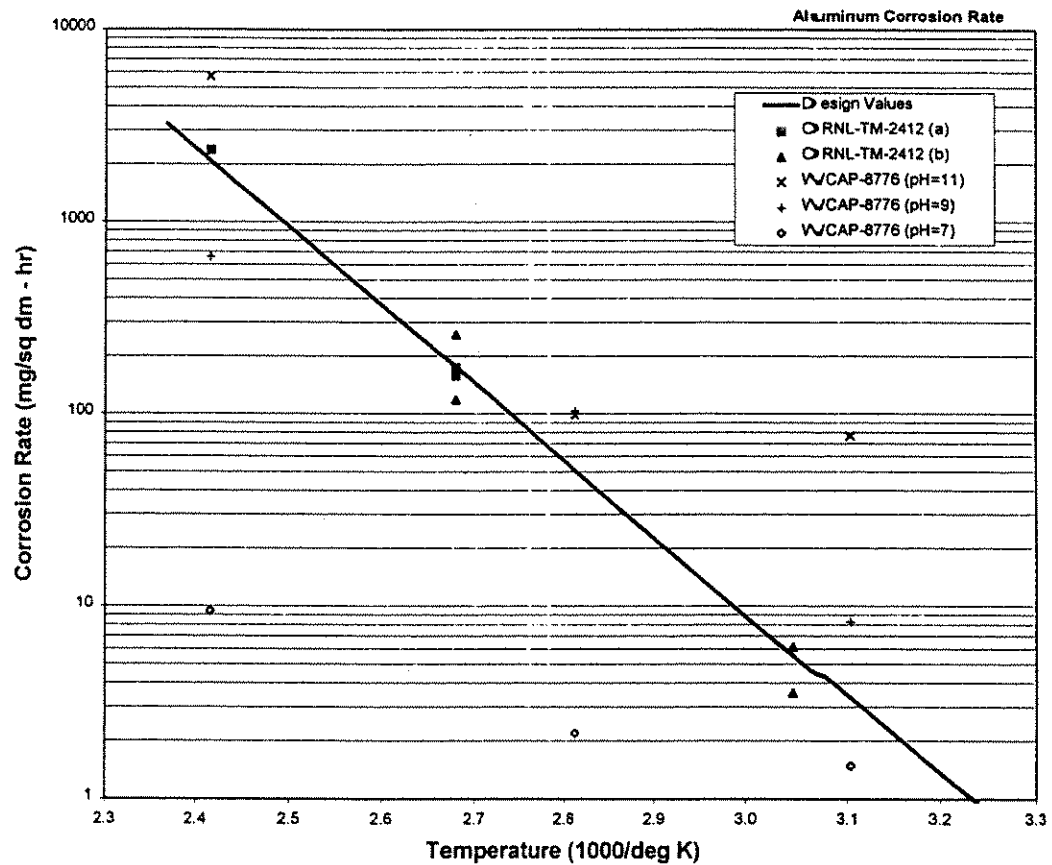


| | |
|--|-----------------|
| INDIAN POINT 3 | FSAR UPDATE |
| TITRATION CURVE FOR BORIC ACID WITH SODIUM HYDROXIDE | |
| REV. 1, JULY 1993 | FIGURE NO. 6D-6 |



| | | | |
|--|------------|-------------|------|
| 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

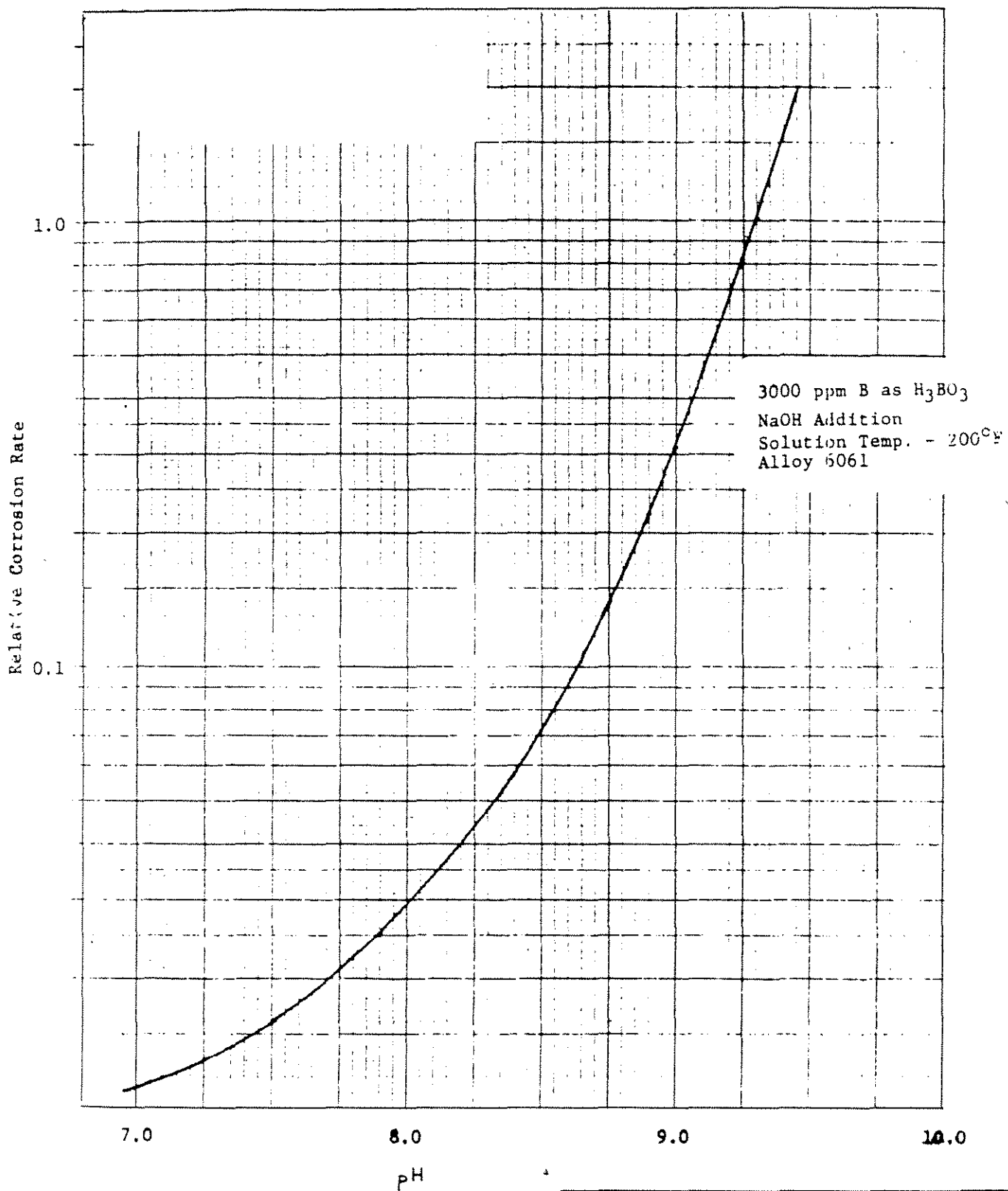


INDIAN POINT 3 FSAR UPDATE

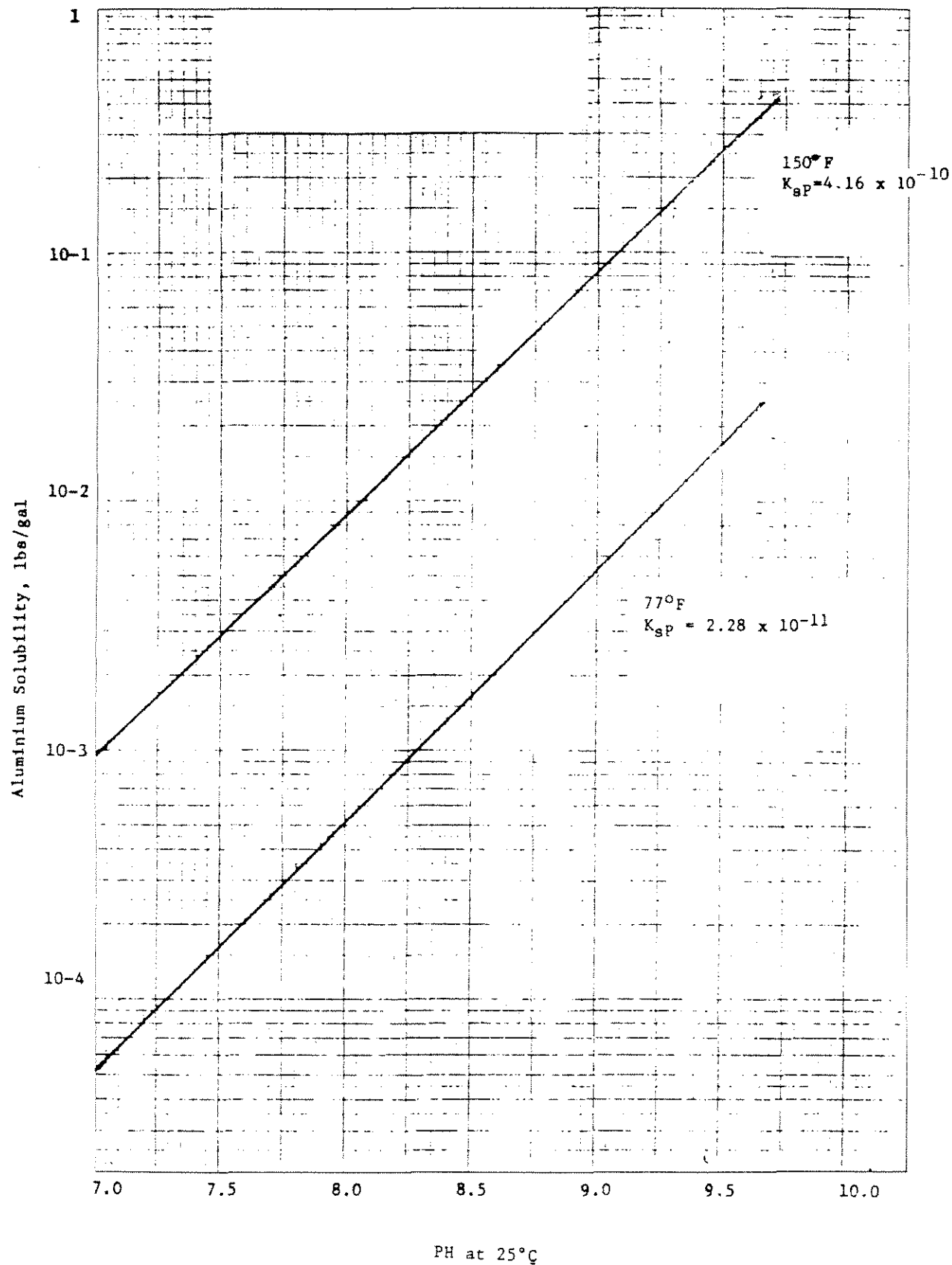
ALUMINUM CORROSION
IN DBA ENVIROMENT

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

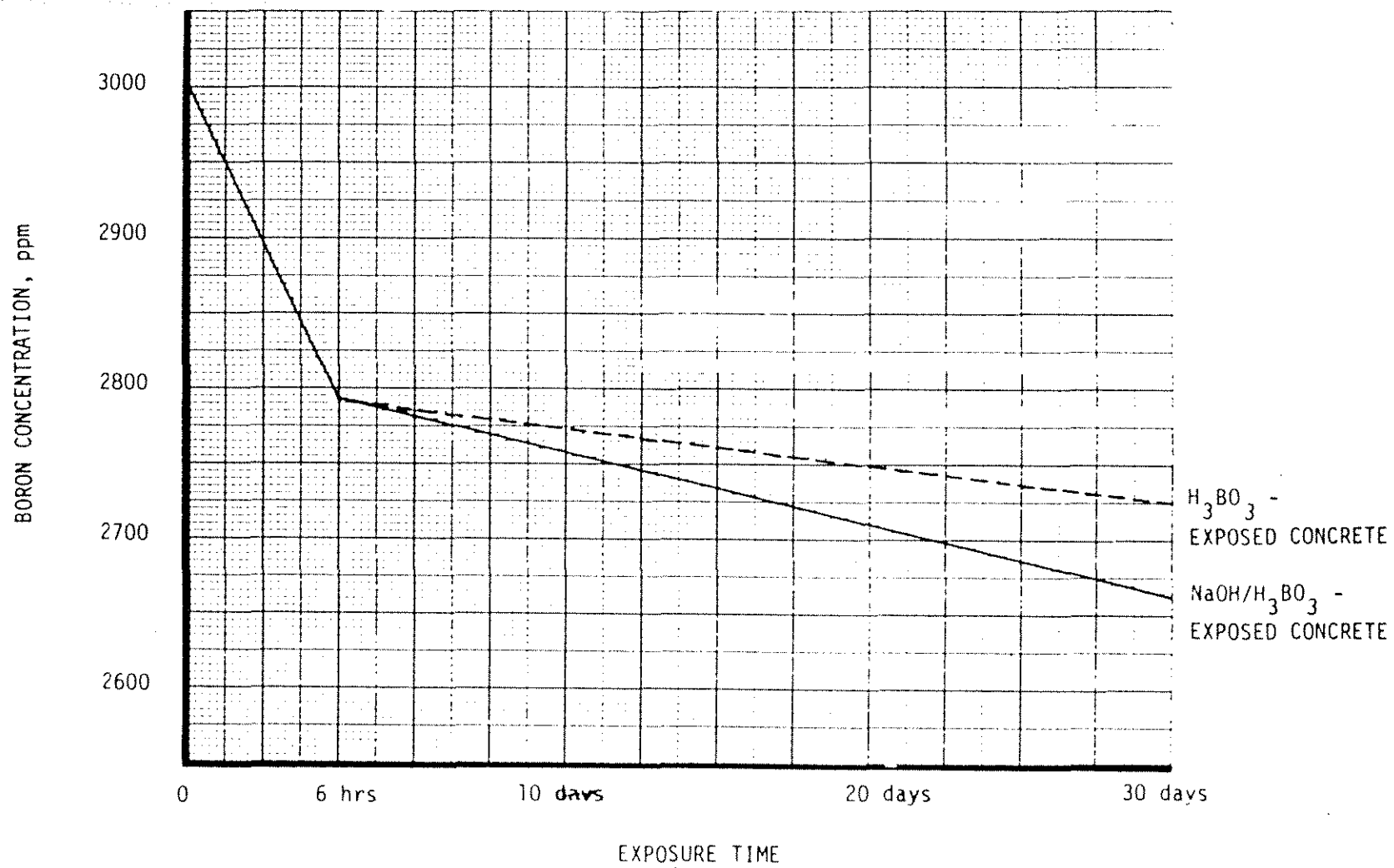
SOLUBILITY OF ALUMINUM
CORROSION PRODUCTS AS A FUNCTION OF
pH AT 77°F AND 150°F

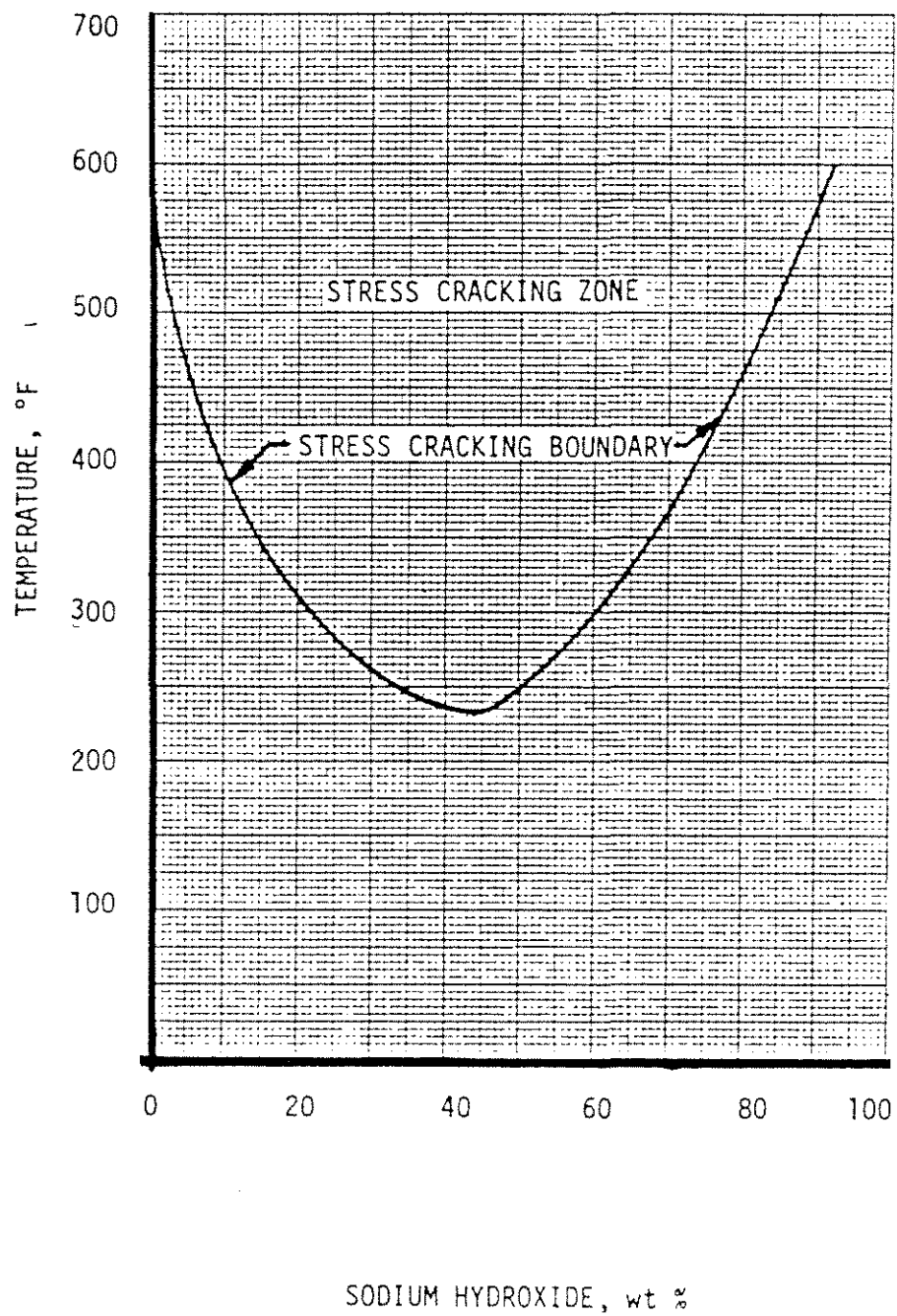
REV 0

JULY, 1982

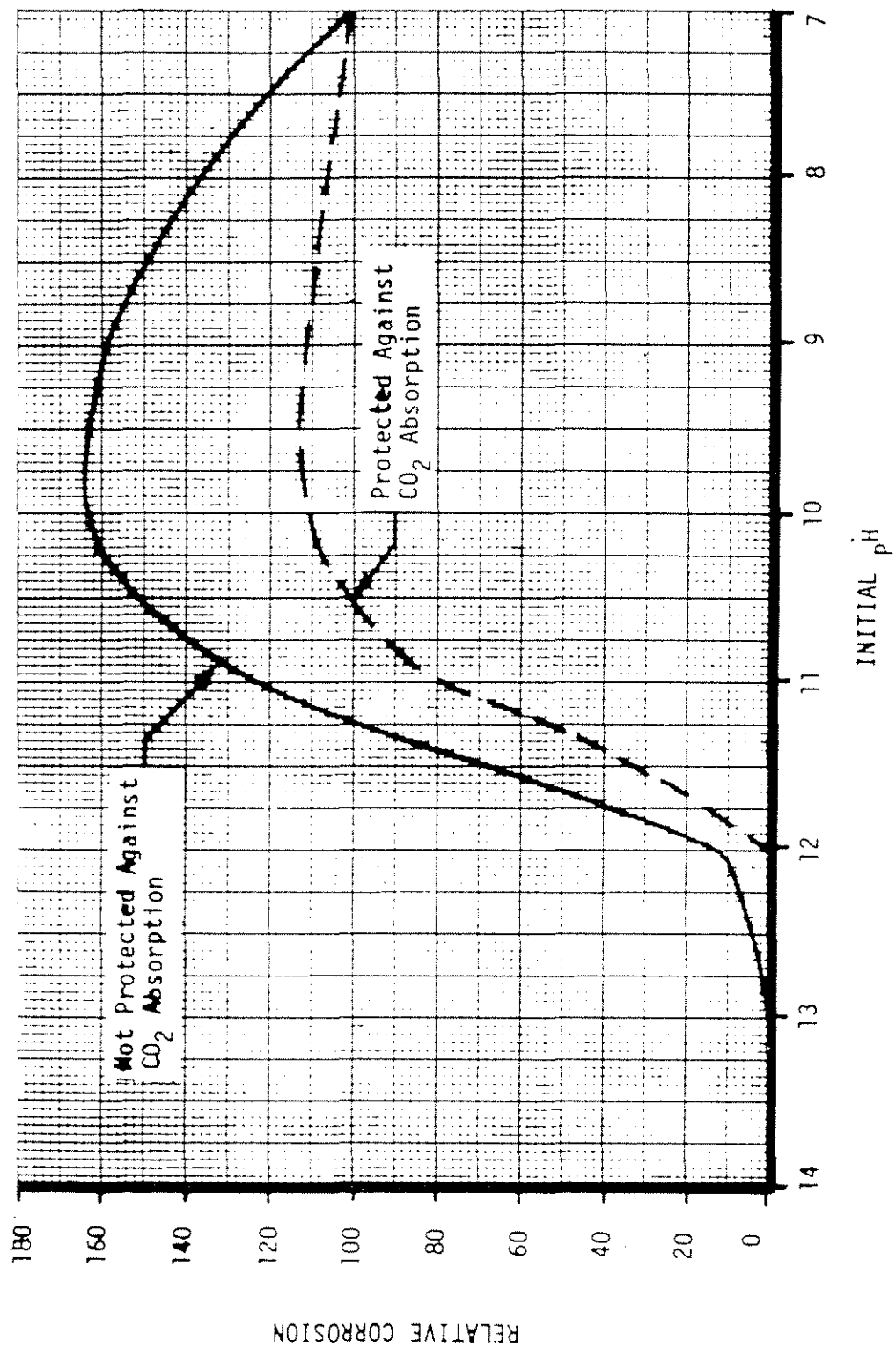
FIGURE NO 6D-10

| | |
|--|------------------|
| 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 |



INDIAN POINT 3

FSAR UPDATE

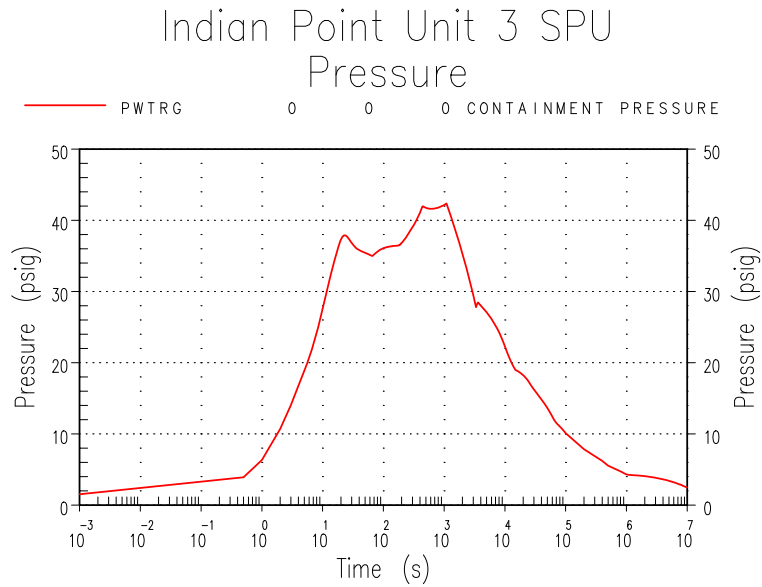
EFFECT OF CARBON DIOXIDE
ON CORROSION OF IRON
IN NaOH SOLUTION

REV 0

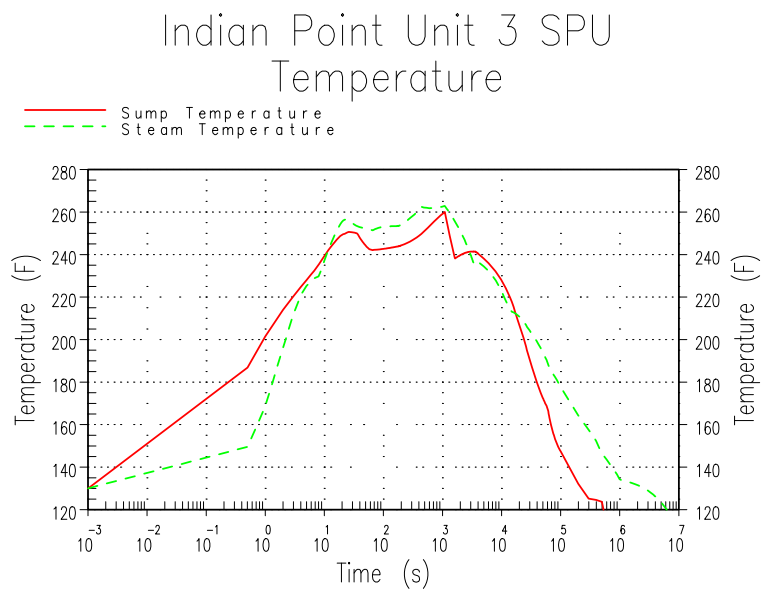
JULY 1982

FIGURE NO. 6E-2

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

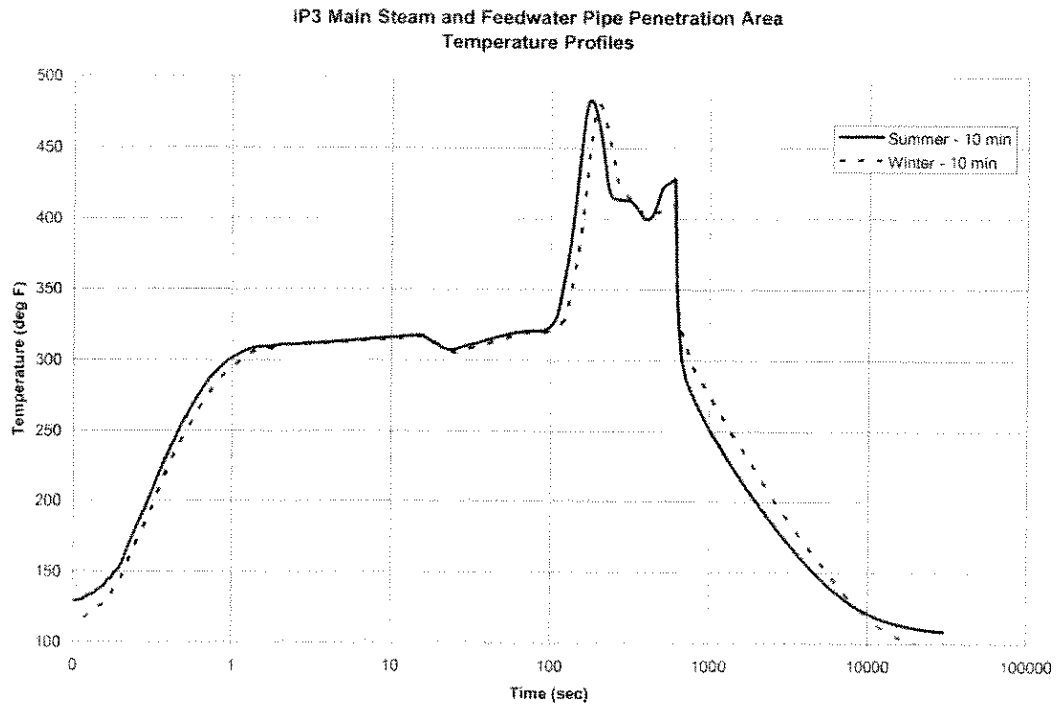


DEPS Minimum Safeguards Pressure Transient



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

