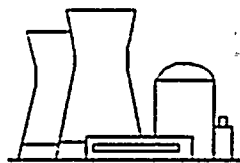
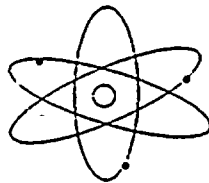


# Donald C. Cook Nuclear Plant Units 1 & 2



## Monthly Performance Monitoring Report



9003270258 900313  
PDR ADCK 05000315  
R PDC

January 1990 Data

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## INTRODUCTION

The Monthly Performance Monitoring Report is designed to measure, trend, and report selected Donald C. Cook Nuclear Plant performance information for review by American Electric Power management. This program furnishes management with data that indicates the performance of the Cook Nuclear Plant in key safety, reliability, and budget areas.

## HIGHLIGHTS

### Unit 1

Unit 1 operated for all but seven hours of the month of January at 100% power. Power was reduced to 88% on Thursday, 4 January for the monthly main turbine control valve testing. Power was returned to 100% on the 5th. The monthly testing was performed mid-week, rather than over the weekend, to support the Unit 2 Ice Condenser Surveillance outage.

On 31 January Unit 1 was in the 207th day of consecutive electrical production.

### Unit 2

Unit 2 entered the month of January at 100% power. A power reduction was begun on Friday, 5 January, and Unit 2 was removed from service at 0227 on the 6th for a scheduled ice condenser surveillance outage.

During the outage the ice condenser lower inlet door inspection, sixteen scheduled RFC walk-downs, repairs to several leaks discovered during the containment walk-down (including RTD manifold valve RC-108-L1 and SI-158-L1 & L2), and tube staking and removal of tube plugs in the east and west main feed pump condensers were completed.

The unit's return to service was delayed by large steam generator stop valve closure times. Three of four stop valves failed their technical specification requirements for closure time on initial stroke testing. All four MSIVs were modified, in accordance with a vendor design, to reduce condensation which caused an increase in valve closure times. In addition, MRV-220 required one larger stud, and repair of the stud hole; the hole was damaged as the old stud was being removed. The reactor coolant system was cooled down and the level lowered to half loop during the MSIV repairs to effect repairs of various valves.

On Wednesday, 24 January, all four MSIVs had passed the 5 second closure time test after a 24 hour wait period. The reactor went critical on 25 January, at 1136, and the unit paralleled with the system at 2253 the same day. After chemistry holds, west main feed-pump testing, and delays due to heater drain pump level indication problems the unit reached 100% power at 0400 on the 27th, where it operated the remainder of the month.

The removal of Unit 2 from service on January 6 ended the longest concurrent Unit 1 and Unit 2 run in Cook's history at 140 days, 6 hours and 53 minutes.

# UNIT AVAILABILITY

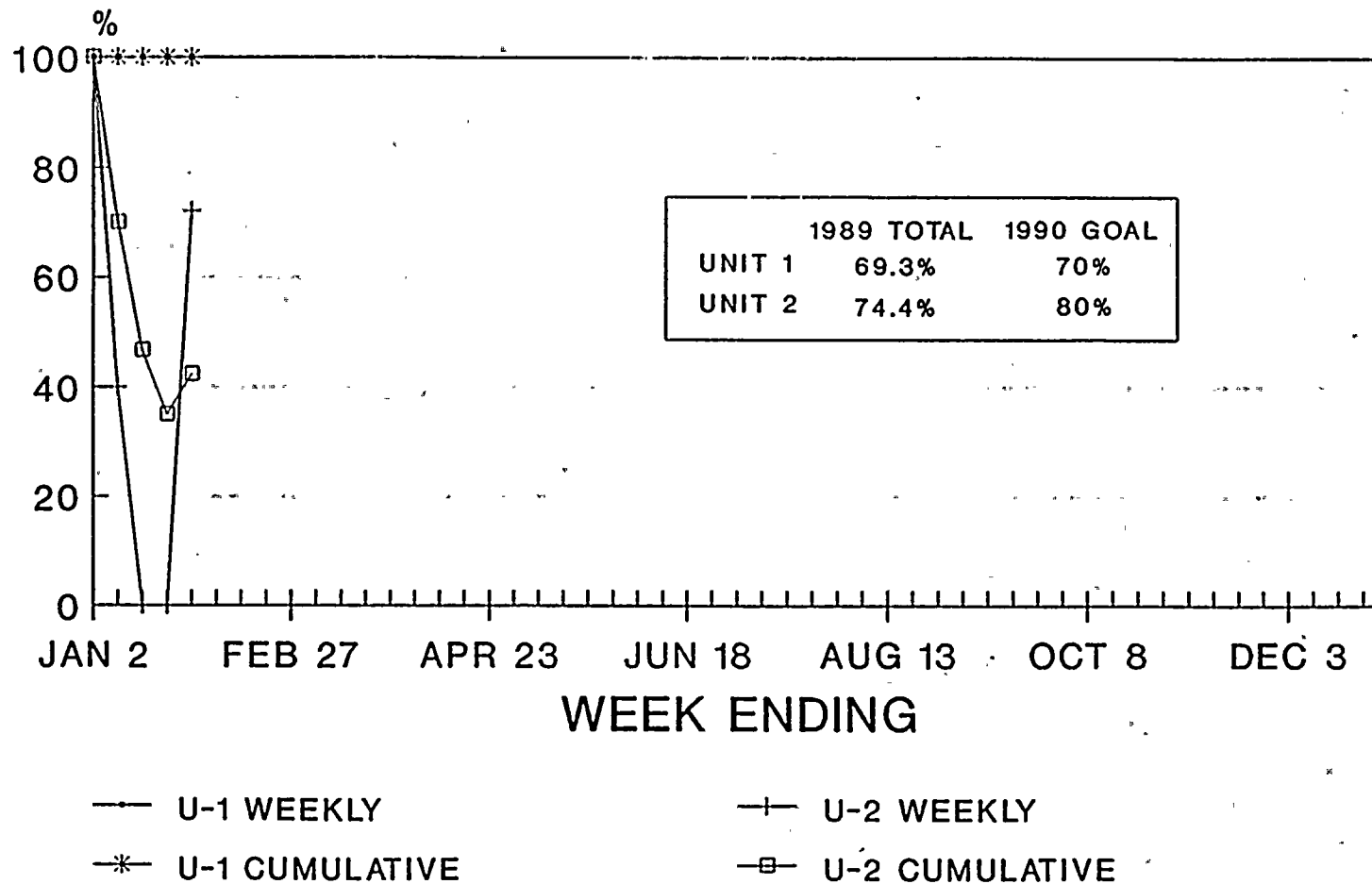


FIG 1

# UNIT CAPACITY FACTOR

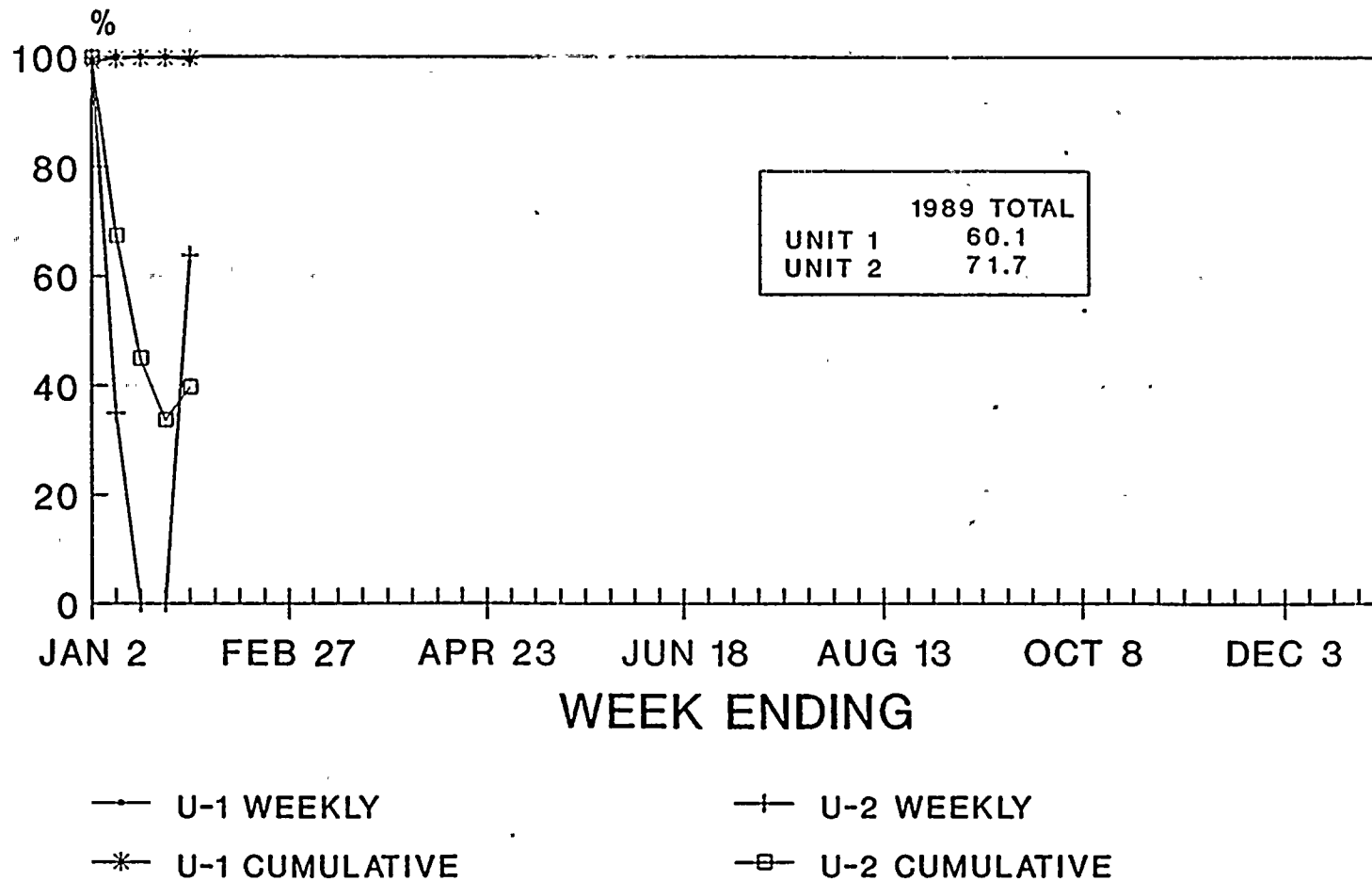


FIG 2

# UNIT SCRAMS AND SAFETY SYSTEM ACTUATIONS

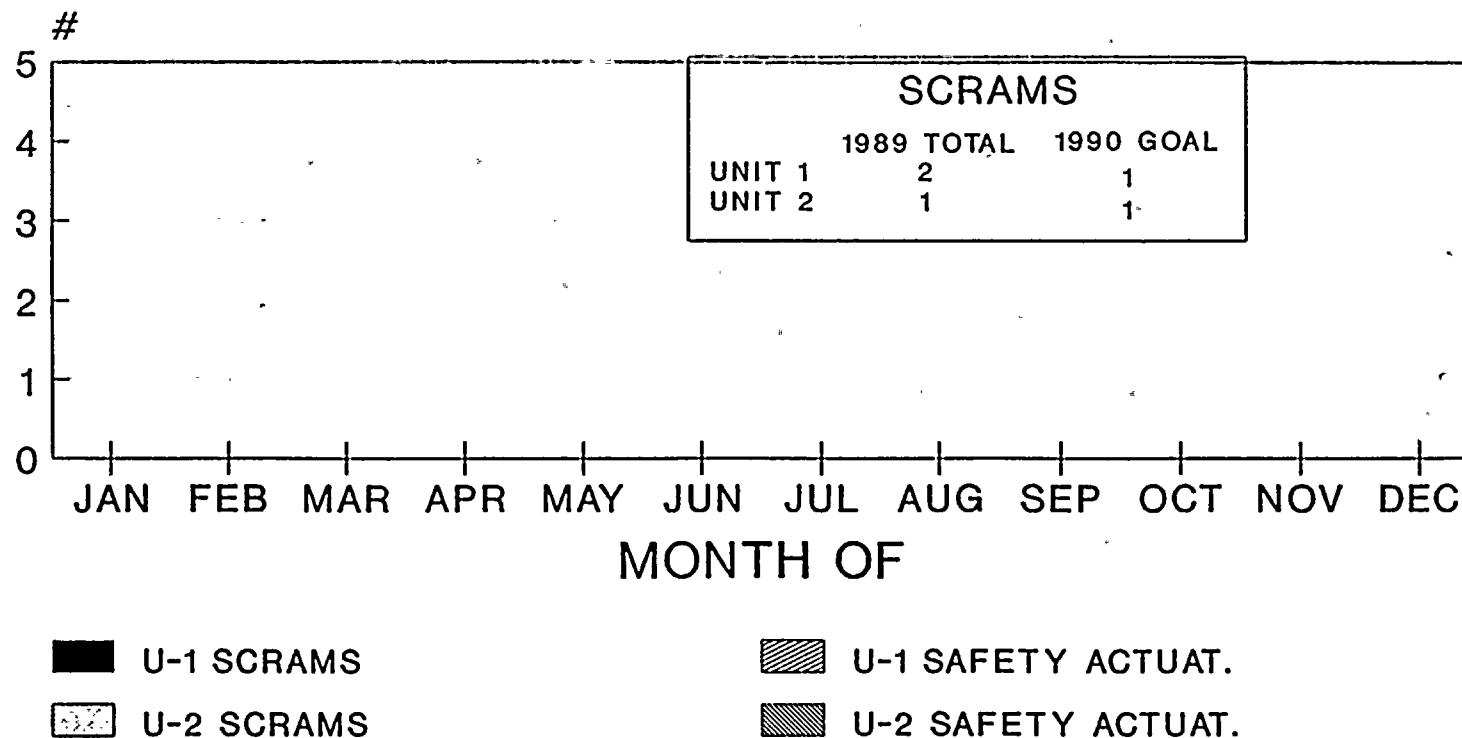


FIG 3

NOTE: THERE HAVE BEEN NO SCRAMS OR SAFETY  
SYSTEM ACTUATIONS YET THIS YEAR



# SAFETY SYSTEM UN-AVAILABILITY

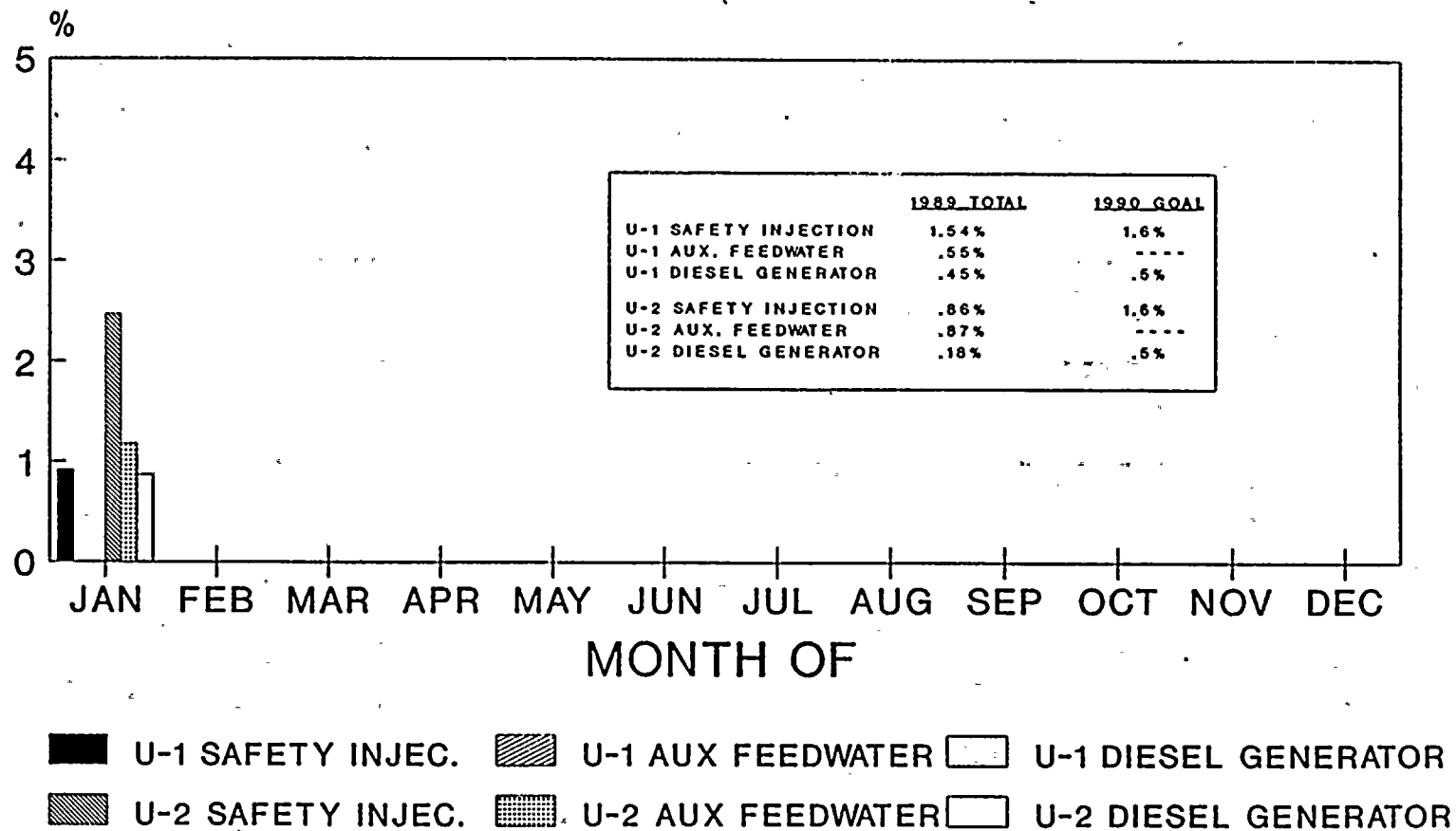


FIG 4

NOTE: THESE ARE CALCULATED ACCORDING TO THE FORMULAS FOR THE INPO INDICATORS

# NET HEAT RATE

## RATIO OF ACTUAL TO DESIGN HEAT RATE

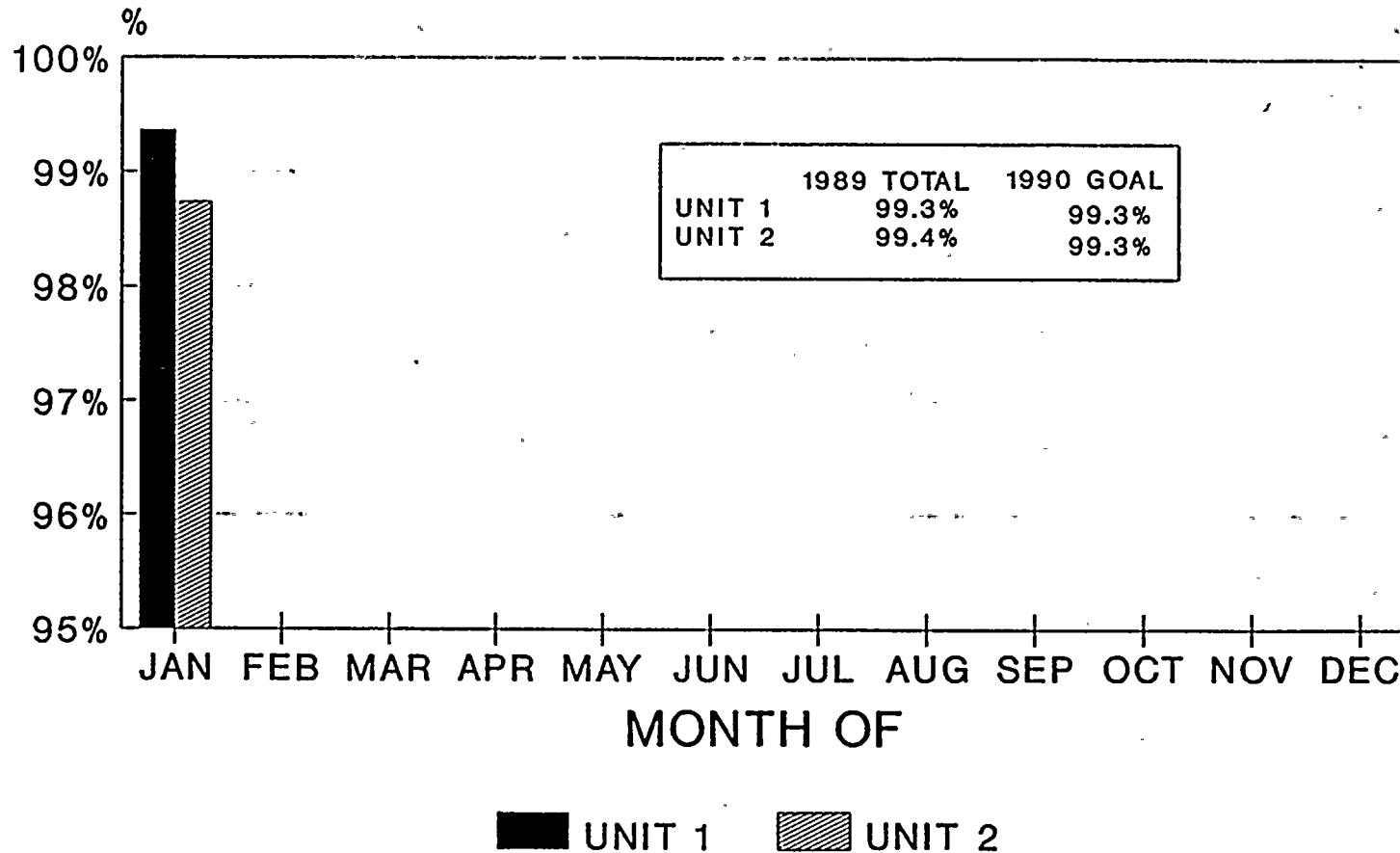


FIG 5

# REACTOR COOLANT SYSTEM LEAKRATE

T/S LIMIT: 1.0 GPM

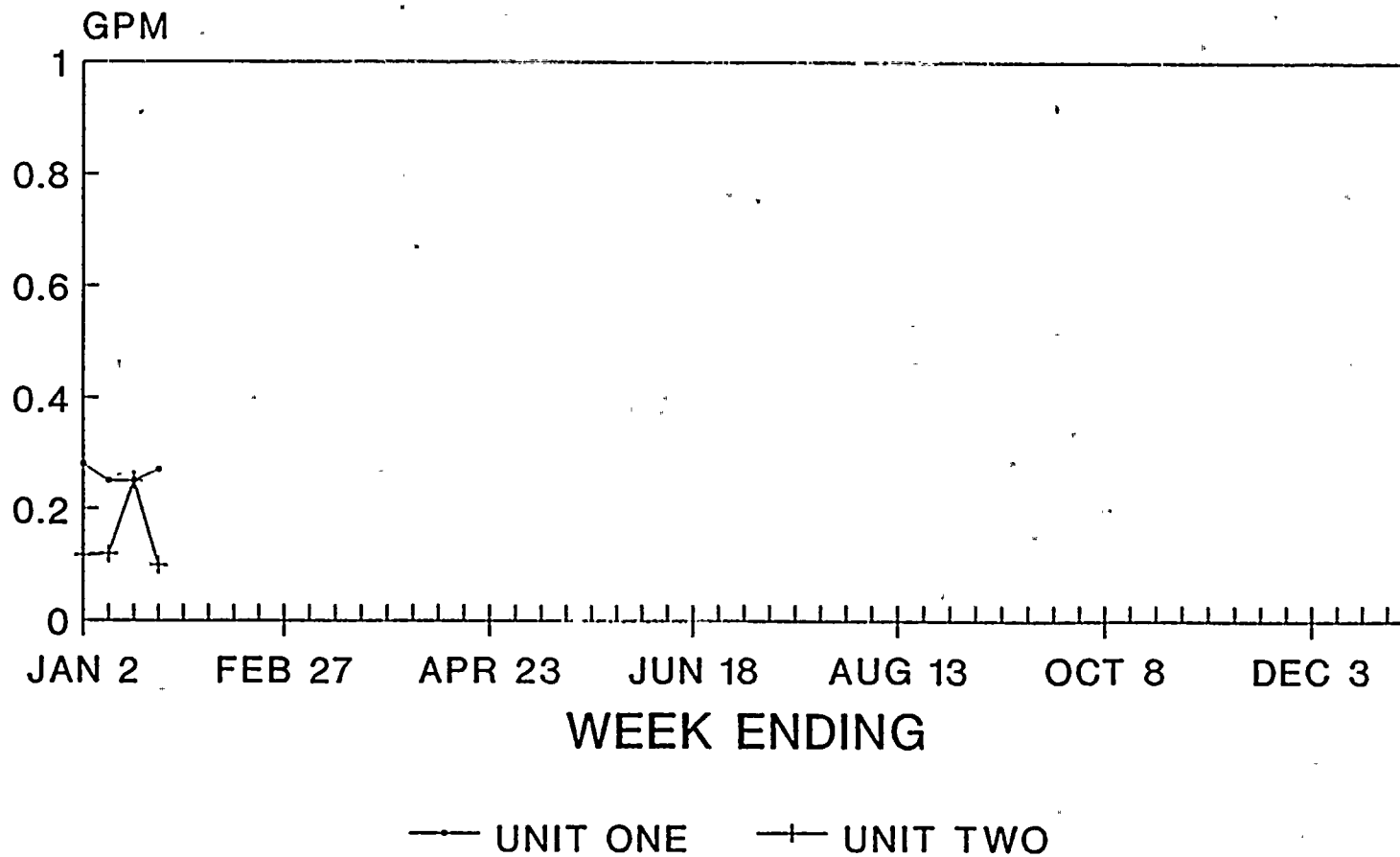


FIG 6

NOTE: THIS GRAPH REFERS TO NET LEAKAGE

# S/G CATION CONDUCTIVITY

S/G OWNERS GROUP LIMIT: 0.8 micro-mho

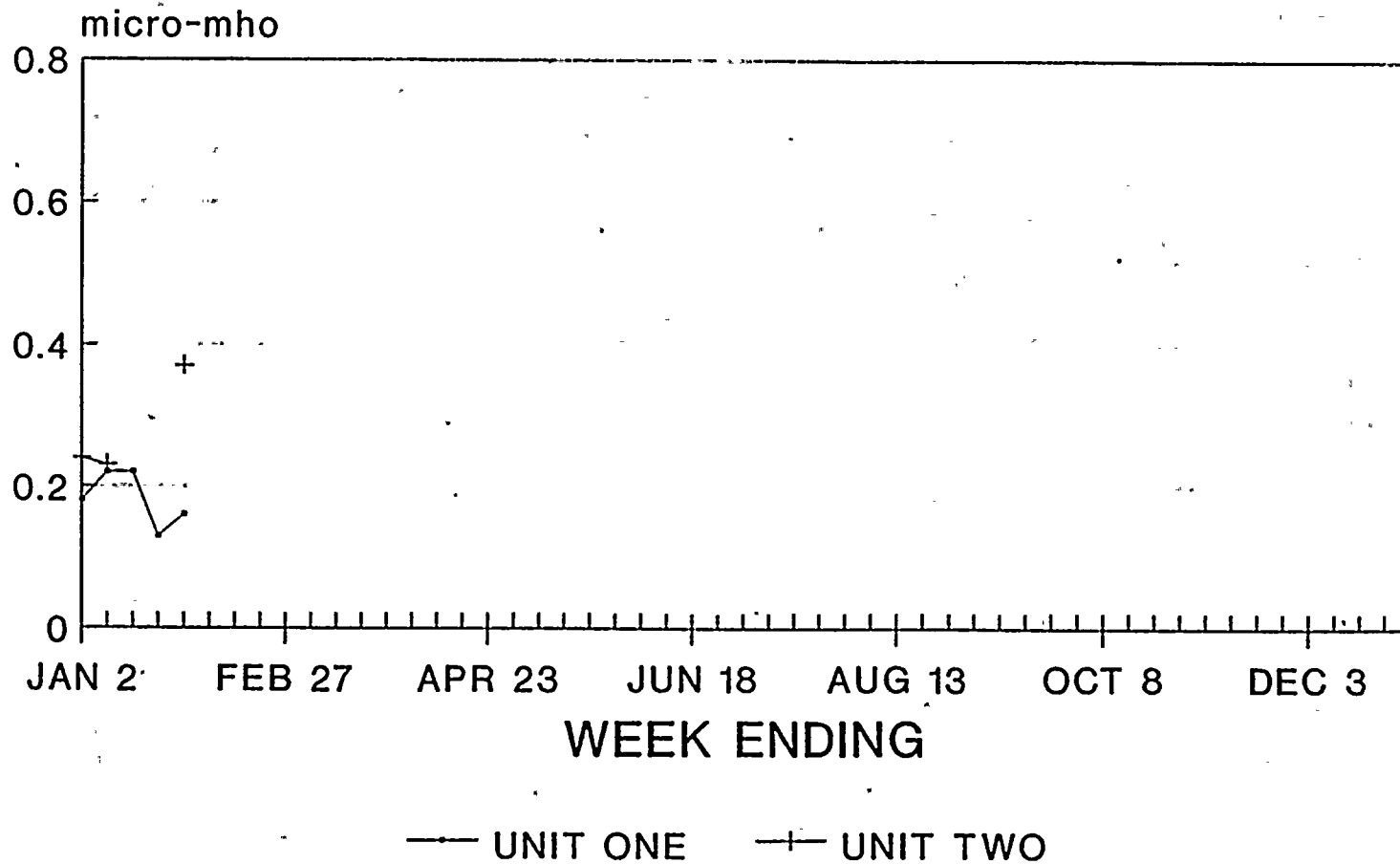


FIG 7

# CHEMISTRY OUT OF SPECIFICATION

% OF TIME S/G CHEM IS OUT OF SPEC

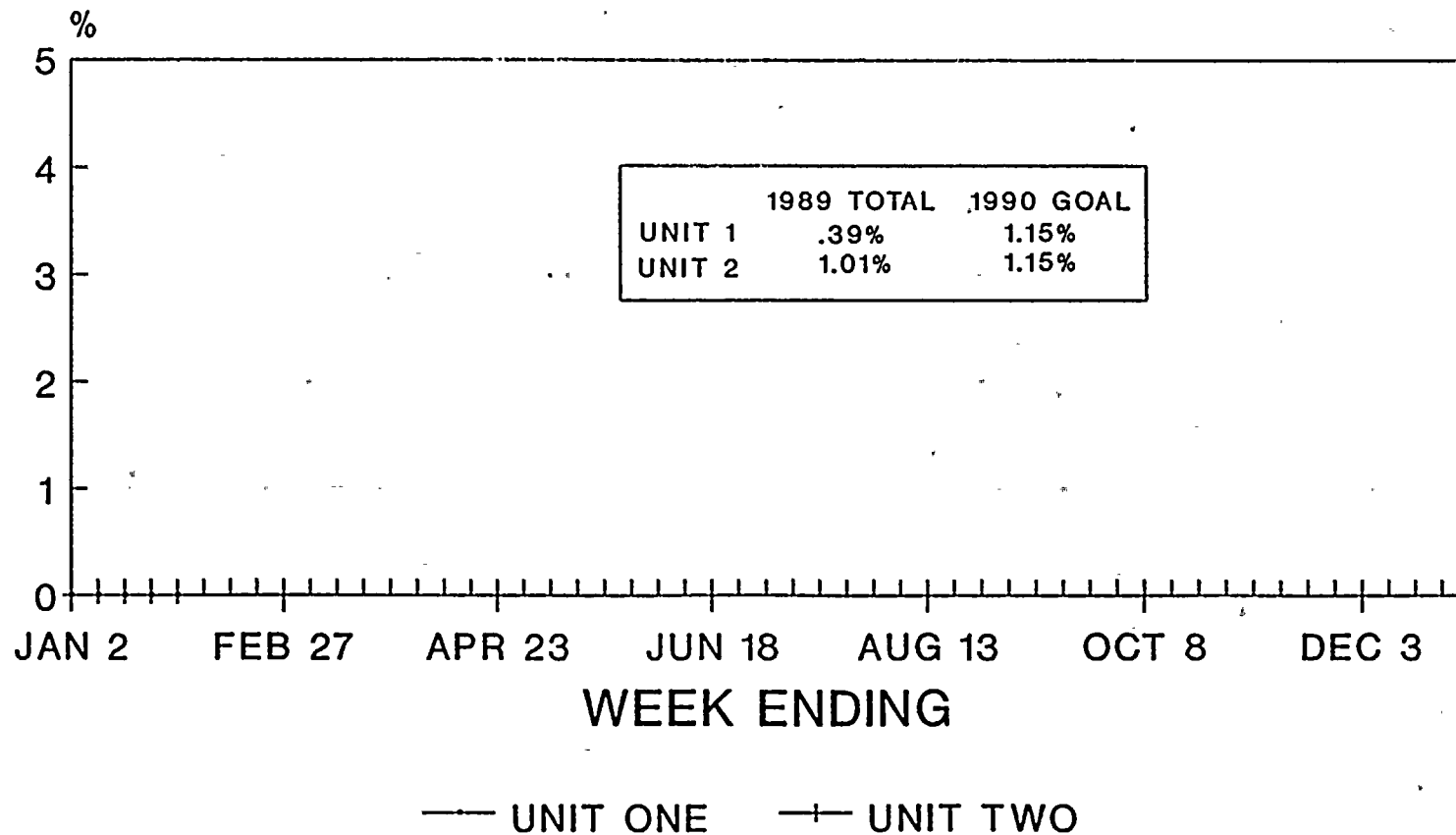


FIG 8

NOTE: STEAM GENERATOR CHEMISTRY HAS YET  
TO BE OUT OF SPECIFICATION THIS YEAR

# REACTOR COOLANT ACTIVITY

## IODINE-131

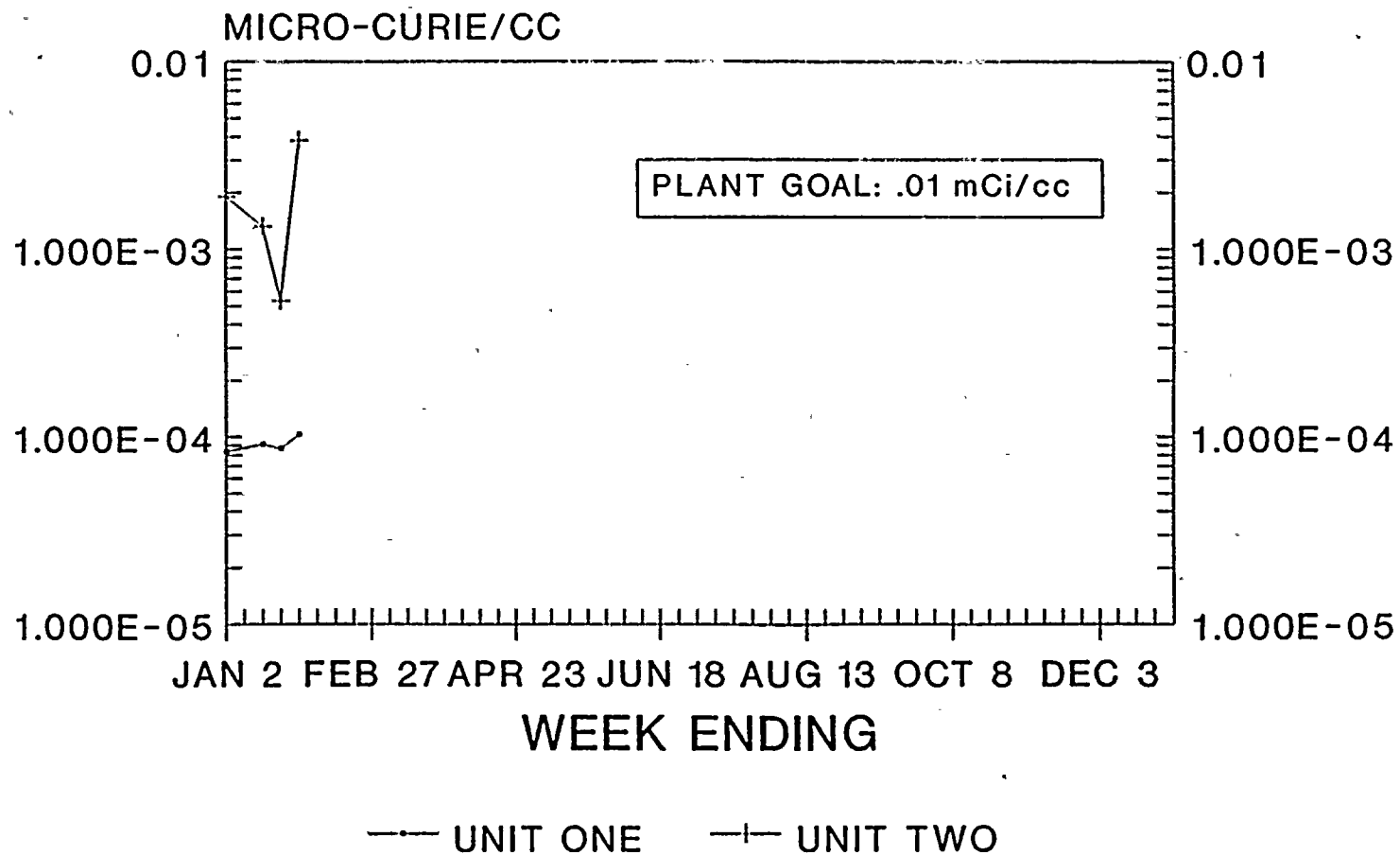


FIG 9

# WASTE WATER VOLUME

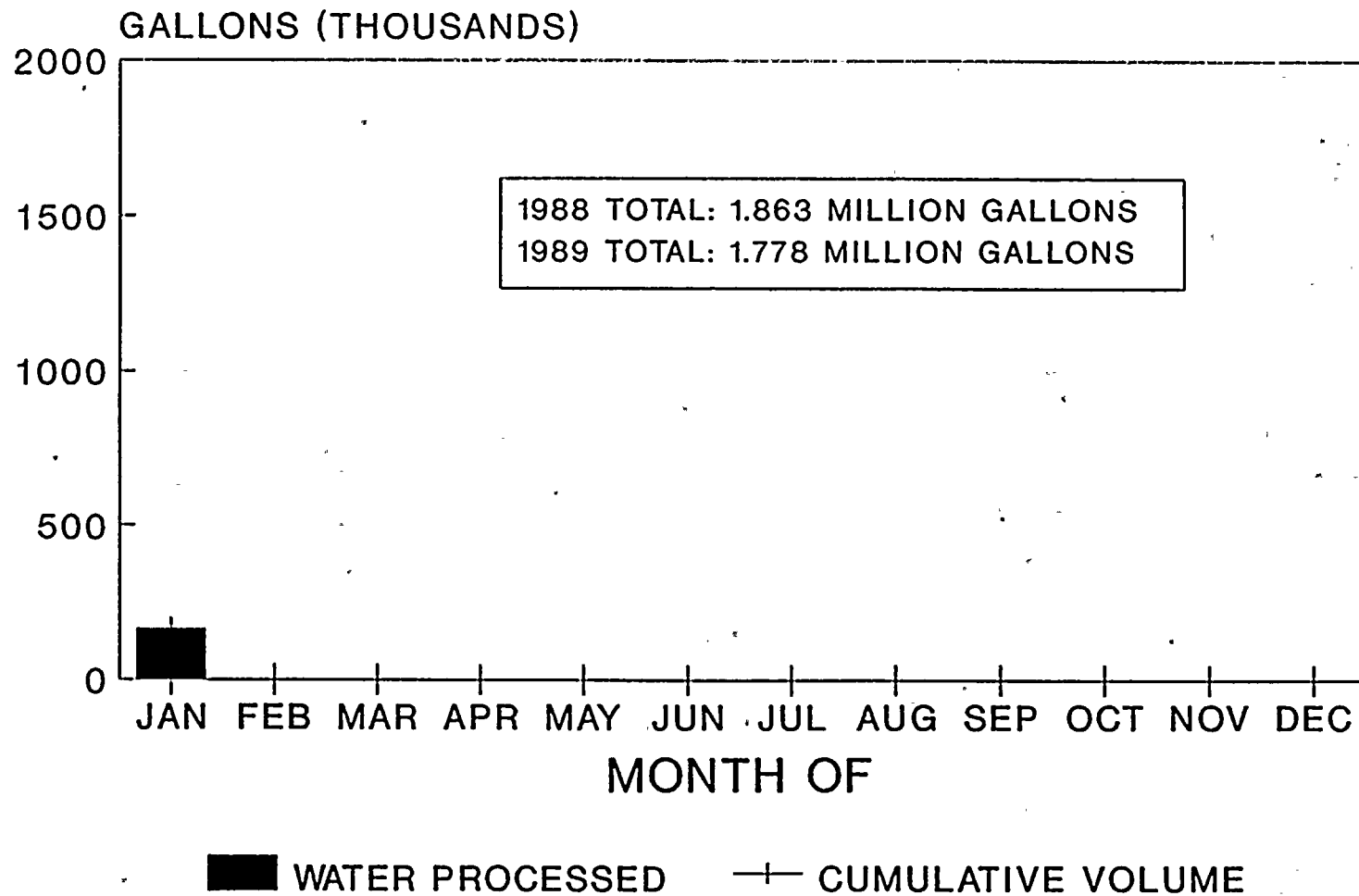


FIG 10

# DRY ACTIVE WASTE

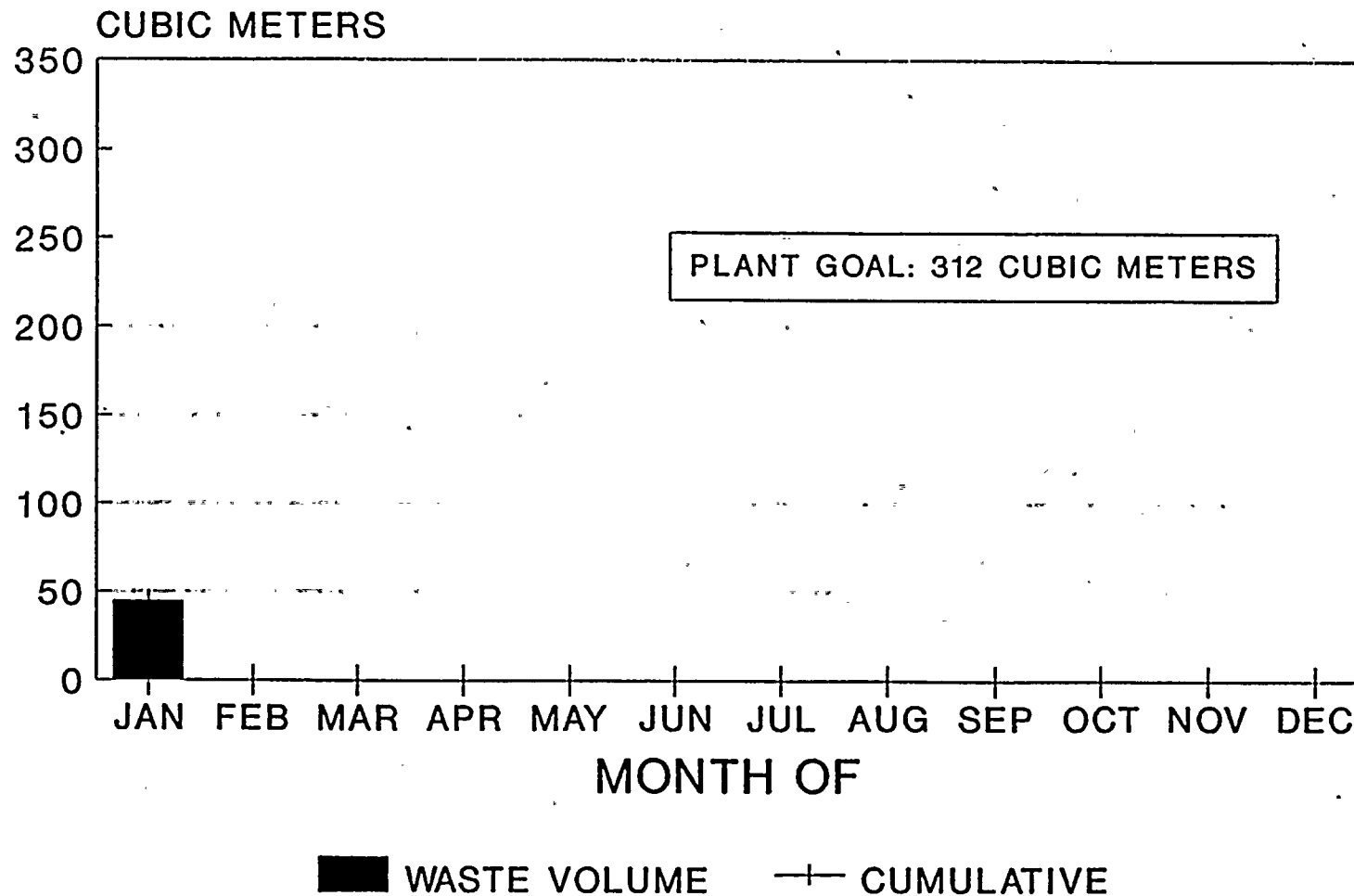


FIG 11



# CONDITION REPORTS ISSUED

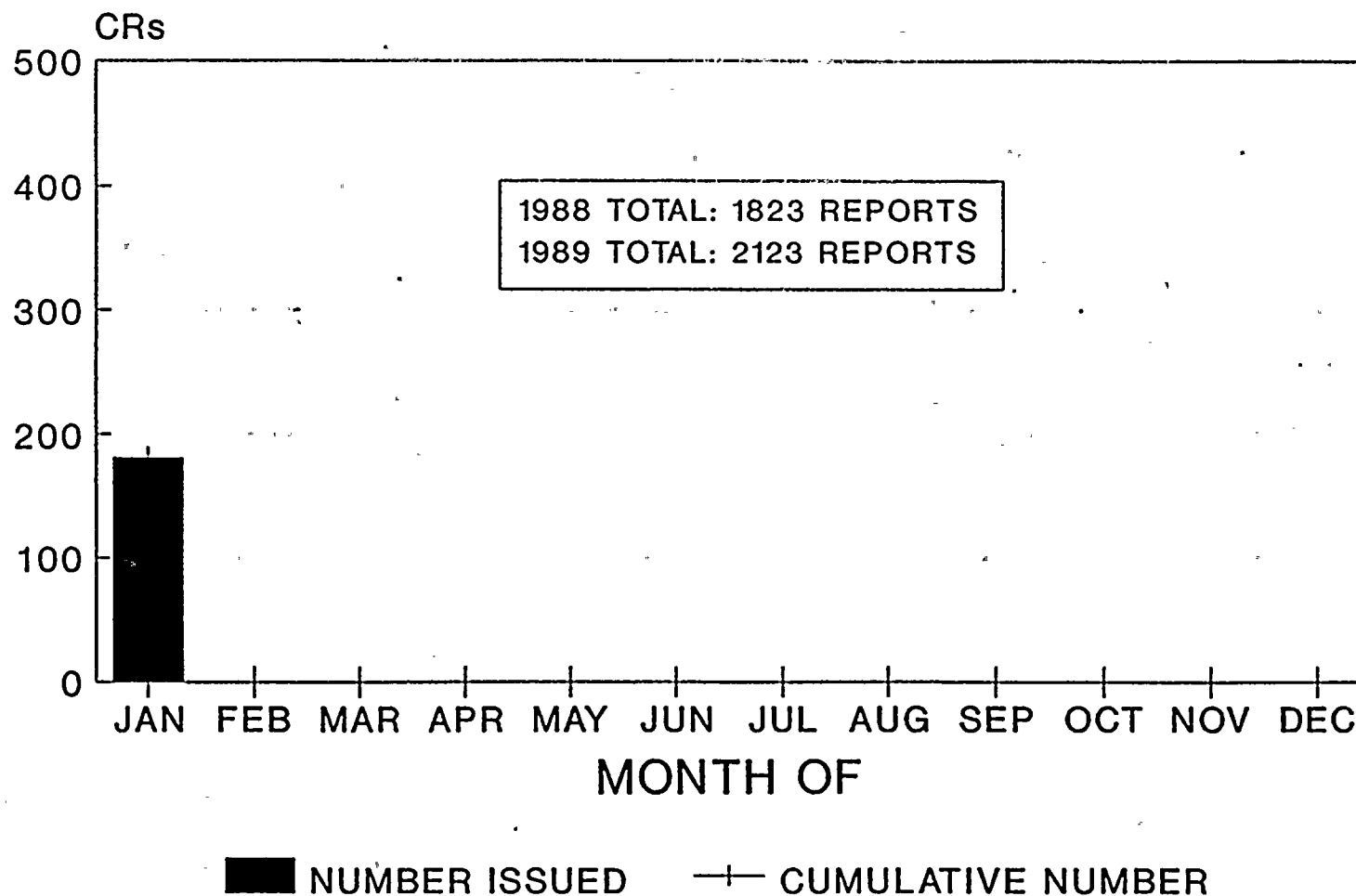


FIG 12

# PROBLEM REPORT STATUS

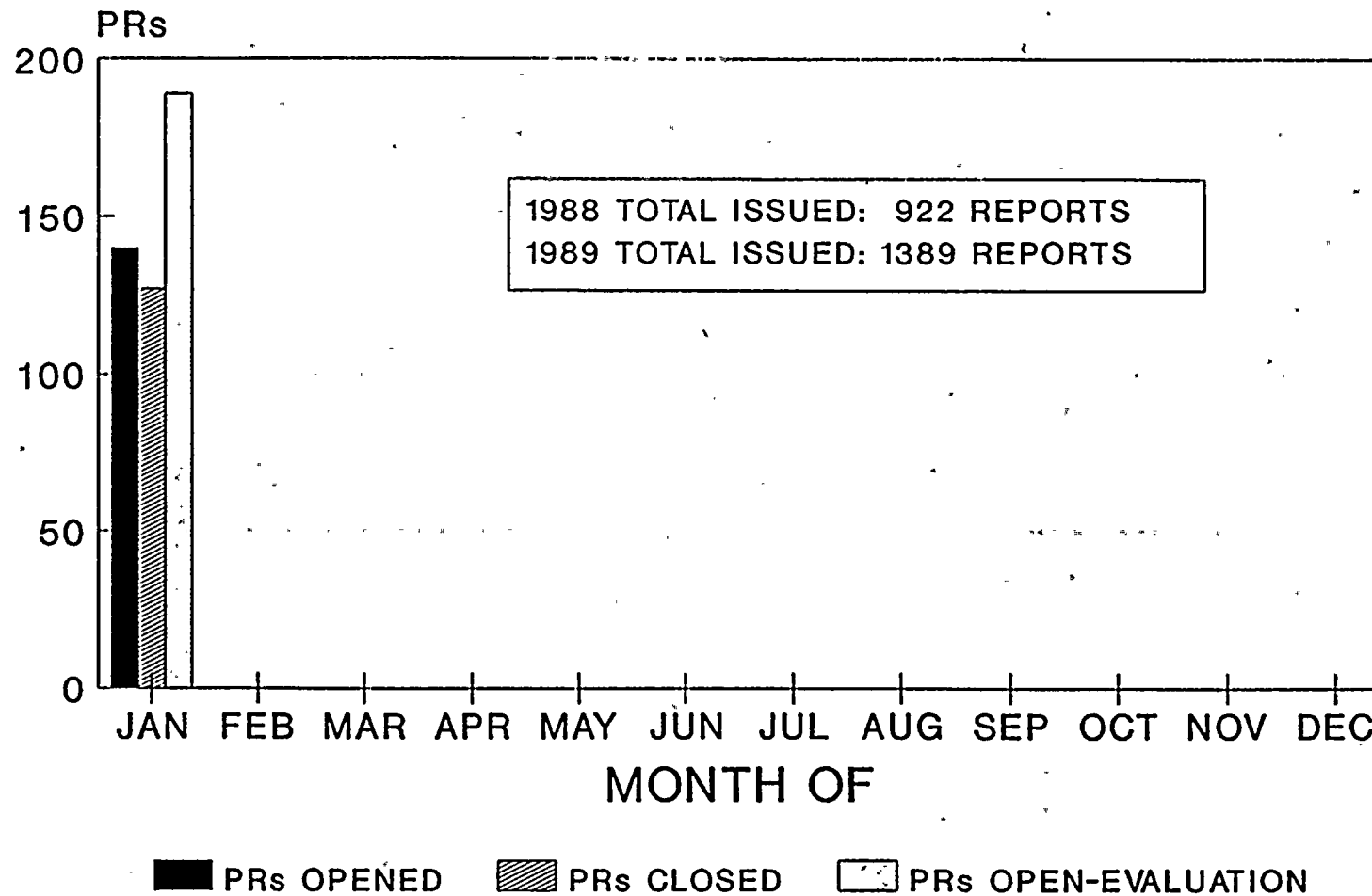


FIG 13

# SIGNIFICANT PROBLEM REPORTS

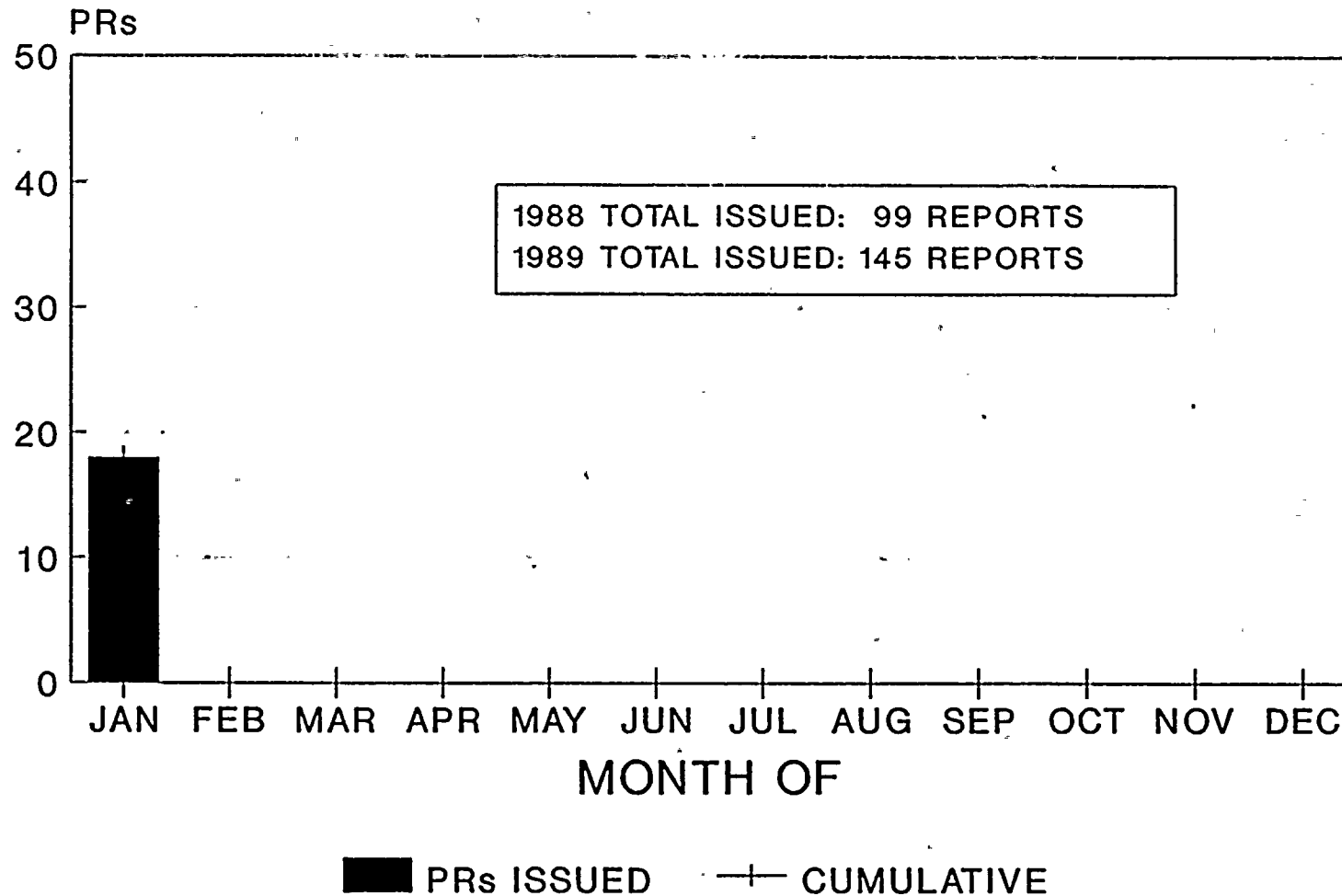


FIG 14



# LICENSE EVENT REPORTS

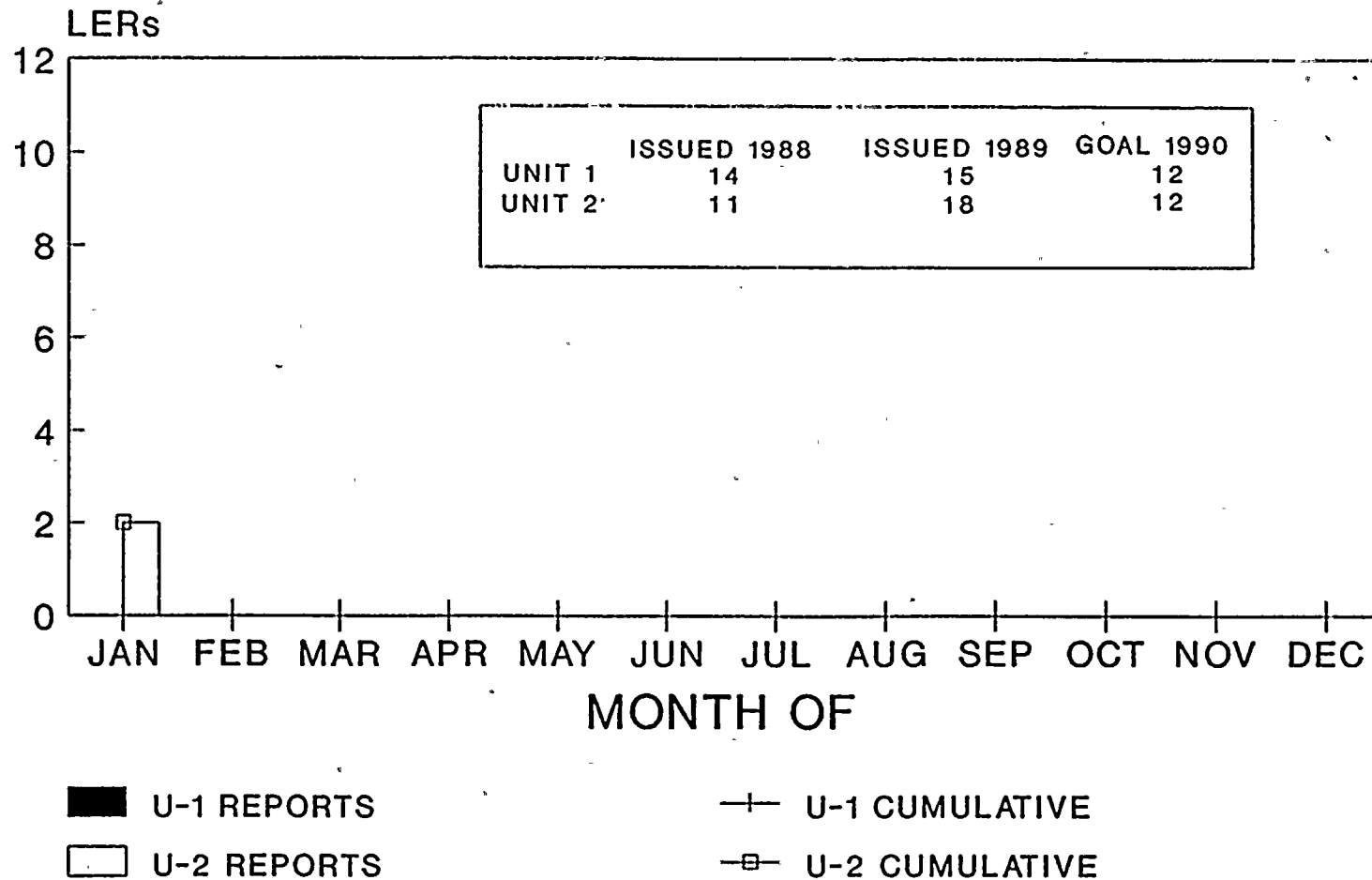


FIG 15

# SIGNIFICANT OPERATING EVENT REPORTS

## 112 INPO RECOMMENDED SOERS

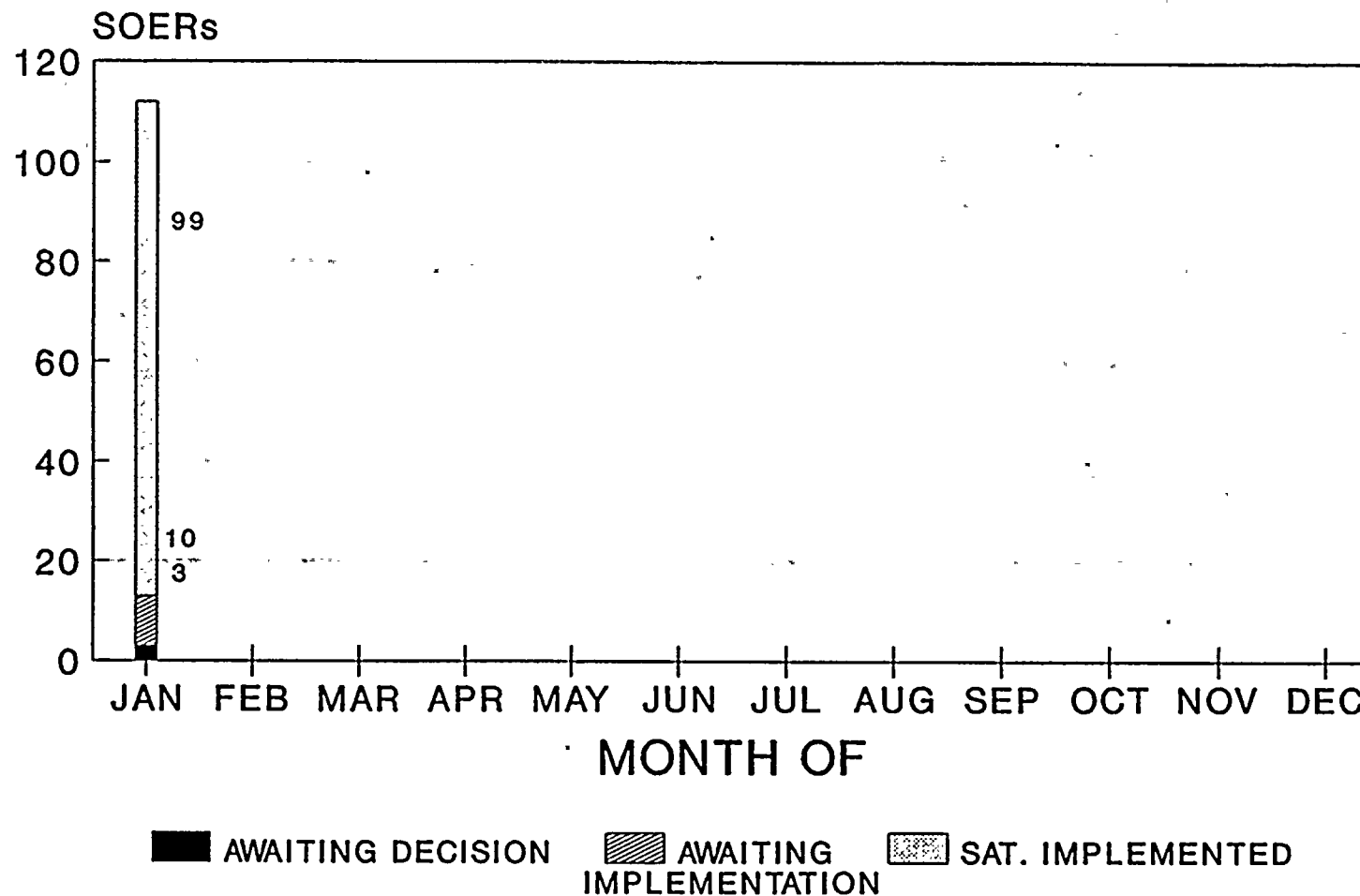


FIG 16

# JOB ORDER STATUS

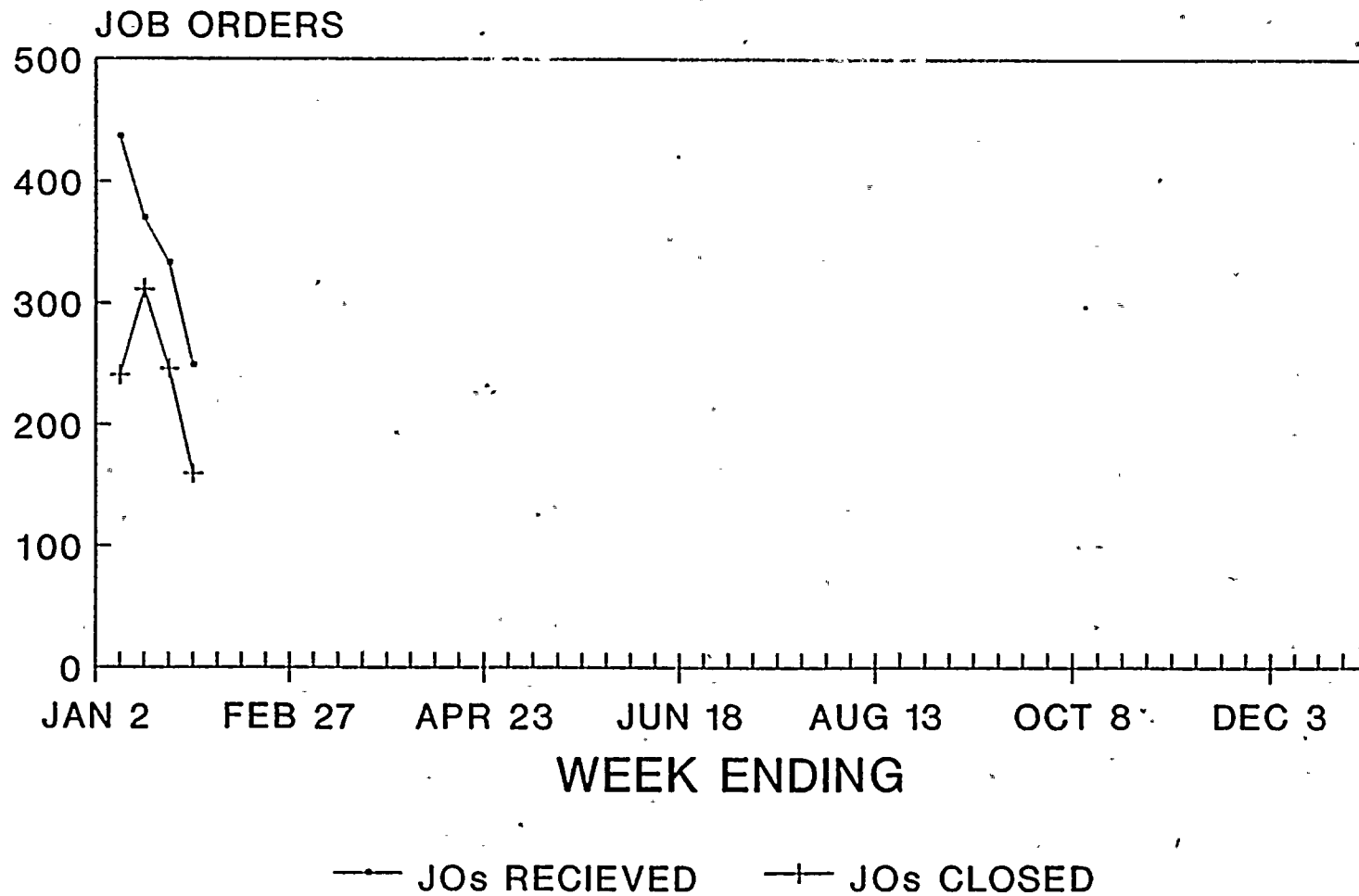


FIG 17

# OPEN JOB ORDERS

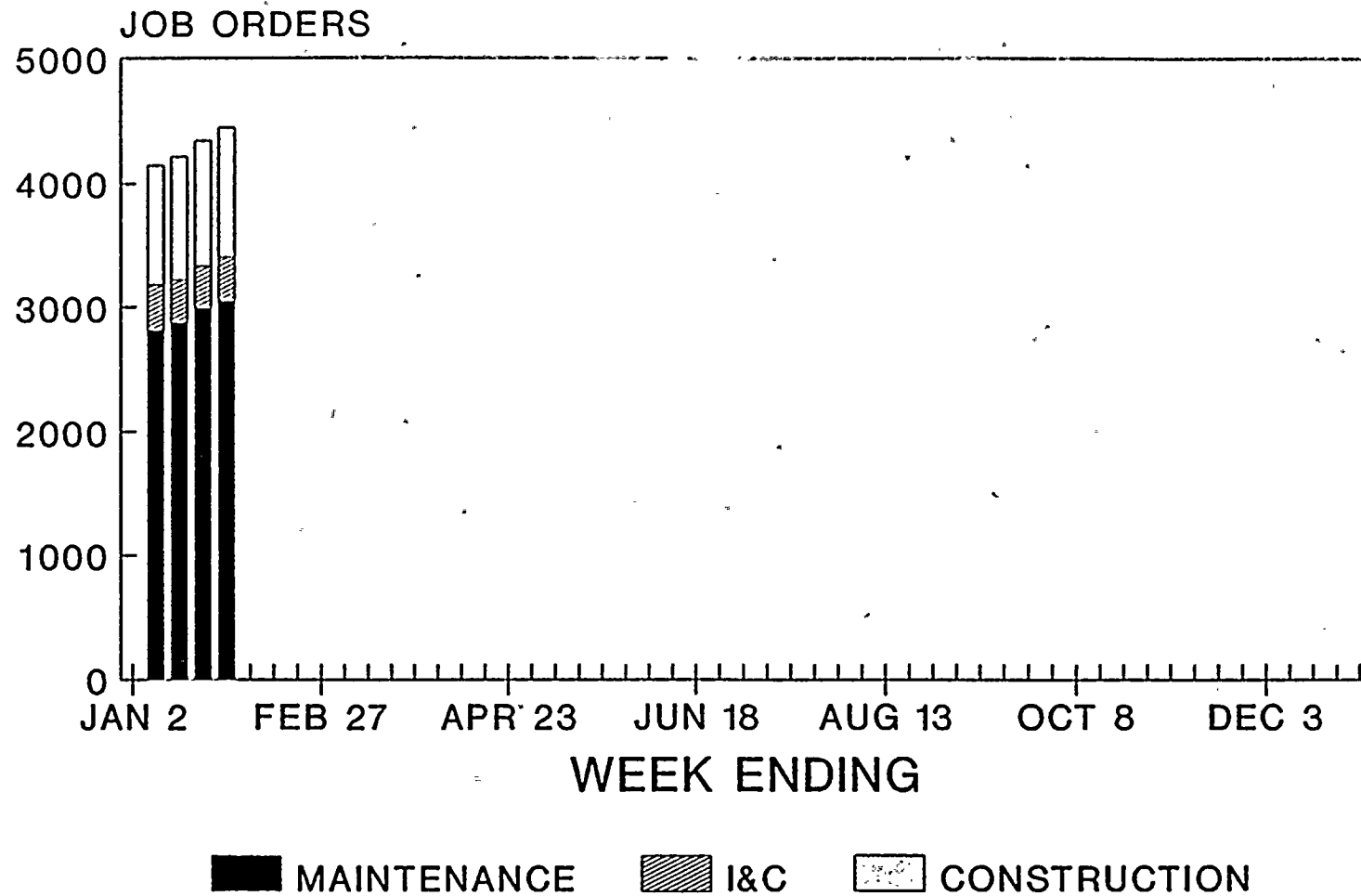


FIG 18



# CORRECTIVE MAINTENANCE JOB ORDERS

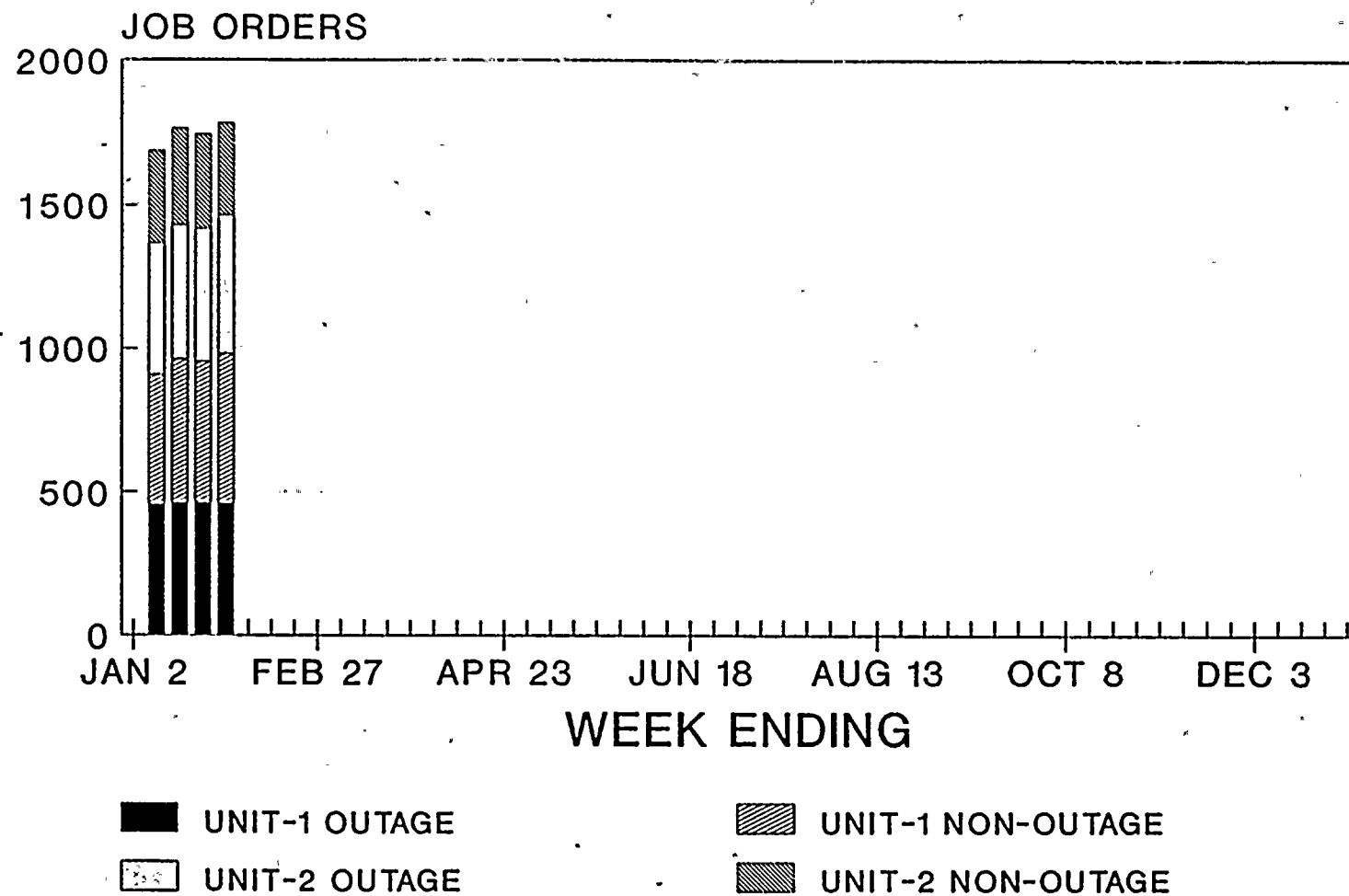


FIG 19

# CONTROL ROOM OPEN JOB ORDERS

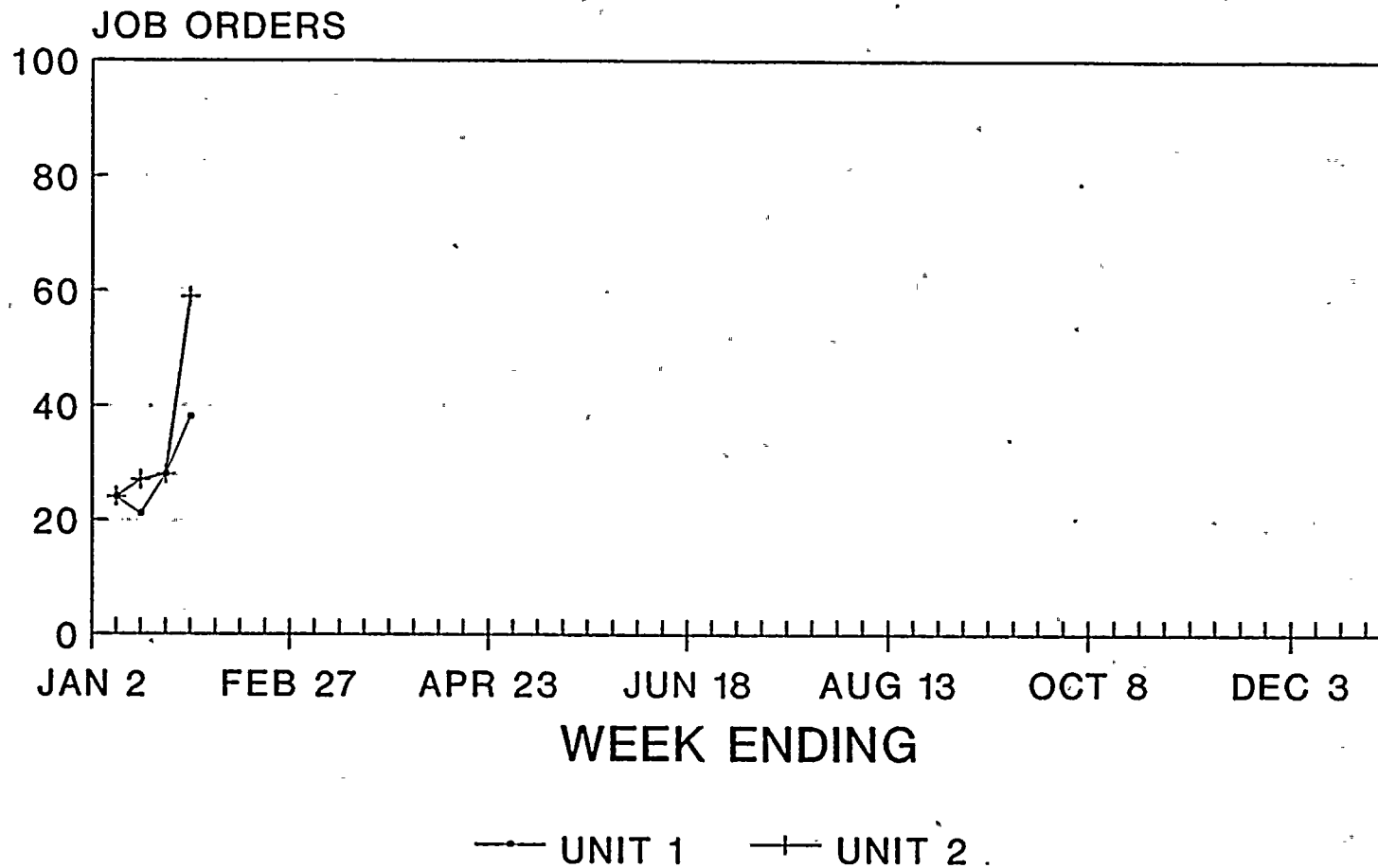


FIG 20

NOTE: PREVIOUS TO 1/30 ONLY I&C CONTROL  
ROOM OPEN JOs WERE REPORTED

# O & M BUDGET

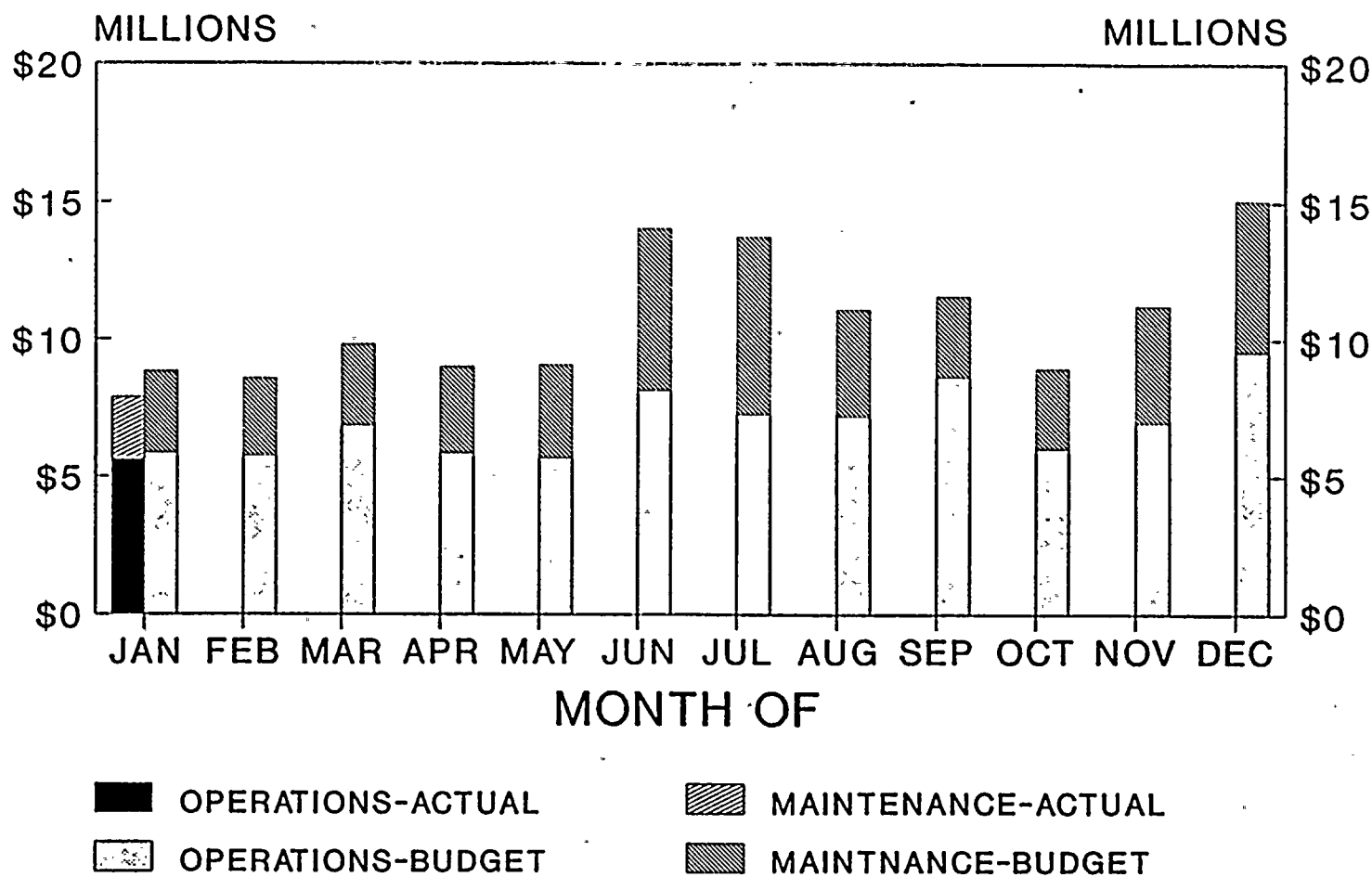


FIG 21

# O & M BUDGET CUMULATIVE

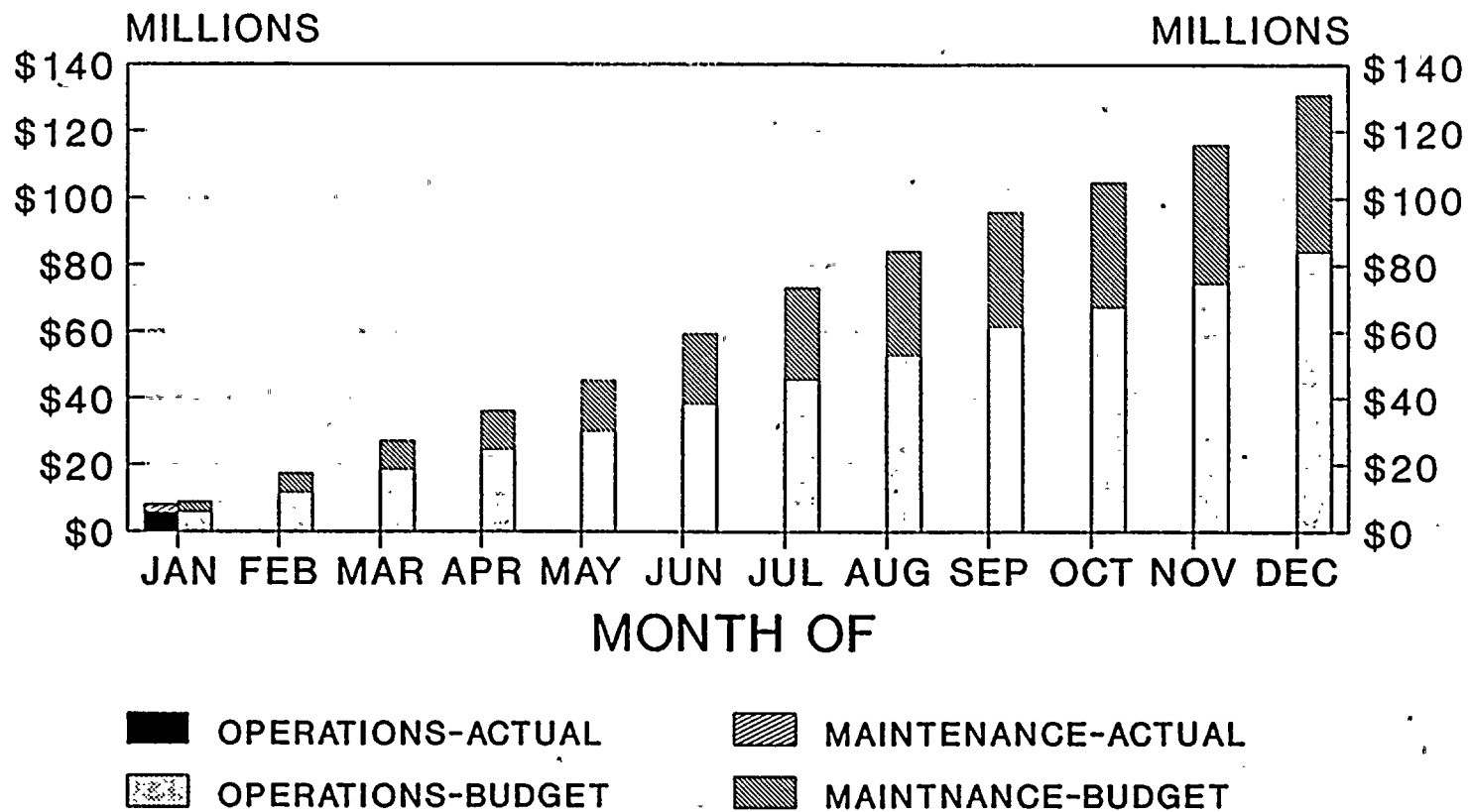


FIG 22

# OVERTIME

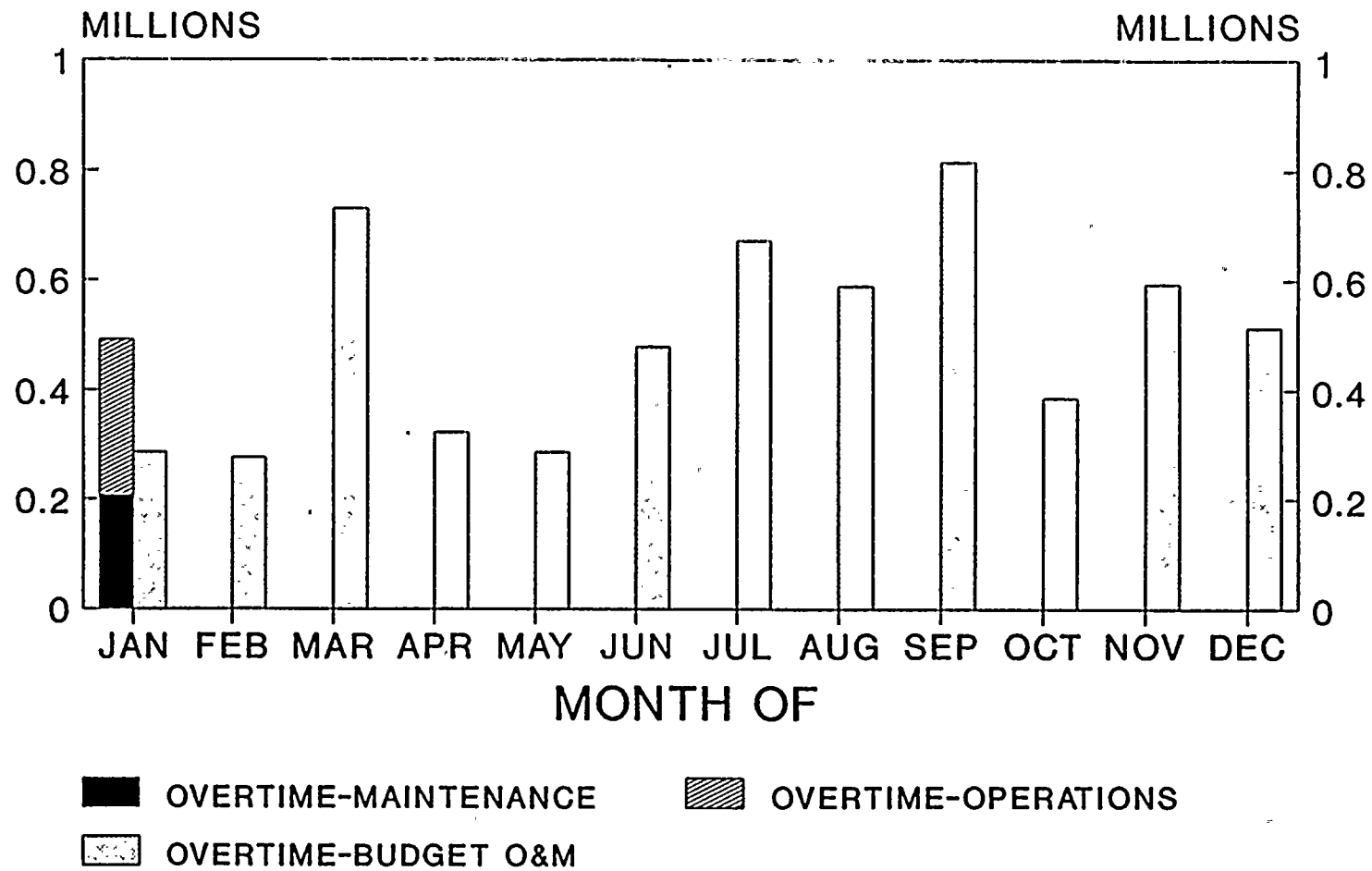


FIG 23

# CAPITAL

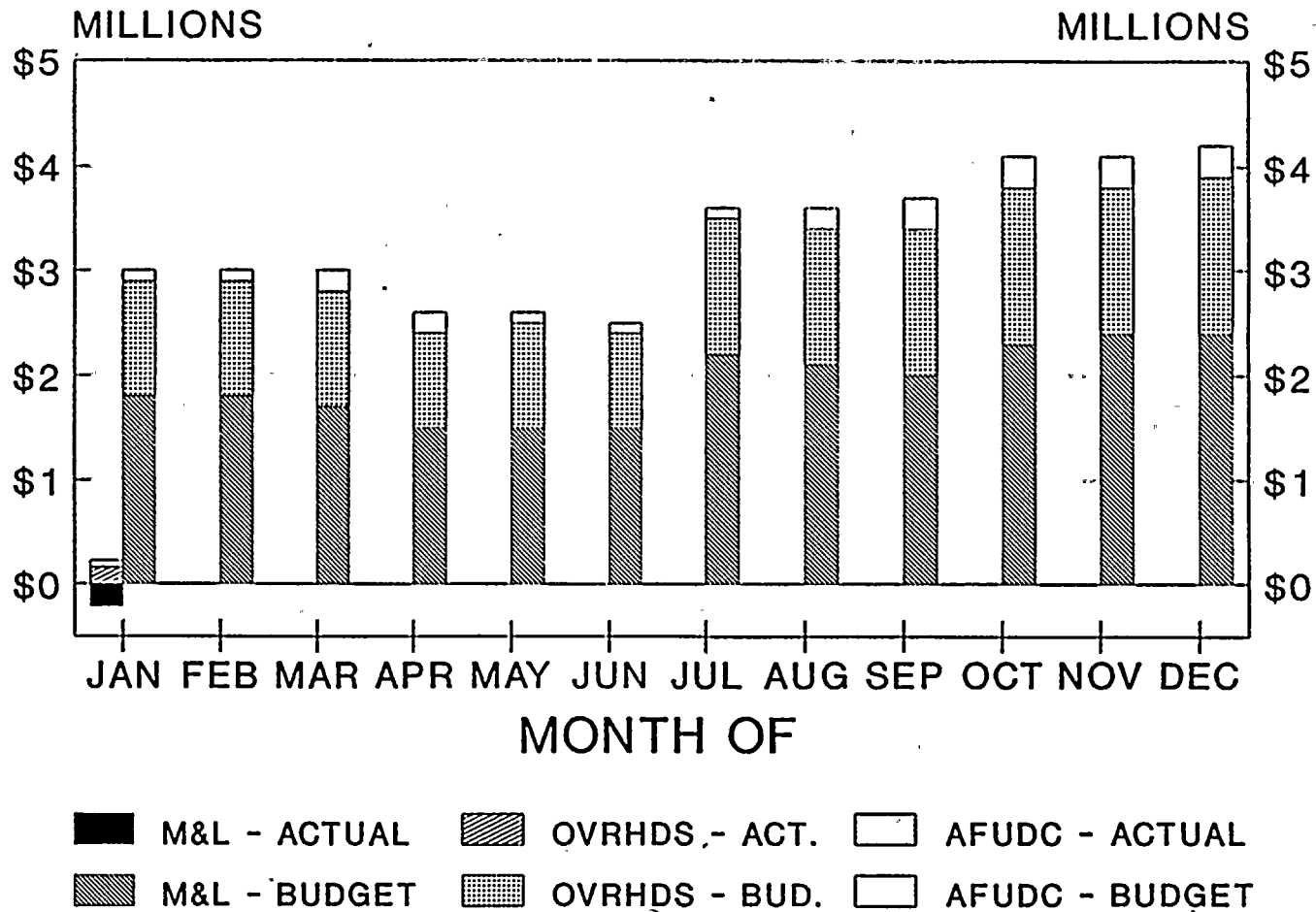


FIG 24

# CAPITAL-CUMULATIVE

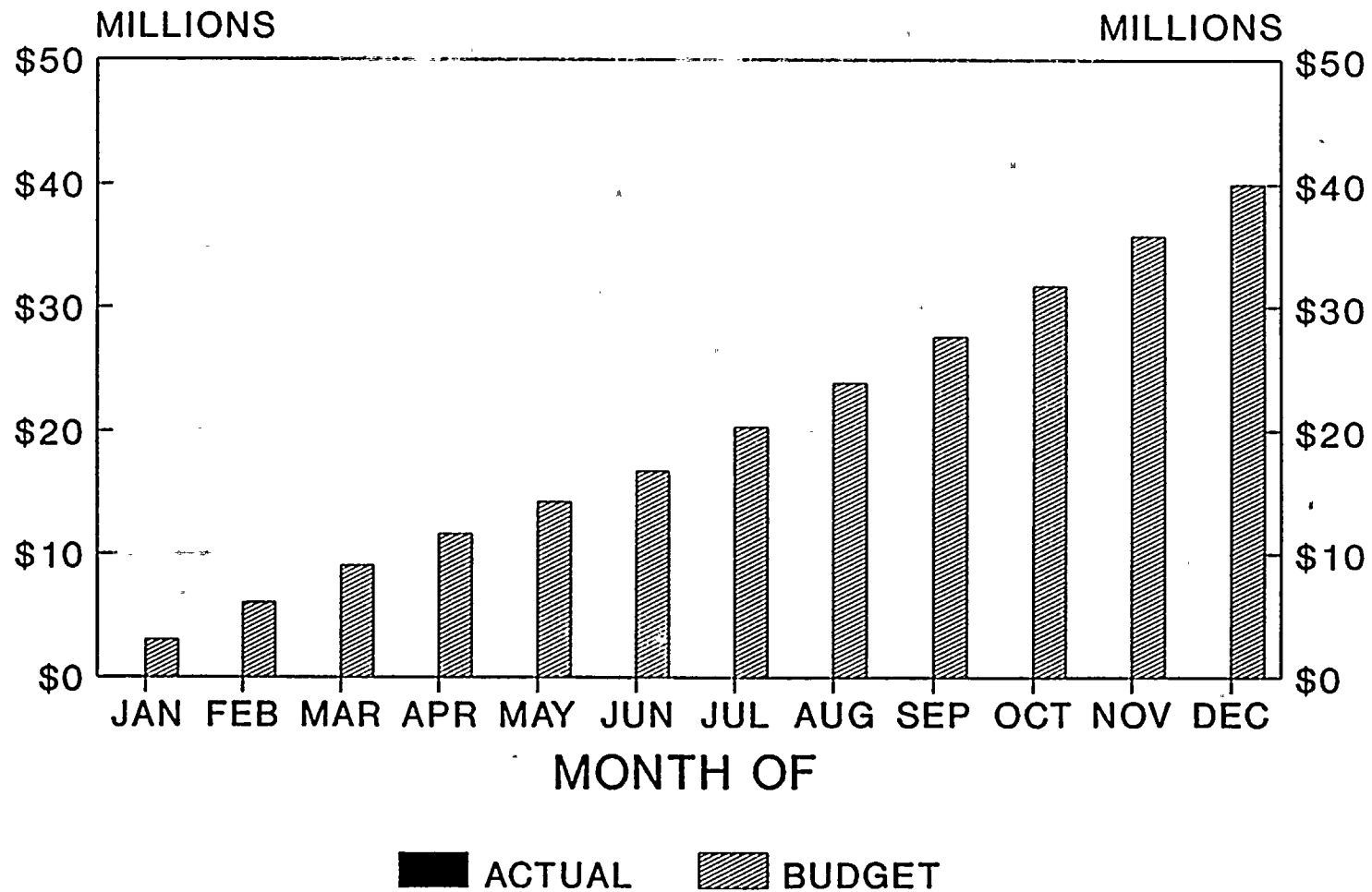


FIG 25

# DOSE

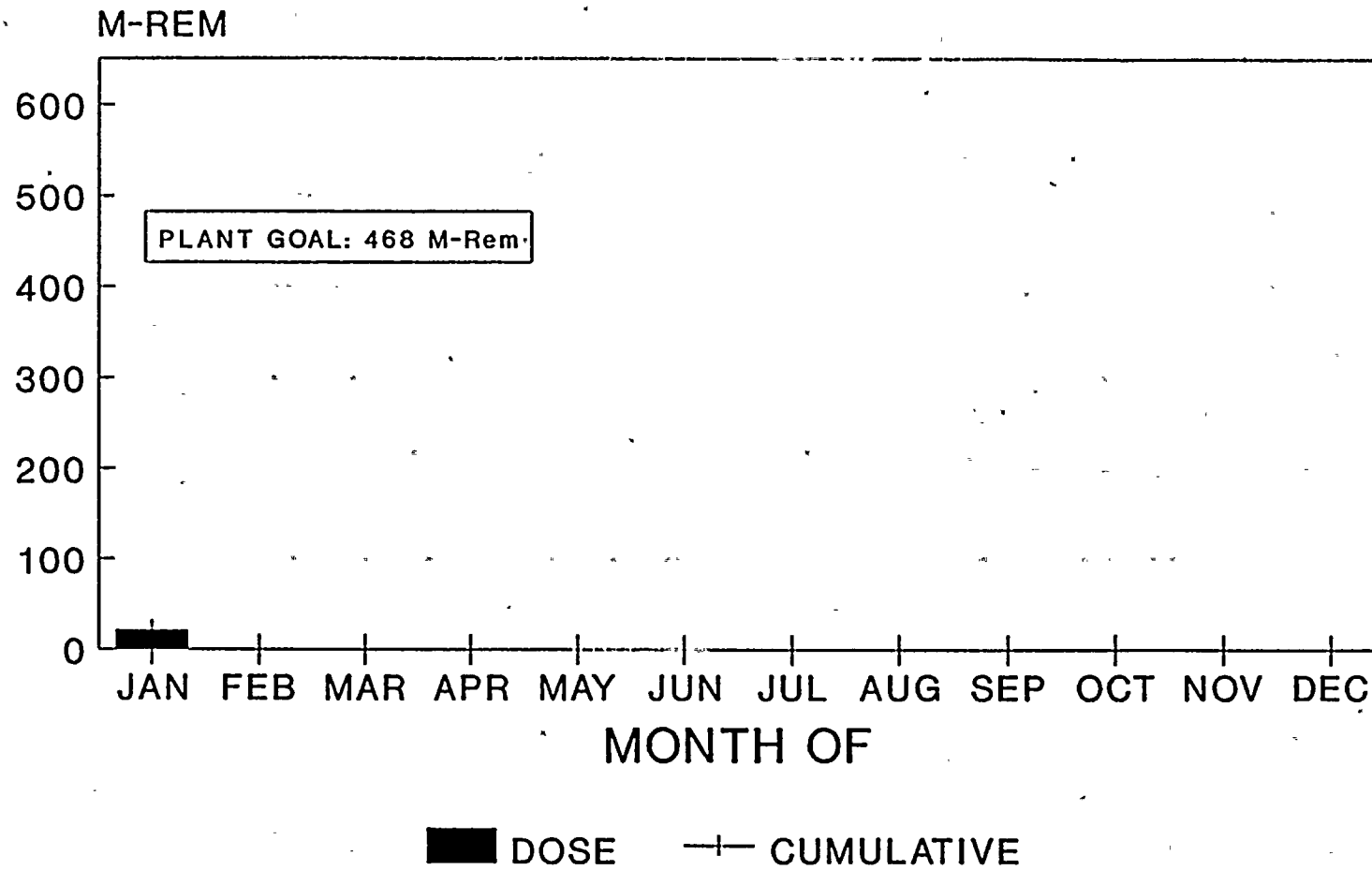


FIG 27

NOTE: DOSE REPORTED IS TLD MEASUREMENT



# PERSONNEL CONTAMINATIONS

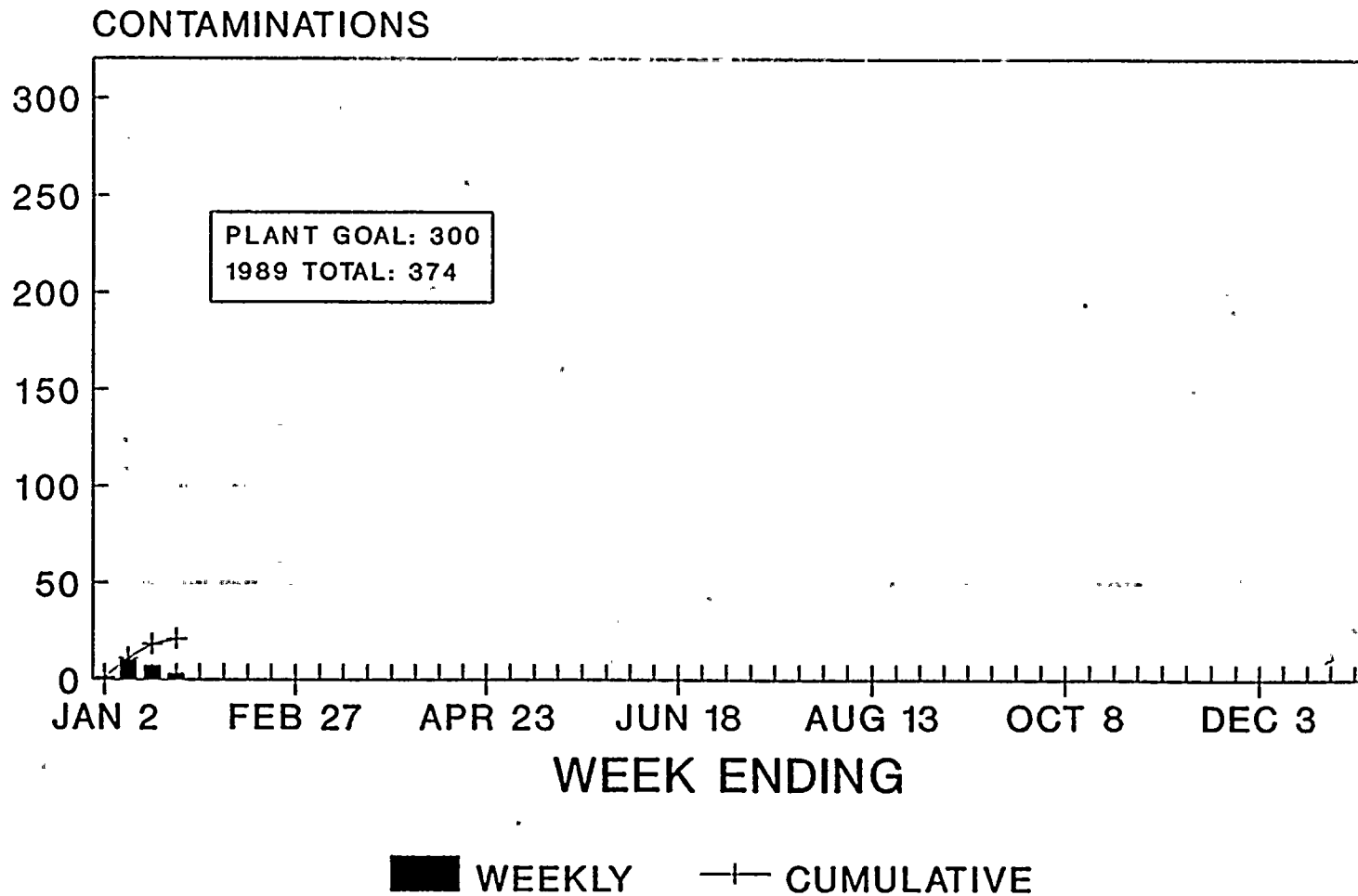


FIG 28

# LOST TIME ACCIDENT RATE

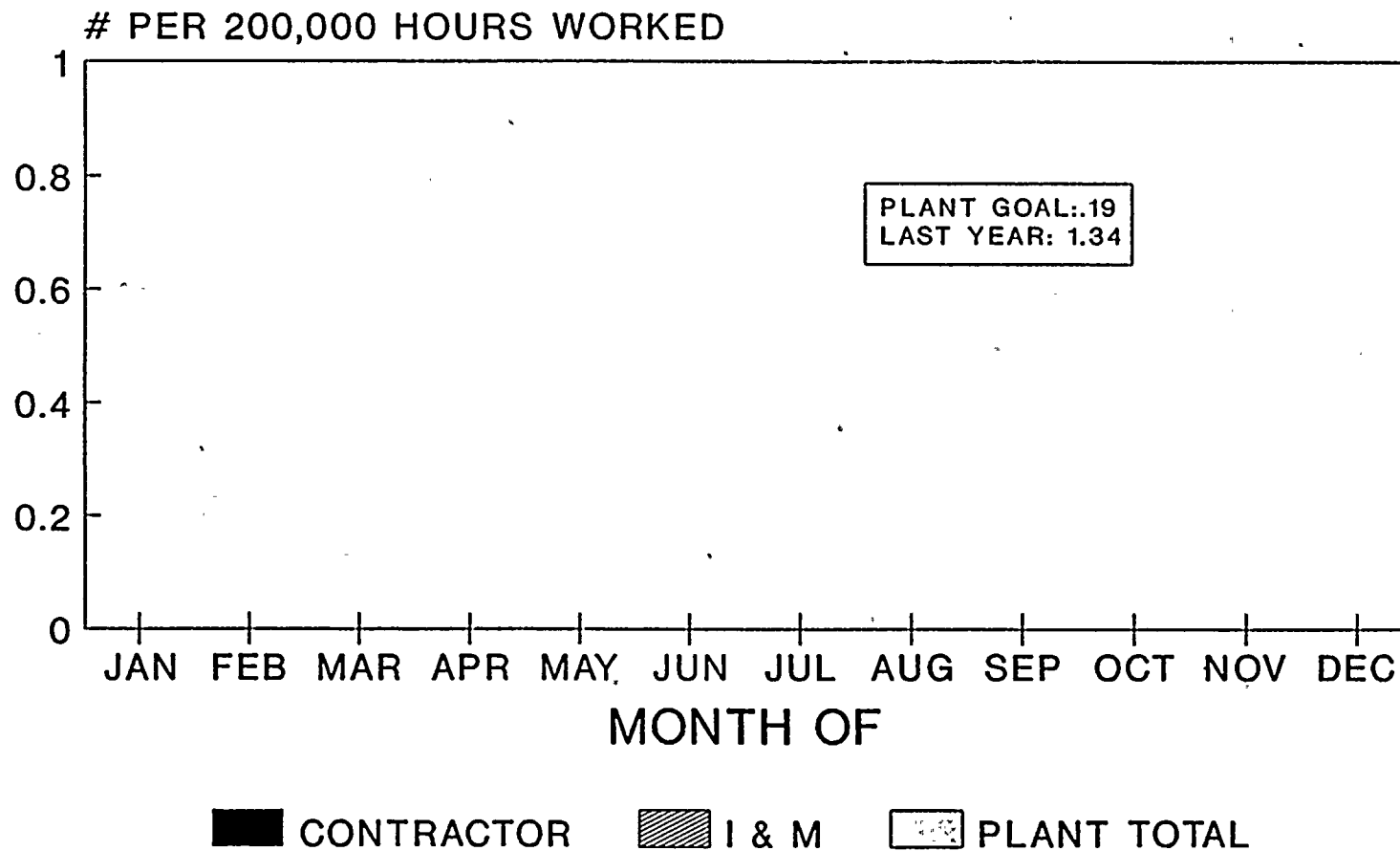


FIG 29

NOTE: THERE HAVE BEEN NO LOST  
TIME ACCIDENTS YET THIS YEAR

# AUXILLIARY BUILDING CONTAMINATED AREA

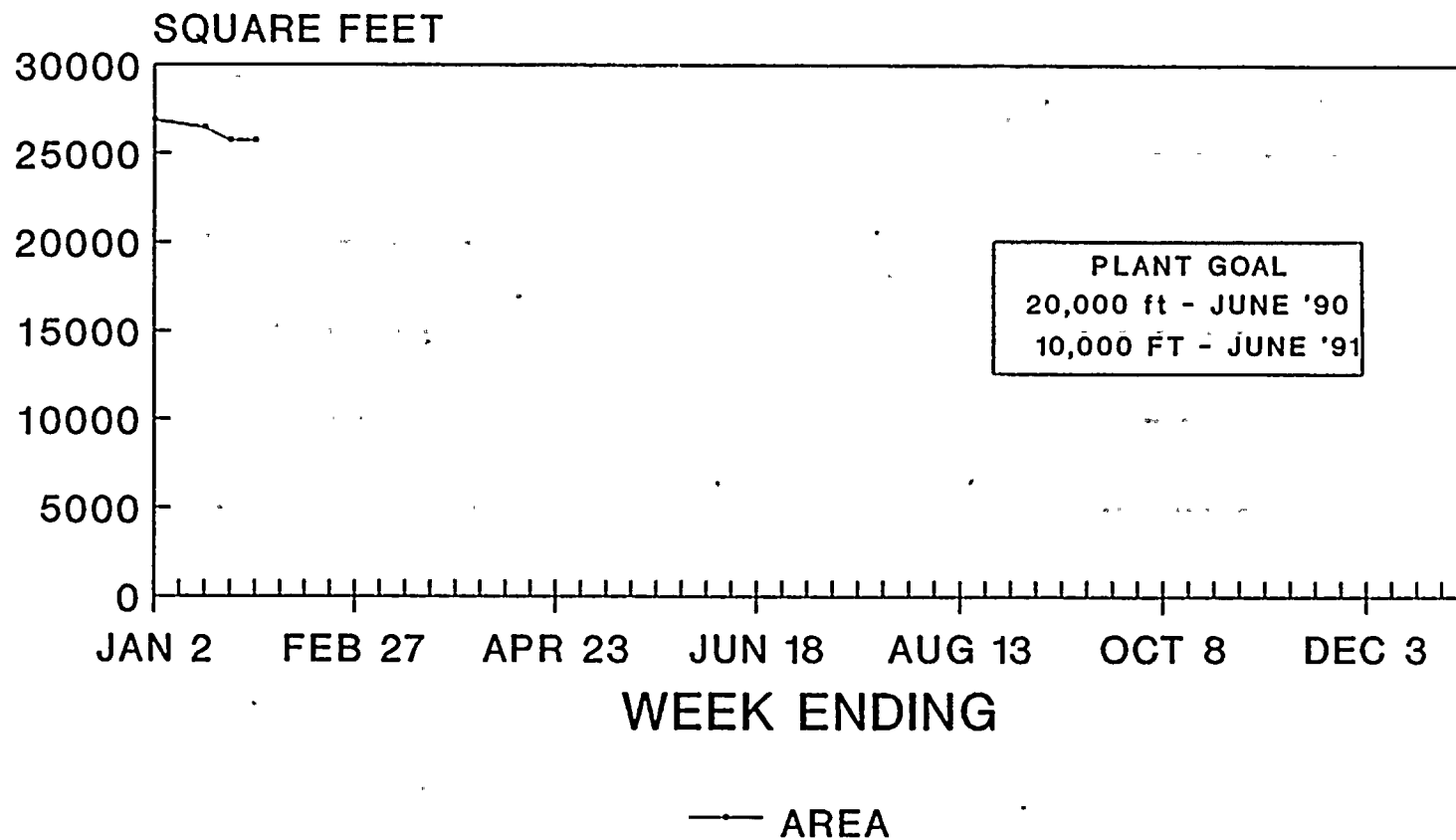


FIG 30

# AUXILIARY BUILDING LEAKS AND CONTAINMENT DEVICES

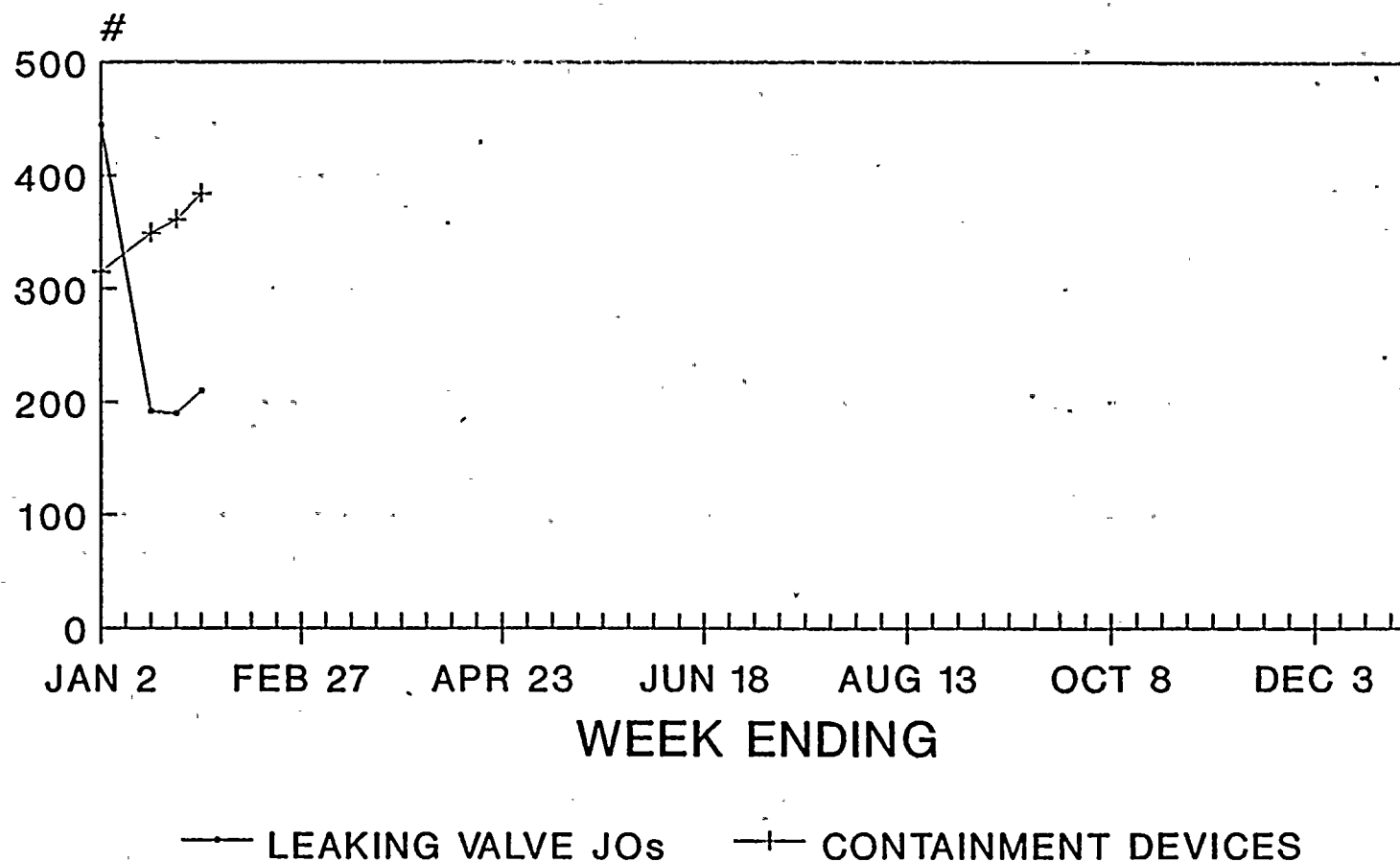


FIG 31

# RFCs 1990 LIST

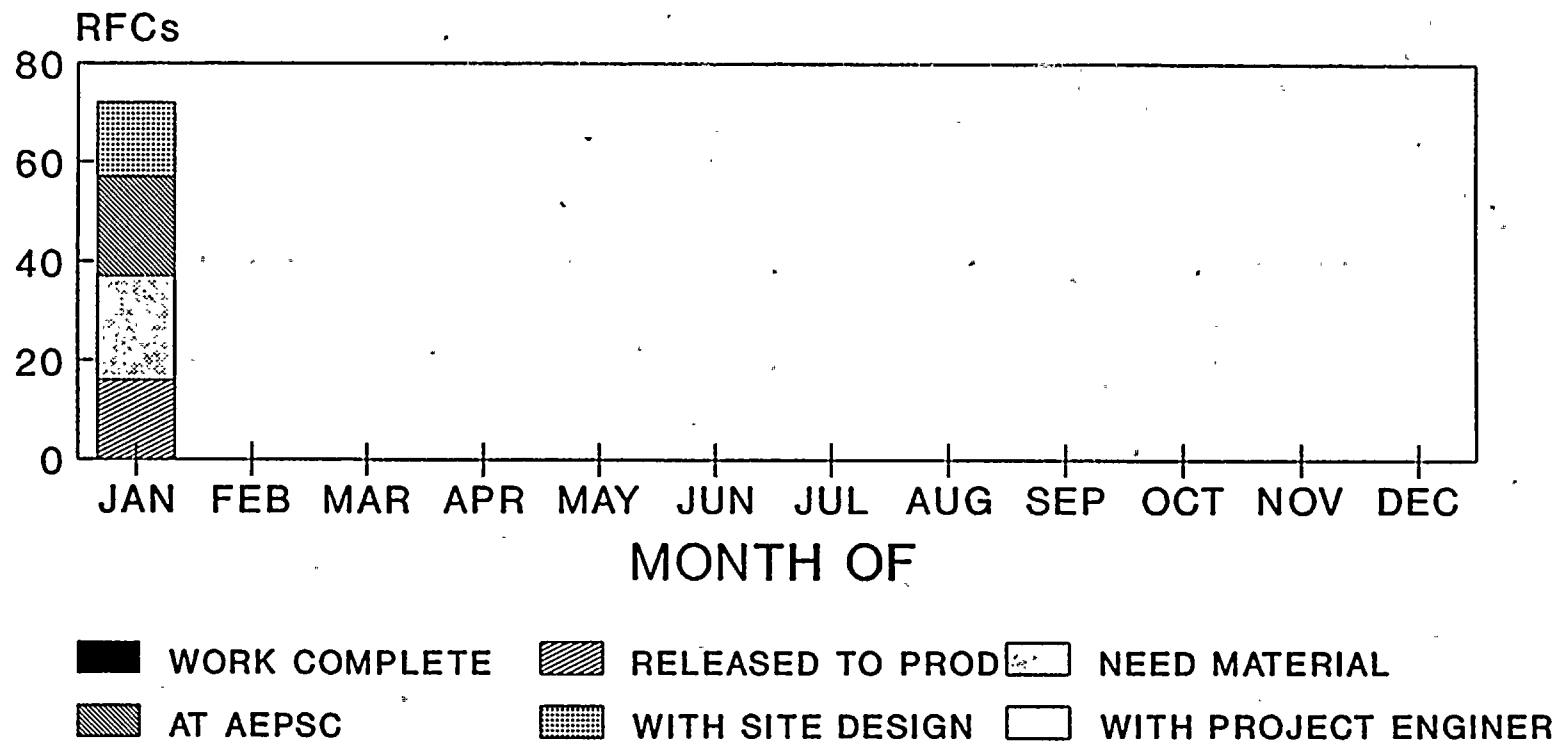


FIG 32

NOTE: 15 RFCs ON THE '88 LIST AND 21  
ON THE '89 LIST ARE NOT YET CLOSED

# MINOR MODs

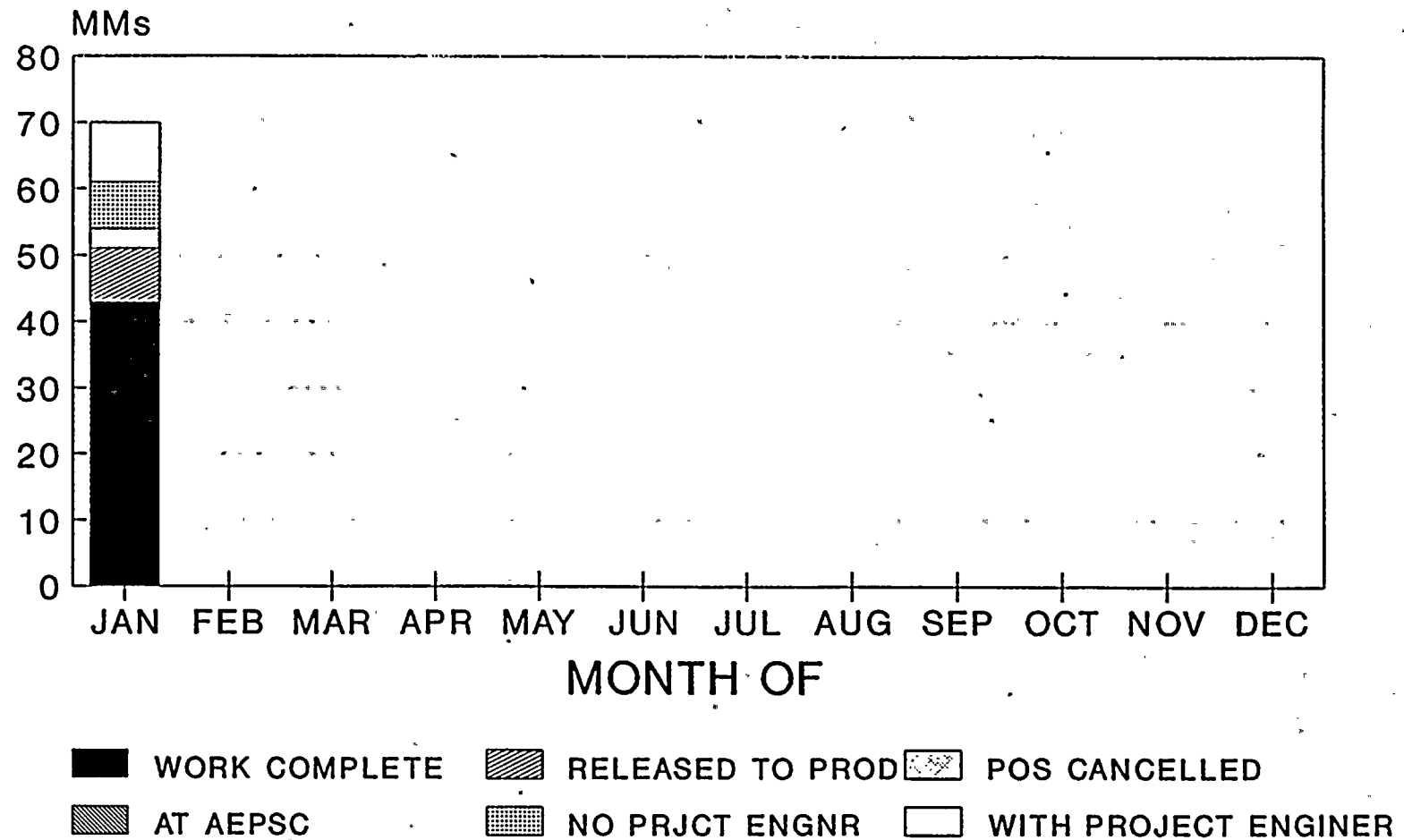


FIG 33

# PLANT MODs

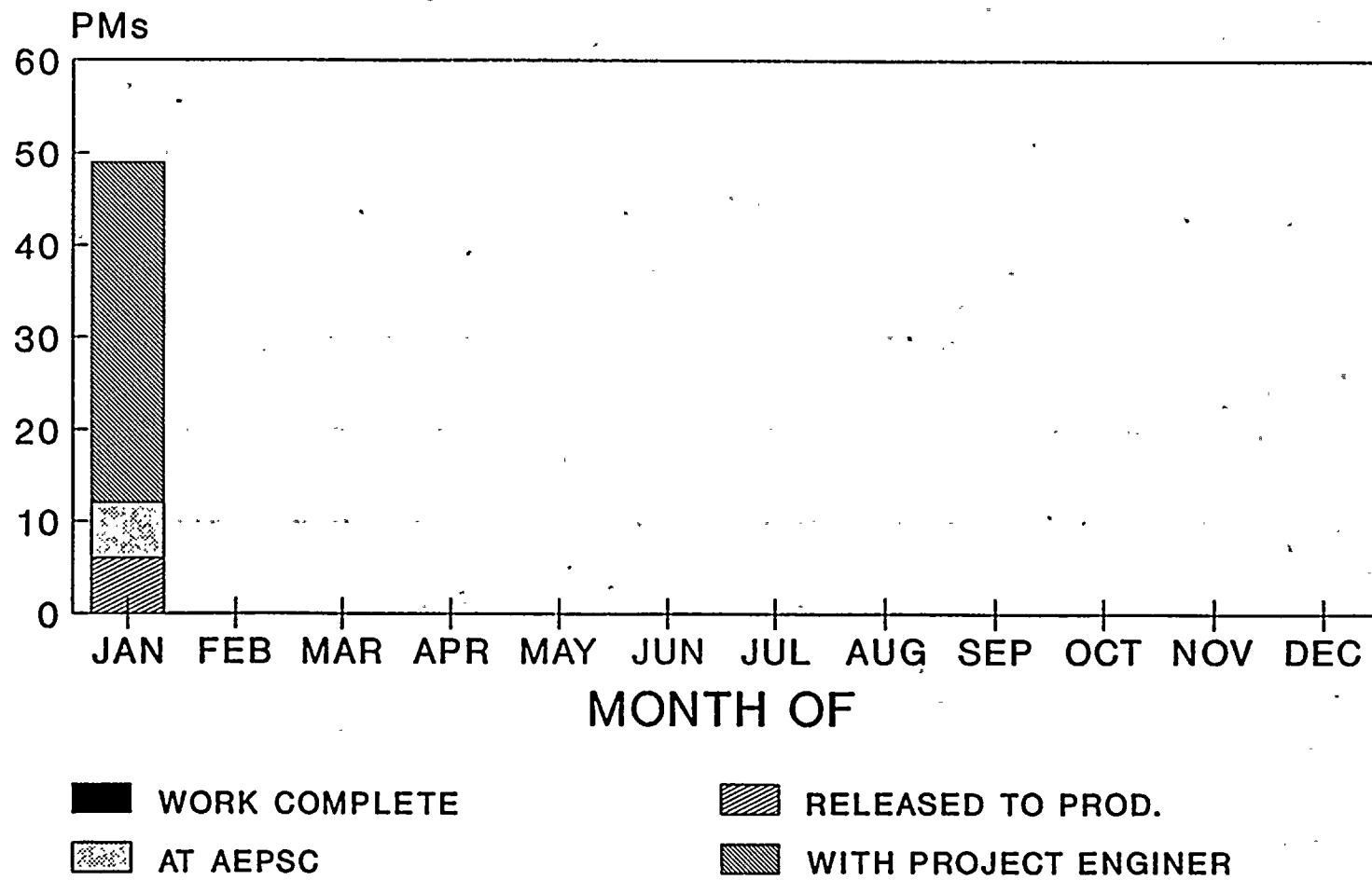


FIG 34