



UNITED STATES
NUCLEAR REGULATORY COMMISSION

REGION IV

611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

APR 18 1994

Dockets: 50-498
50-499
Licenses: NPF-76
NPF-80

Houston Lighting & Power Company
ATTN: William T. Cottle, Group
Vice President, Nuclear
P.O. Box 289
Wadsworth, Texas 77483

SUBJECT: MANAGEMENT MEETING

This refers to the meeting conducted at the South Texas Project site on April 8, 1994. This meeting related to Unit 1 performance during startup and power ascension and Unit 2 startup preparations. Your presentation noted that the Unit 1 startup and power ascension has been approached cautiously with a thorough treatment of encountered challenges. There have been several equipment problems, but the material condition of Unit 1 has been improved over past operating periods. Personnel performance has been generally good, but several lessons were learned following the inadvertent safety injection actuation. Line management and independent assessments of performance have been completed through the 90 percent plateau. These processes identified the following areas as needing continued management attention: (1) management oversight of plant operations; (2) the corrective action process; and (3) operator workarounds.

Highlights of the NRC staff presentation on Unit 1 performance included the following:

- Mixed operator performance, generally good but exceptions at times involving poor communications, inconsistent self-verification practices, and reactor plant operators not identifying equipment deficiencies;
- Positive effects of operations staffing enhancements and the assistance of the operations work control group;
- Instances of weak management oversight involving performance of a complex surveillance test during midloop operations and inappropriate guidance to operators to delete portions of another surveillance test;
- Generally good maintenance performance, with plant material condition being significantly improved and the recent incidence of equipment clearance order problems being reduced;

9404220050 940418
PDR ADDCK 05000498
Q PDR

TEAS
11

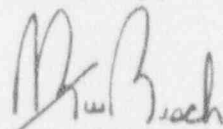
- Some repetitive equipment problems, but some success in improving equipment performance;
- Good support by engineering to operations and maintenance;
- Weak safety evaluation of the containment sump issues;
- Improved system engineer knowledge, but improvement needed in the area of procedure usage;
- Improved performance in security and fire protection;
- Strong performance in radiological protection;
- Continued management attention needed in the areas of procedure usage, the corrective action process, the service request backlog, and management oversight; and
- NRC reliance of Unit 1 performance under recently revised programs as an input to the evaluation of the readiness of Unit 2 for restart.

Unit 2 areas addressed in your presentation included the Operational Readiness Plan, system certification process, planned line management and independent assessment process, performance indicators, and schedule. Assessments so far have indicated the need for increased management attention in the areas of service request backlog reduction, staff overtime, and the corrective action program. Several changes to the preparation for Unit 2 restart were noted based on lessons learned during the Unit 1 restart process.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter will be placed in the NRC's Public Document Room.

Should you have any questions concerning this matter, we will be pleased to discuss them with you.

Sincerely,



A. Bill Beach, Director
Division of Reactor Projects

Attachments:

1. Attendance List
2. Licensee Presentation
3. NRC Staff Presentation

Houston Lighting & Power Company -3-

cc w/attachments:
Houston Lighting & Power Company
ATTN: James J. Sheppard, General Manager
Nuclear Licensing
P.O. Box 289
Wadsworth, Texas 77483

City of Austin
Electric Utility Department
ATTN: J. C. Lanier/M. B. Lee
721 Barton Springs Road
Austin, Texas 78704

City Public Service Board
ATTN: K. J. Fiedler/M. T. Hardt
P.O. Box 1771
San Antonio, Texas 78296

Newman & Holtzinger, P. C.
ATTN: Jack R. Newman, Esq.
1615 L Street, NW
Washington, D.C. 20036

Central Power and Light Company
ATTN: G. E. Vaughn/T. M. Puckett
P.O. Box 2121
Corpus Christi, Texas 78403

INPO
Records Center
700 Galleria Parkway
Atlanta, Georgia 30339-5957

Mr. Joseph M. Hendrie
50 Bellport Lane
Bellport, New York 11713

Bureau of Radiation Control
State of Texas
1100 West 49th Street
Austin, Texas 78756

Judge, Matagorda County
Matagorda County Courthouse
1700 Seventh Street
Bay City, Texas 77414

bcc to DMB (IE45)

bcc distrib. by RIV:

L. J. Callan

Branch Chief (DRP/A)

MIS System

RIV File

R. Bachmann, OGC, MS: 15-B-18

Director, WCFO

Public Affairs Officer, WCFO

Resident Inspector

Lisa Shea, RM/ALF, MS: MNBB 4503

DRSS-FIPB

Project Engineer (DRP/A)

Branch Chief (DRP/TSS)

State Liaison Officer, WCFO

| | | | | |
|--------------|---------|--|--|--|
| RIV: C:DRP/A | D:DRP | | | |
| WDJohnson | ABBeach | | | |
| 4/13/94 | 4/17/94 | | | |

Houston Lighting & Power Company

-4-

Licensing Representative
Houston Lighting & Power Company
Suite 610
Three Metro Center
Bethesda, Maryland 20814

Shaw, Pittman, Potts & Trowbridge
ATTN: Joseph R. Egan, Esq.
2300 N Street, N.W.
Washington, D.C. 20037

ATTENDANCE LIST

Attendance at the management meeting between Houston Lighting & Power Company and NRC on April 8, 1994, at the South Texas Project site:

HL&P

W. Cottle, Group Vice President, Nuclear
J. Groth, Vice President, Nuclear Generation
S. Rosen, Vice President, Industry Relations
T. Jordan, Manager, Systems Engineering
S. Thomas, Manager, Design Engineering
L. Martin, General Manager, Nuclear Assurance
G. Parkey, Plant Manager, Unit 2
L. Myers, Plant Manager, Unit 1
F. Mangan, General Manager, Plant Services
J. Sheppard, General Manager, Nuclear Licensing

CITY PUBLIC SERVICE - SAN ANTONIO

M. Hardt, Director, Nuclear Division

CENTRAL POWER AND LIGHT

G. Vaughn, Vice President

NRC

B. Beach, Director, Division of Reactor Projects (DRP)
S. Black, Director, Project Directorate IV-2, Office of Nuclear
Reactor Regulation
W. Johnson, Chief, Project Branch A, DRP
D. Loveless, Senior Resident Inspector, DRP
D. Garcia, Resident Inspector, DRP

Also in attendance were other staff members, members of the public, licensee contractors, and media representatives.

SOUTH TEXAS PROJECT

HL&P and NRC Management Meeting

April 8, 1994



VISION: STP -- A WORLD-CLASS POWER PRODUCER

AGENDA

- | | |
|---|-----------------|
| I. OPENING REMARKS | BILL COTTLE |
| II. UNIT 1 STARTUP PERFORMANCE | |
| EQUIPMENT PERFORMANCE | JOHN GROTH |
| MAINTENANCE PERFORMANCE | JOHN GROTH |
| OPERATIONAL PERFORMANCE | JOHN GROTH |
| UNIT 1 TESTING | LEW MYERS |
| LINE MANAGEMENT ASSESSMENT | LEW MYERS |
| INDEPENDENT ASSESSMENT | LAWRENCE MARTIN |
| CONCLUSIONS | JOHN GROTH |
| III. NRC REVIEW OF UNIT 1 PERFORMANCE | BILL JOHNSON |
| IV. UNIT 2 STARTUP PREPARATION | |
| OPERATIONAL READINESS PLAN FOR UNIT 2 | JOE SHEPPARD |
| SYSTEM CERTIFICATION | TOM JORDAN |
| INDEPENDENT ASSESSMENT | LAWRENCE MARTIN |
| MAINTENANCE PERFORMANCE | GARY PARKEY |
| SCHEDULE | GARY PARKEY |
| IMPROVEMENTS BASED ON UNIT 1 EXPERIENCE | GARY PARKEY |
| V. CLOSING REMARKS | BILL COTTLE |

OPENING REMARKS

UNIT 1 STARTUP PERFORMANCE

EQUIPMENT PERFORMANCE - CHALLENGES

APPROACH HAS BEEN TO PROCEED CAUTIOUSLY AND THOROUGHLY
RESOLVE ENCOUNTERED CHALLENGES

NORMAL STEAM GENERATOR FEED PUMPS

FEEDWATER REGULATING VALVES

STEAM GENERATOR 1C TUBE LEAKAGE

STANDBY DIESEL GENERATORS

SDG 11 VOLTAGE REGULATION PROBLEM

SDG 22 PISTON 4R FAILURE (NO EFFECTS ON UNIT 1)

EXPERIENCE GAINED FROM ALL SDGs BEING APPLIED TO BOTH
UNITS

POWER OPERATED RELIEF VALVES

EQUIPMENT PERFORMANCE - SUCCESSES AND IMPROVEMENTS

TURBINE-DRIVEN AUXILIARY FEEDWATER PUMP

DIGITAL ROD POSITION INDICATION

FUEL INTEGRITY / GOOD PRIMARY CHEMISTRY

GOOD REACTOR COOLANT SYSTEM INTEGRITY

SECONDARY SYSTEM TIGHTNESS

N-16 MONITORS

OVERALL - STRONG MATERIAL CONDITION FOR RELIABLE
OPERATION

MAINTENANCE PERFORMANCE

ABILITY TO RESPOND TO CHALLENGES

MAINTENANCE BACKLOG MAINTAINED BELOW ESTABLISHED GOALS

PERFORMANCE INDICATORS

INOPERABLE AUTOMATIC FUNCTIONS

MAIN CONTROL BOARD ITEMS

SR GENERATION RATE

SR WORKOFF RATE

INOPERABLE AUTOMATIC FUNCTIONS - OPERATIONS ITEMS

GOAL: AGGREGATE DOES NOT ADVERSELY AFFECT OPERATIONS
ABILITY TO PERFORM QUALITY ROUNDS AND HANDLE
NORMAL WORK LOAD. POSITIVE TREND.

STATUS: 21 ITEMS

- 6 - PRIMARY SYSTEM
- 8 - SECONDARY SYSTEM
- 2 - INDICATION ONLY
- 5 - SYSTEM NOT REQUIRED FOR FULL POWER

10 ITEMS IDENTIFIED SINCE MARCH 1

AGGREGATE DOES NOT AFFECT OPERATIONS

ITEMS WILL CONTINUE TO BE MONITORED CLOSELY AND
AGGRESSIVELY RESOLVED

MAIN CONTROL BOARD ITEMS

GOAL: NONE THAT ADVERSELY AFFECT OPERATIONS ABILITY TO EFFECTIVELY MONITOR PLANT CONDITIONS AT EACH MODE; LESS THAN 10 AT FULL POWER

STATUS: 34 ITEMS

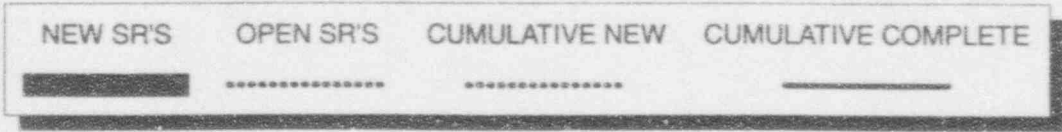
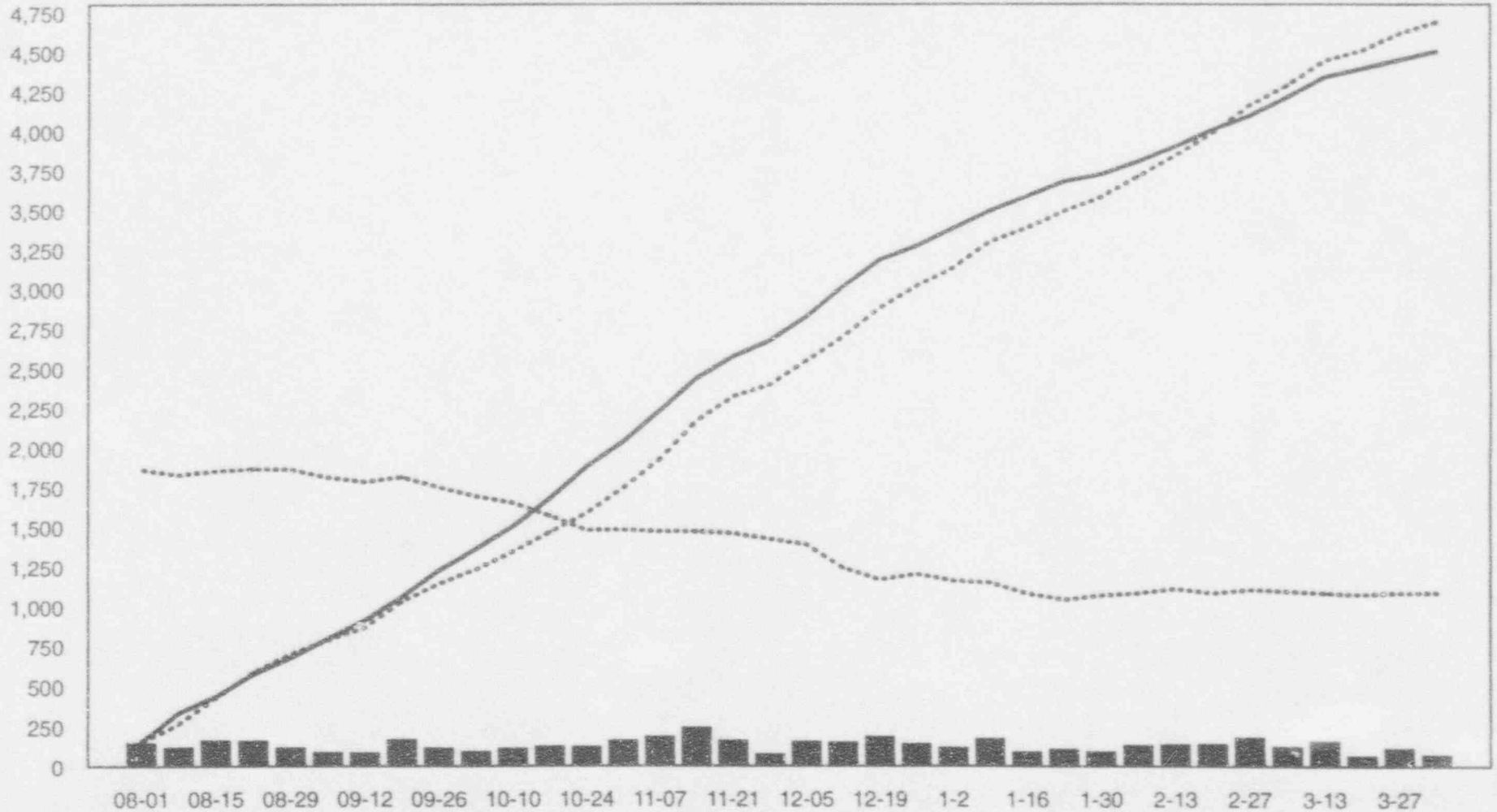
- 4 - PRIMARY SYSTEM
- 6 - SECONDARY SYSTEM
- 22 - INDICATION ONLY
- 2 - RADIATION MONITORS

21 ITEMS IDENTIFIED SINCE MARCH 1

NONE ADVERSELY AFFECT OPERATIONS ABILITY TO EFFECTIVELY MONITOR PLANT CONDITIONS

ITEMS WILL CONTINUE TO BE MONITORED CLOSELY AND AGGRESSIVELY RESOLVED

**UNIT 1
PREVENTIVE & CORRECTIVE MAINTENANCE
SERVICE REQUESTS**



OPERATIONAL PERFORMANCE

CONDUCT OF OPERATIONS

HUMAN PERFORMANCE

PROCEDURAL PERFORMANCE

OPERATIONS STAFFING

OPERATIONS AND MAINTENANCE OVERTIME

OPERATIONAL PERFORMANCE (CONT.)

MANAGEMENT OVERSIGHT IN PLANT OPERATIONS UPGRADED

STARTUP DUTY MANAGERS WITH OPERATIONS
RESPONSIBILITIES TO MONITOR CONTROL ROOM ACTIVITIES

RISK ASSESSMENTS ON ACTIVITIES

REVISE MID-LOOP PROCEDURE

LESSONS LEARNED FROM S.I. ACTUATION EVENT

ACTION TO ADDRESS NRC AND OTHER OBSERVATIONS

PERFORMANCE STRENGTHS

OVERALL STATUS OF OPERATIONS

UNIT 1 TESTING
AND
LINE MANAGEMENT ASSESSMENT

UNIT 1 AUGMENTED TESTING

TWENTY TESTS PLANNED AS PART OF THE AUGMENTED TEST PROGRAM

FOUR TESTS PERFORMED PRIOR TO POWER OPERATIONS

FIFTEEN WERE PERFORMED AS PART OF THE POWER ASCENSION TEST PROGRAM

THE DEMINERALIZED WATER REVERSE OSMOSIS SUBSYSTEM IS SCHEDULED TO BE COMPLETED IN MAY

SIGNIFICANT TESTS COMPLETED THAT DEMONSTRATE IMPROVED PLANT PERFORMANCE

AUXILIARY FEEDPUMP 14 POST MAINTENANCE

STANDBY DIESEL GENERATOR

N-16 MONITOR MODIFICATION

TEMPERATURE MONITORING OF THE RHR SYSTEM

NORMAL STEAM GENERATOR FEEDPUMP OVERSPEED TESTS

FEEDWATER ISOLATION BYPASS VALVE RESERVE D/P

MODIFICATION

ESSENTIAL CHILLER MODIFICATION

PLANT STATUS

LINE MANAGEMENT ASSESSMENTS

LINE MANAGEMENT ASSESSMENTS PERFORMED

PRIOR TO CORE RELOAD

PRIOR TO MODE 4

PRIOR TO MODE 2

PRIOR TO 50% REACTOR POWER

PRIOR TO PROCEEDING ABOVE 90% REACTOR POWER

ANOTHER ASSESSMENT TO BE CONDUCTED AFTER 10 DAYS AT FULL
POWER

UNIT 1
INDEPENDENT ASSESSMENT

INDEPENDENT ASSESSMENT

READINESS TO PROCEED ABOVE 90% POWER COMPLETED

AREAS FOR CONTINUED ATTENTION

MANAGEMENT OVERSIGHT IN PLANT OPERATIONS ENHANCED

CORRECTIVE ACTION PROCESS

OPERATOR WORKAROUNDS REQUIRED INCREASED
MANAGEMENT ATTENTION

INDEPENDENT ASSESSMENT (OPERATIONAL READINESS OVERSIGHT
TEAM FOLLOWUP REPORT)

FOCUSED ON COMMAND AND CONTROL ISSUES

SAFETY INJECTION ACTUATION ISSUES ADDRESSED PRIOR TO
EXCEEDING 50% POWER

LINES OF AUTHORITY AND RESPONSIBILITY

PROCEDURAL ADHERENCE

MIDDLE MANAGEMENT RESPONSIBILITIES

CONTINUAL REINFORCEMENT OF MANAGEMENT
EXPECTATIONS

PLANT OPERATIONS

CORRECTIVE ACTION PROGRAM

CONCLUSIONS

UNIT 2 STARTUP PREPARATION

OPERATIONAL READINESS PLAN FOR UNIT 2
(SUBMITTED TO NRC ON MARCH 18, 1994)

ADDRESS SPECIFIC UNIT 2 ISSUES AND REMAINING SITE
PROGRAMMATIC ISSUES SUPPORTING UNIT 2 RETURN TO OPERATION

PROCESS AND APPROACH GENERALLY SAME AS UNIT 1; SOME
CHANGES BASED ON EXPERIENCE GAINED FROM UNIT 1

DELIBERATE AND CONSERVATIVE APPROACH TO SUPPORT
RESUMPTION OF POWER OPERATION OF UNIT 2

IMPLEMENTED IN CONJUNCTION WITH THE STP BUSINESS PLAN

COMPONENTS INCLUDE

SYSTEM CERTIFICATION PROGRAM

ASSESSMENTS OF READINESS TO RESUME OPERATION

MATERIAL CONDITION AND WORKLOAD MANAGEMENT

SYSTEM CERTIFICATION

SYSTEM CERTIFICATION PROGRAM

SAME PROCESS AS FOR UNIT 1

READINESS REVIEWS

OUTSTANDING WORK ITEMS/MODIFICATIONS EVALUATED

COMPREHENSIVE WALKDOWNS BY INTERDISCIPLINARY TEAMS

APPROVAL BY PLANT MANAGER

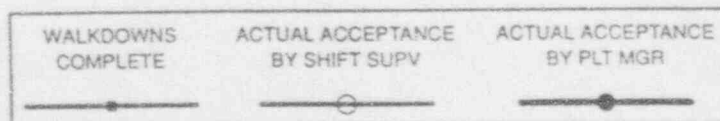
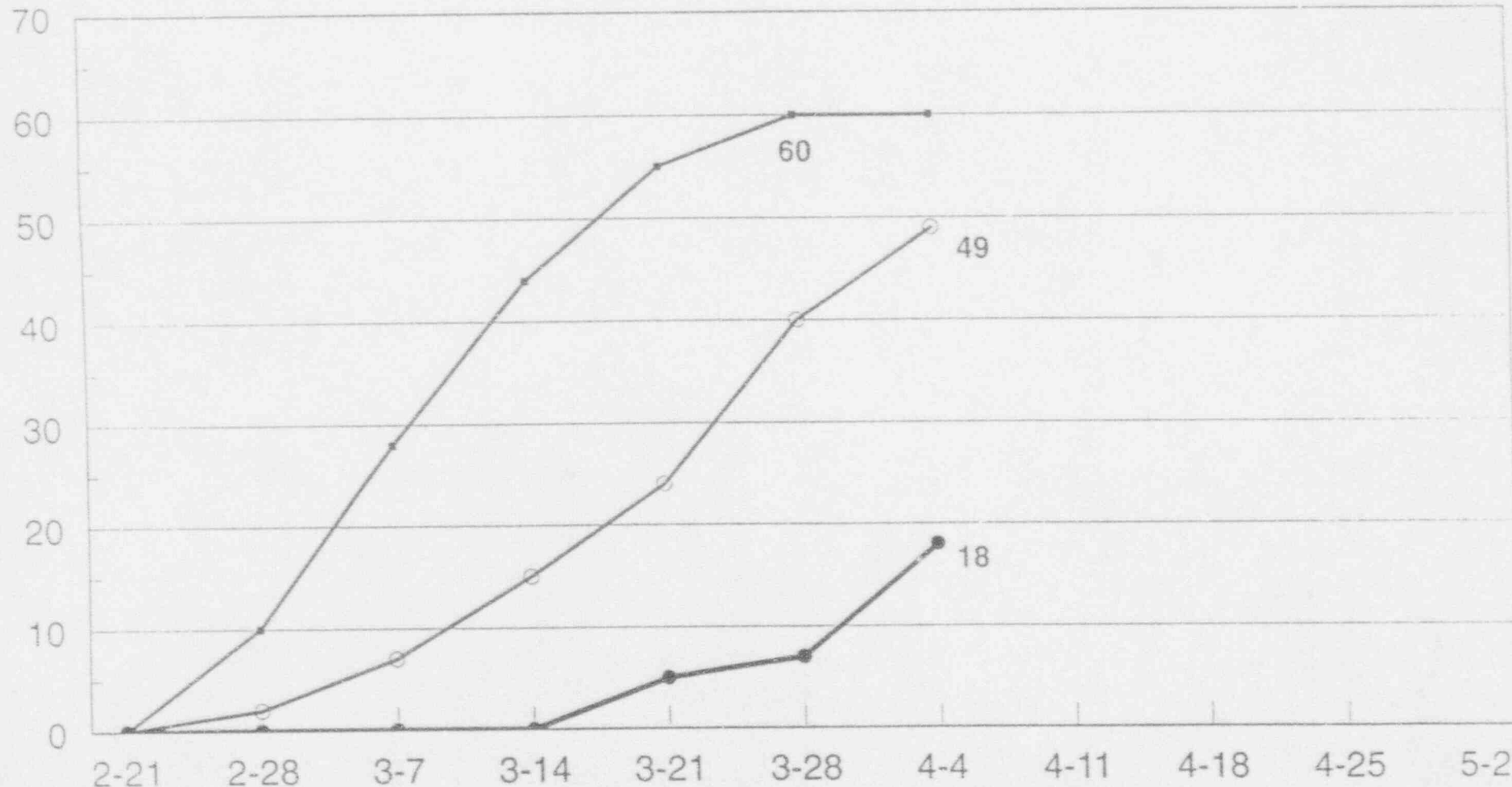
FACTORS IN UNIT 1 OPERATING EXPERIENCE

CURRENT STATUS (SEE ATTACHED FIGURE)

UNIT 2 SYSTEM CERTIFICATION WALKDOWNS & APPROVALS

status as of 4/4/94

NO OF SYSTEMS



NO OF SR'S GENERATED TO DATE: 181

UNIT 2 ASSESSMENTS

SELF-ASSESSMENT PROCESS

SAME PROCESS AS FOR UNIT 1

EVALUATES AND DETERMINES ACCEPTABILITY OF ASCENSION TO THE NEXT PLATEAU

MANAGEMENT EFFECTIVENESS IN IDENTIFYING, PURSUING AND CORRECTING PROBLEMS PART OF PROCESS

CONSISTS OF LINE MANAGEMENT ASSESSMENT PLAN, INDEPENDENT ASSESSMENT PLAN, THIRD-PARTY REVIEW

KEY MILESTONE ASSESSMENTS

PRIOR TO MODE 4

PRIOR TO CRITICALITY

POWER ASCENSION ABOVE 50% POWER

COMPLETION OF 10 DAYS OF FULL POWER OPERATION

ASSESSMENT FOR CORE RELOAD COMPLETED

INDEPENDENT ASSESSMENT PLAN

MAJOR TOPICS ARE:

DEPARTMENT PERFORMANCE

INTEGRATED SCHEDULE

BACKLOG REDUCTION

SPECIFIC EQUIPMENT ISSUES

SYSTEM CERTIFICATION

MANAGEMENT OVERSIGHT

MANAGEMENT SELF ASSESSMENT

TRAINING

STAFFING

CONFIGURATION MANAGEMENT

INDEPENDENT ASSESSMENT PLAN (CONT.)

CORRECTIVE ACTION PROGRAM

SURVEILLANCE/SPECIAL TESTING

MOTOR OPERATED VALVES

AREAS REQUIRING INCREASED MANAGEMENT ATTENTION AS OF
03/24/94

SR BACKLOG REDUCTION

STAFFING - OVERTIME

CORRECTIVE ACTION PROGRAM

THIRD PARTY REVIEW

UNIT 2 PERFORMANCE INDICATORS
SCHEDULE AND
IMPROVEMENTS BASED ON EXPERIENCE

MAINTENANCE PERFORMANCE

INOPERABLE AUTOMATIC FUNCTIONS

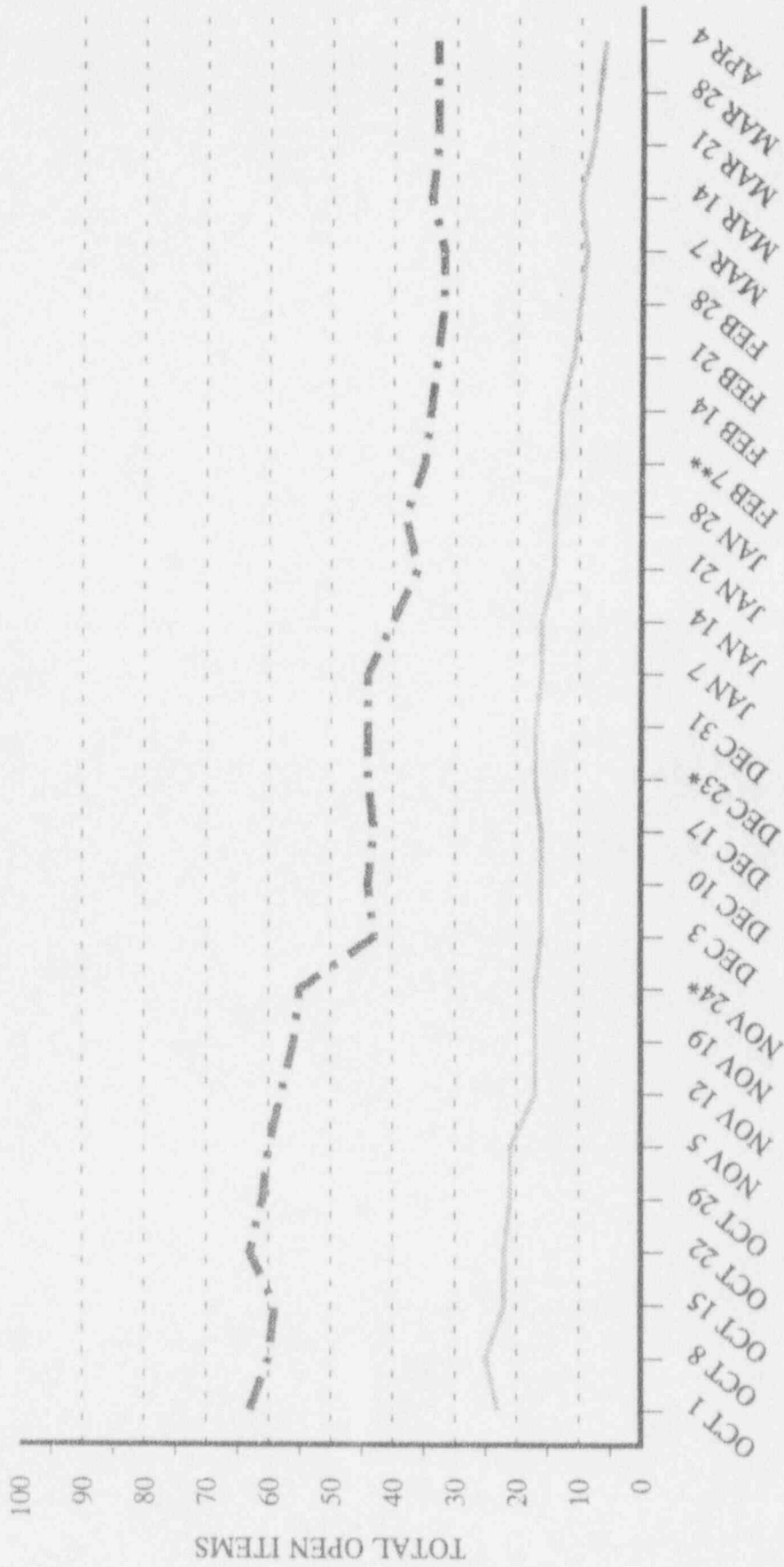
MAIN CONTROL BOARD ITEMS

TOTAL OPEN SERVICE REQUESTS

SERVICE REQUEST GENERATION RATE

UNIT 2

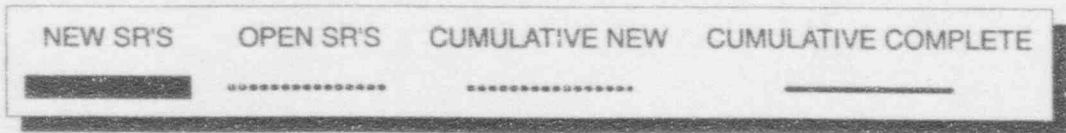
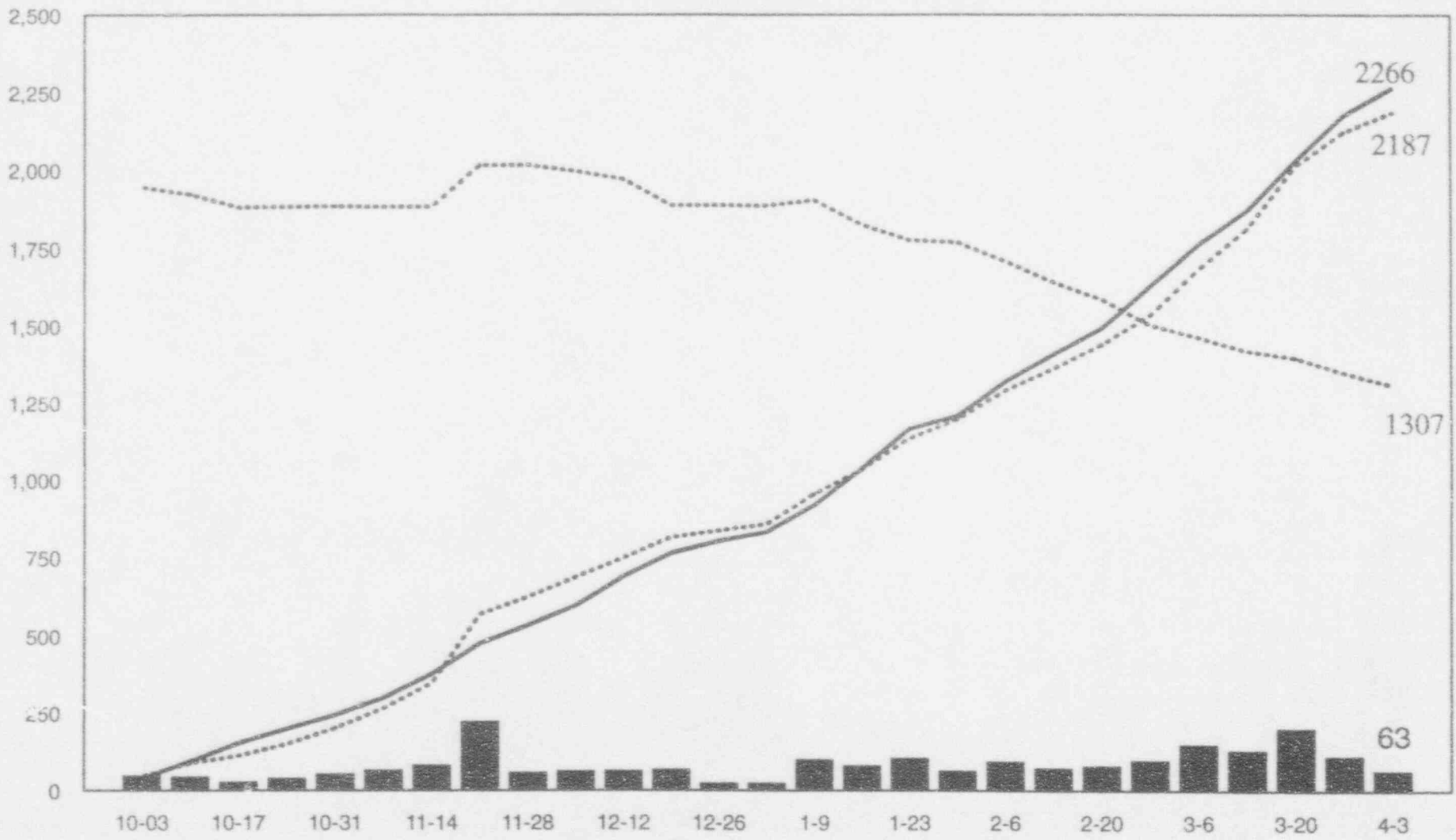
IAFO's / MCB's



IAFO's ———
 MCB's - - - -

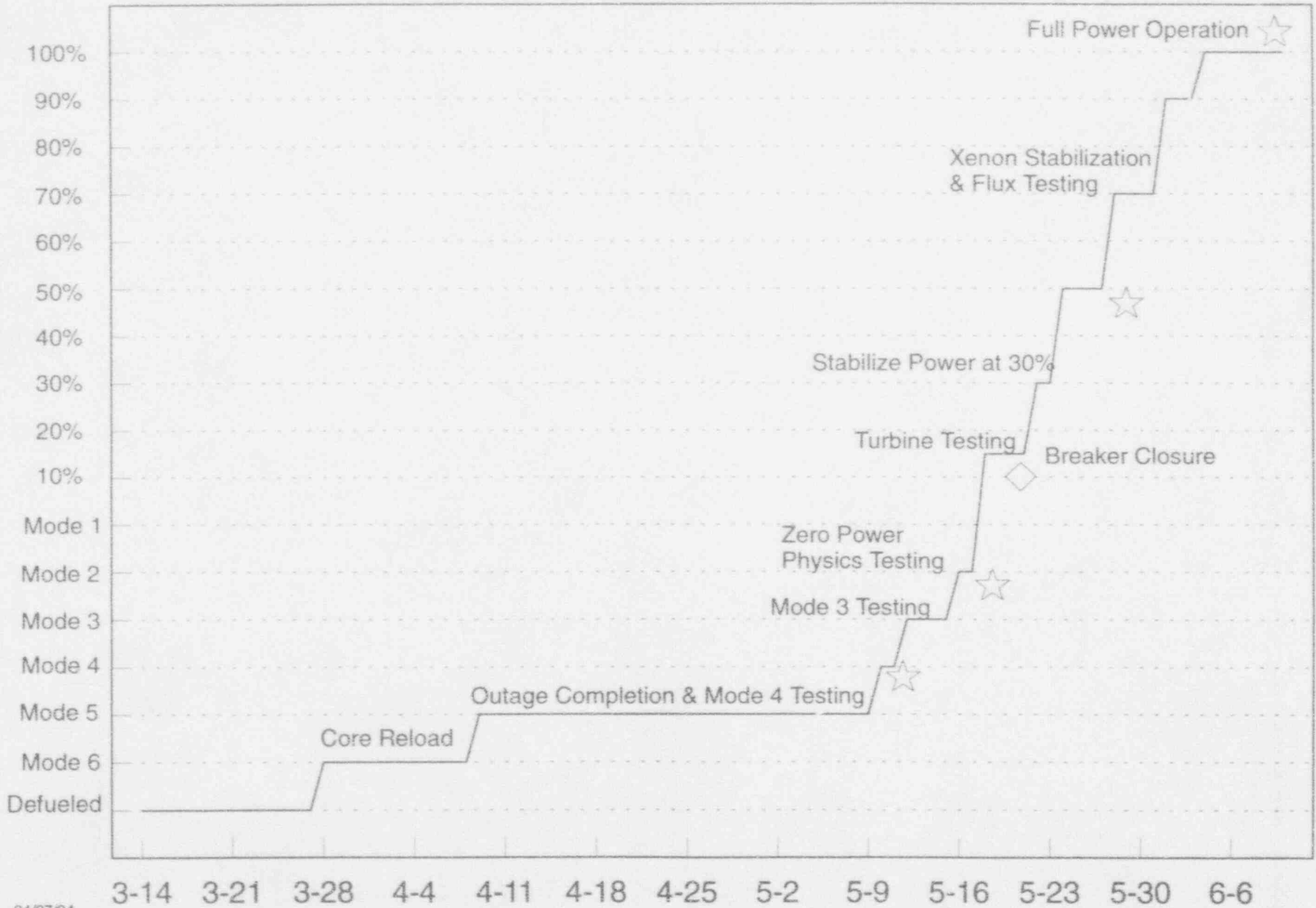
* Due to Holiday
 ** Week ending change

UNIT 2 SERVICE REQUEST BACKLOG



UNIT 2 SCHEDULE

UNIT 2 POWER ASCENSION SCHEDULE



04/07/94

☆ ASSESSMENT MILESTONES

IMPROVEMENTS BASED ON UNIT 1 EXPERIENCE

MOTOR OPERATED VALVE TESTING

STEAM GENERATOR FEED PUMP TESTING

PRIMARY SYSTEM VALVE PACKING CONSOLIDATION

SINGLE ESF TRAIN OUTAGES

STANDBY DIESEL GENERATOR SIMULATED TEST RUNS

PAPER CLOSURE PROCESS FOR MODE CHANGES

CLOSING REMARKS

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION

OVERVIEW OF PERFORMANCE - 4/8/94

PLANT OPERATIONS

- OPERATOR PERFORMANCE
- STAFFING ENHANCEMENTS
- MANAGEMENT OVERSIGHT

MAINTENANCE

- WORK PRIORITIZATION AND PLANNING
 - WORKER PERFORMANCE
- CONTINUED EQUIPMENT PROBLEMS
 - EQUIPMENT SUCCESSES

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION

OVERVIEW OF PERFORMANCE - 4/8/94

ENGINEERING

- NEW MANAGEMENT
- BACKLOGS REDUCED - IMPROVED WORK MANAGEMENT SYSTEMS
- GENERALLY GOOD SUPPORT TO OPERATIONS AND MAINTENANCE
 - CONTAINMENT SUMP ISSUES
 - ESSENTIAL CHILLERS
 - SYSTEM ENGINEERING
 - SYSTEM CERTIFICATION

PLANT SUPPORT

- EMERGENCY PREPAREDNESS EXERCISE AND DRILLS
 - PERFORMANCE IN SECURITY
 - PERFORMANCE IN RADIATION PROTECTION
 - FIRE PROTECTION