UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-8064

JUL 21 1994

MEETING SUMMARY

Licensees: Houston Lighting & Power Company

Facility: South Texas Project, Units 1 and 2

Dockets: 50-498/499

SUBJECT: ENGINEERING PROGRAM MEETING

This refers to the meeting conducted at your request in the Region IV office on July 7, 1994. This meeting related to discussion of your engineering programs accomplishments and initiatives.

The meeting was attended by those listed in Attachment 1. The attendance list and the presentation handouts are provided in Attachments 1, 2A, and 2B, respectfully. The meeting was considered beneficial and provided for an open discussion on the status of your engineering programs.

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,

for John Pellet
Thomas P. Gwynn, Director
Division of Reactor Safety

Attachments:
1. Attendance List
2. Licensee Presentations

cc w/o 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

250006

IE45

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

Office of the Governor
ATTN: Susan Rieff, Director
Environmental Policy
P.O. Box 12428
Austin, Texas 78711

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

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

Houston Lighting & Power Company
ATTN: Rufus S. Scott, Associate
General Counsel
P.O. Box 61867
Houston, Texas 77208

Egan & Associates, P.C.
ATTN: Joseph R. Egan, Esq.
2300 N Street, N.W.
Washington, D.C. 20037

ATTACHMENT 1

ATTENDANCE LIST

1 HOUSTON LIGHTING & POWER COMPANY

T. H. Cloninger, Vice President, Nuclear Engineering
M. Forsyth, System/Computer Analysis Supervisor, Systems Engineering
R. Harris, Supervising Engineer, Section XI, Engineering Program
S. M. Head, Supervisor, Licensing
T. J. Jordan, Manager, Systems Engineering
M. D. Meier, Manager, Engineering Programs
D. C. Sicking, Supervising Engineer, Systems Engineering
S. Thomas, Manager, Design Engineering Department

2 CITY OF AUSTIN

R. X. Del Gado, Fuels Planner
C. Garza, Project Coordination

3 OFFICE COUNSEL

M. Moehlmann

4 NUCLEAR REGULATORY COMMISSION

L. J. Callan, Regional Administrator
T. P. Gwynn, Director, Division of Reactor Safety
T. F. Westerman, Chief, Engineering Branch, Division of Reactor Safety
D. A. Powers, Chief, Maintenance Branch, Division of Reactor Safety
W. D. Johnson, Chief, Reactor Project Branch A, Division of Reactor Projects
L. E. Ellershaw, Reactor Inspector, Maintenance Branch, Division of Reactor Safety

bcc w/Attachments:

DMB (IE 45)
J. L. Milhoan, DEDR (MS 17G21)
H. L. Thompson, DEDS (MS 17G21)
W. T. Russell, D/NRR (MS 12D1)
A. C. Thadani, ADT/NRR (MS 12G18)
L. A. Reyes, ADP/NRR (MS 12D9)
J. Lieberman, D/OE (MS 7H5)
L. J. Chandler, OGC (MS 15B18)
NRR Project Managers: T. Alexion (MS 13H3)
OEDO RIV Coordinator (MS 17G21)
L. J. Callan, RA
J. M. Montgomery, DRA
G. F. Sanborn, EO
C. A. Hackney, RSLO
J. Gilliland, PAO, RIV
T. P. Gwynn, D/DRS
T. F. Westerman
M. F. Runyan
C. J. Paulk
RA Secretary
DRA Secretary
Carol Gordon
Division Secretary
L. S. Ousley

RIV:C:MB*	C:MB*	C:PBA	ADD:DRS	D:DRS
TFWesterman/lb	DAPowers	WJohnson	JLPellet	TPGwynn
07/13/94	07/20/94	07/20/94	07/21/94	07/21/94

*Previously concurred

bcc w/Attachments:

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07/13/94	07/20/94	07/20/94	07/21/94	07/21/94

*Previously concurred

SOUTH TEXAS PROJECT

Nuclear Engineering Overview
Arlington, Texas

July 7, 1994

ATTACHMENT 2A

VISION: STP--A WORLD-CLASS POWER PRODUCER

M-1143.PRE

SOUTH TEXAS PROJECT

NUCLEAR ENGINEERING OVERVIEW

AGENDA

ENGINEERING PHILOSOPHY AND ACCOMPLISHMENTS.....TED CLONINGER

MAJOR EQUIPMENT ISSUES

* EQUIPMENT IMPROVEMENTS ACHIEVED.....TOM JORDAN
* EQUIPMENT INITIATIVES.....TOM JORDAN

PROGRAMMATIC INITIATIVES

* MODIFICATION PROGRAM.....STEVE THOMAS
* ENGINEERING WORK MANAGEMENT.....STEVE THOMAS
* SYSTEM PERFORMANCE MONITORING.....MARK FORSYTH
* LUBRICATION PROGRAM.....DAN SICKING
* MOV PROGRAM.....MIKE MEIER
* INSERVICE TEST PROGRAM.....MIKE MEIER

CLOSING REMARKS.....TED CLONINGER

SOUTH TEXAS PROJECT

ENGINEERING PHILOSOPHY

* ENGINEERING SUPPORT WILL BE CUSTOMER DRIVEN

* TECHNICAL COMPETENCE WILL BE FOUNDED ON AN OPERATIONAL FOCUS

* PROBLEM RESOLUTION WILL BE AGGRESSIVELY PURSUED WITH THE BEST EXPERTISE AVAILABLE

* RESOURCES, TOOLS, AND TRAINING WILL BE PROVIDED TO ACHIEVE WORLD CLASS STATURE

SOUTH TEXAS PROJECT
ENGINEERING ACCOMPLISHMENTS

* ENGINEERING ORGANIZATION REALIGNED BY FUNCTIONAL RESPONSIBILITIES FOR MORE EFFICIENT OPERATION

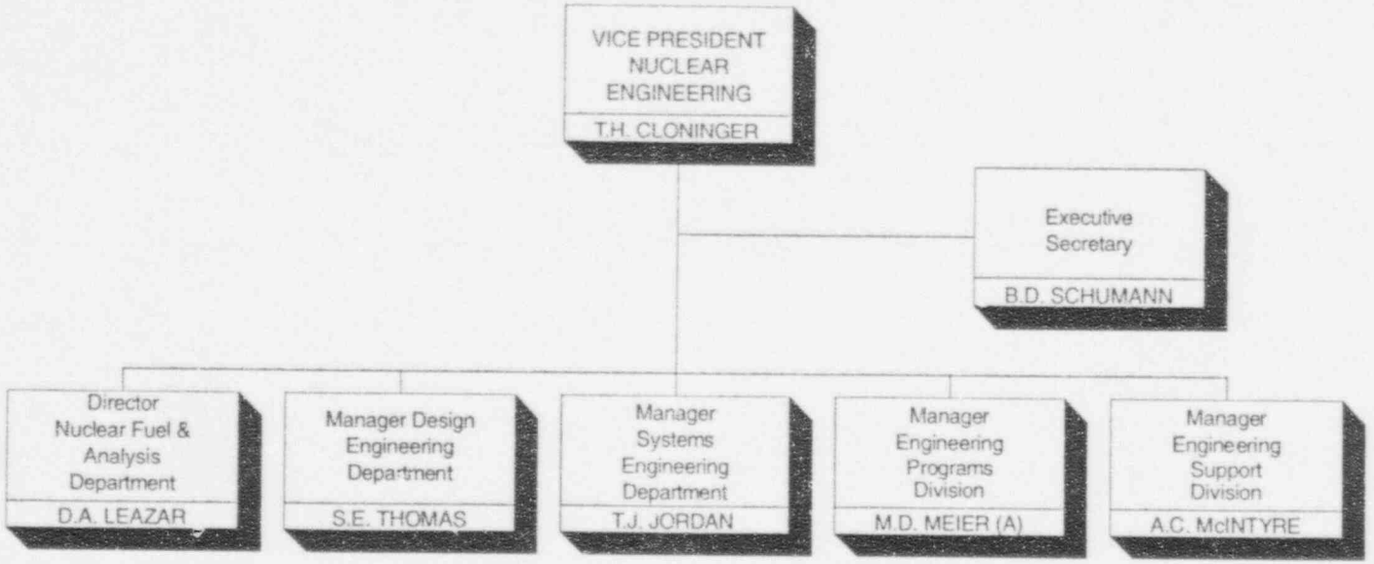
* NEW ENGINEERING WORK MANAGEMENT SYSTEM TO IMPROVE TRACKING AND MANAGEMENT OF ENGINEERING WORKLOAD

* SYSTEM ENGINEERING GUIDELINES AND DIVISION OF RESPONSIBILITIES ESTABLISHED

* MANAGEMENT SRO CERTIFICATION TRAINING

* SELF ASSESSMENT CULTURE ESTABLISHED

SOUTH TEXAS PROJECT
NUCLEAR ENGINEERING



- Mgt Comm Fuel Staff
- Fab Cont
- Rx Engr
- TH Anal
- PRA
- Decomm

- Disciplines
- Procurement Engineering
- VETIP
- MOD Admin.

- Fluid Systems
- Elect/I&C Systems
- Technical Support
- Computers
- Reliability
  - Statistics
  - PM Pgm
  - Pred Maint
  - RCM
  - Thermal Performance

- Testing
  - Section XI
  - Surveillance
  - Leak Rate
  - Rx/Plt Perf
  - CV/Snubber /HVAC
  - Fuel Insp
- Fire Prot
- Welding
- Codes & Stds
- Procedures
- MOV Program
- Ge[illegible]

- Reporting
- Business Plan
- Tracking/Trending
- Doc Processing
- Budget
- DataBases
- Training
- Word Proc
- Nuc Net
- MED/MPL
- CM Program
- Process Proced.
- Work Management

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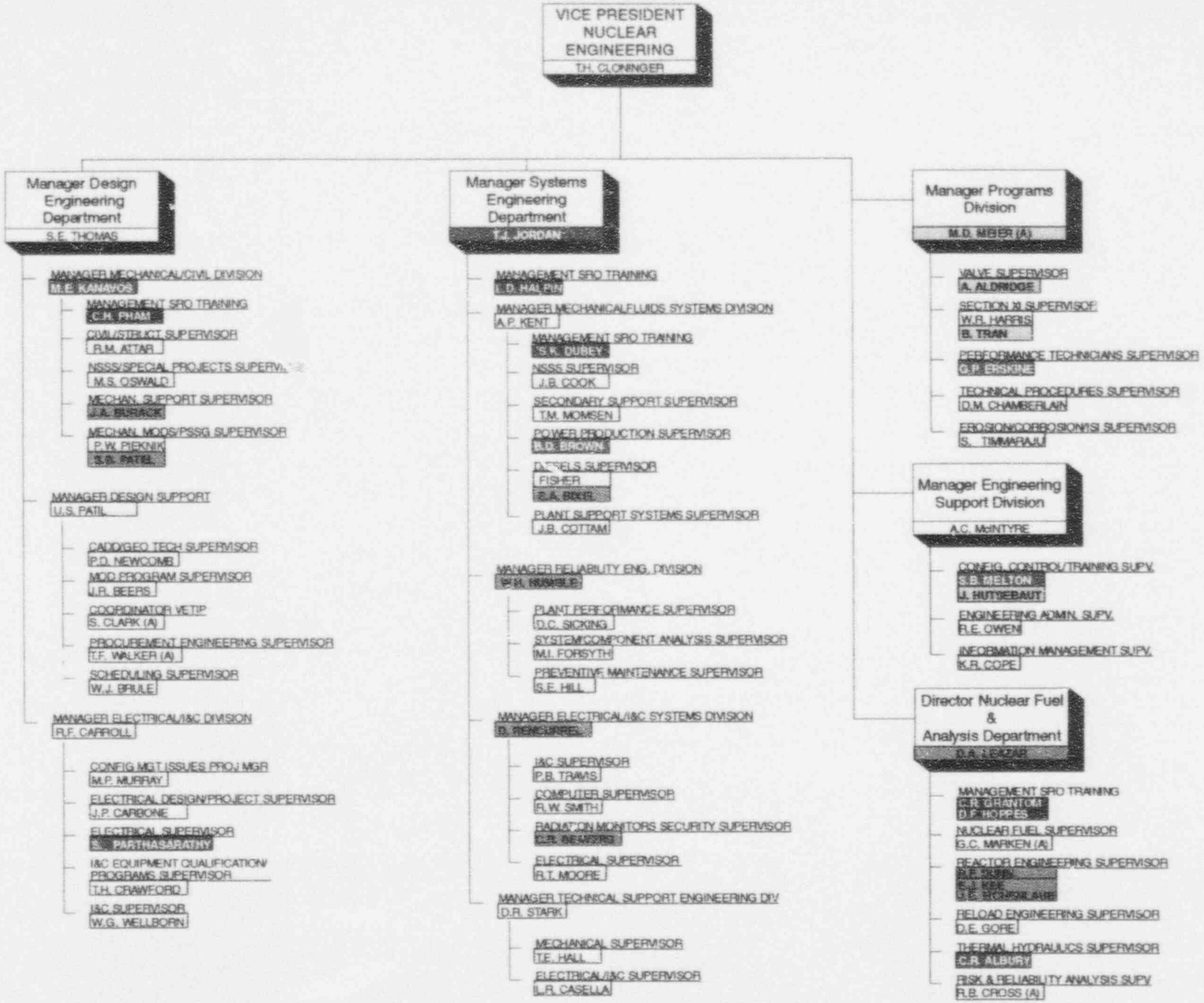
SOUTH TEXAS PROJECT NUCLEAR ENGINEERING



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SOUTH TEXAS PROJECT

EQUIPMENT IMPROVEMENTS ACHIEVED

* STEAM GENERATOR FEED PUMPS/TURBINES
  * LUBRICATING OIL/SEAL WATER LEAKAGE
  * HIGH PRESSURE STOP VALVE LEAKAGE
  * SOLENOIDS/ACTUATORS
* STARTUP FEED PUMP WATER INGRESS
* DIESEL GENERATORS
  * TECHNICAL SUPPORT CENTER DIESEL
  * STANDBY DIESEL GENERATORS
* NITROGEN 16 MONITORS
* AUXILIARY FEED PUMP 14
* HEATER DRIP SYSTEM LEVEL CONTROLLERS

SOUTH TEXAS PROJECT

EQUIPMENT IMPROVEMENTS ACHIEVED
(CONTINUED)

* RESIDUAL HEAT REMOVAL SYSTEM COOLDOWN METHODOLOGY
* UNIT 1 REACTOR VESSEL O-RING
* ESSENTIAL CHILLER BYPASS
* CONDENSATE POLISHERS
* SECONDARY PLANT LEAKAGE
* GLAND STEAM SYSTEM
* RADIATION MONITORS

SOUTH TEXAS PROJECT
EQUIPMENT INITIATIVES

* CONTINUE DIESEL GENERATOR RELIABILITY IMPROVEMENTS
* SECONDARY PLANT COMPONENT RELIABILITY
  * FEEDWATER BOOSTER PUMPS
  * MAIN TURBINE AND AUXILIARIES
  * STEAM GENERATOR POWER OPERATED RELIEF VALVES
* INSTRUMENT AIR SYSTEM QUALITY
* MOTOR MAINTENANCE PLANNING
* MOLDED CASE CIRCUIT BREAKER MAINTENANCE AND TESTING
* EQUIPMENT DIAGNOSTICS AND ROOT CAUSE ANALYSIS

SOUTH TEXAS PROJECT

MODIFICATION PROGRAM

VISION ELEMENTS

* DIVISION OF RESPONSIBILITY
* PROCESS IMPROVEMENT
* MODIFICATIONS EFFECTIVENESS

SOUTH TEXAS PROJECT

MODIFICATION PROGRAM
(CONTINUED)

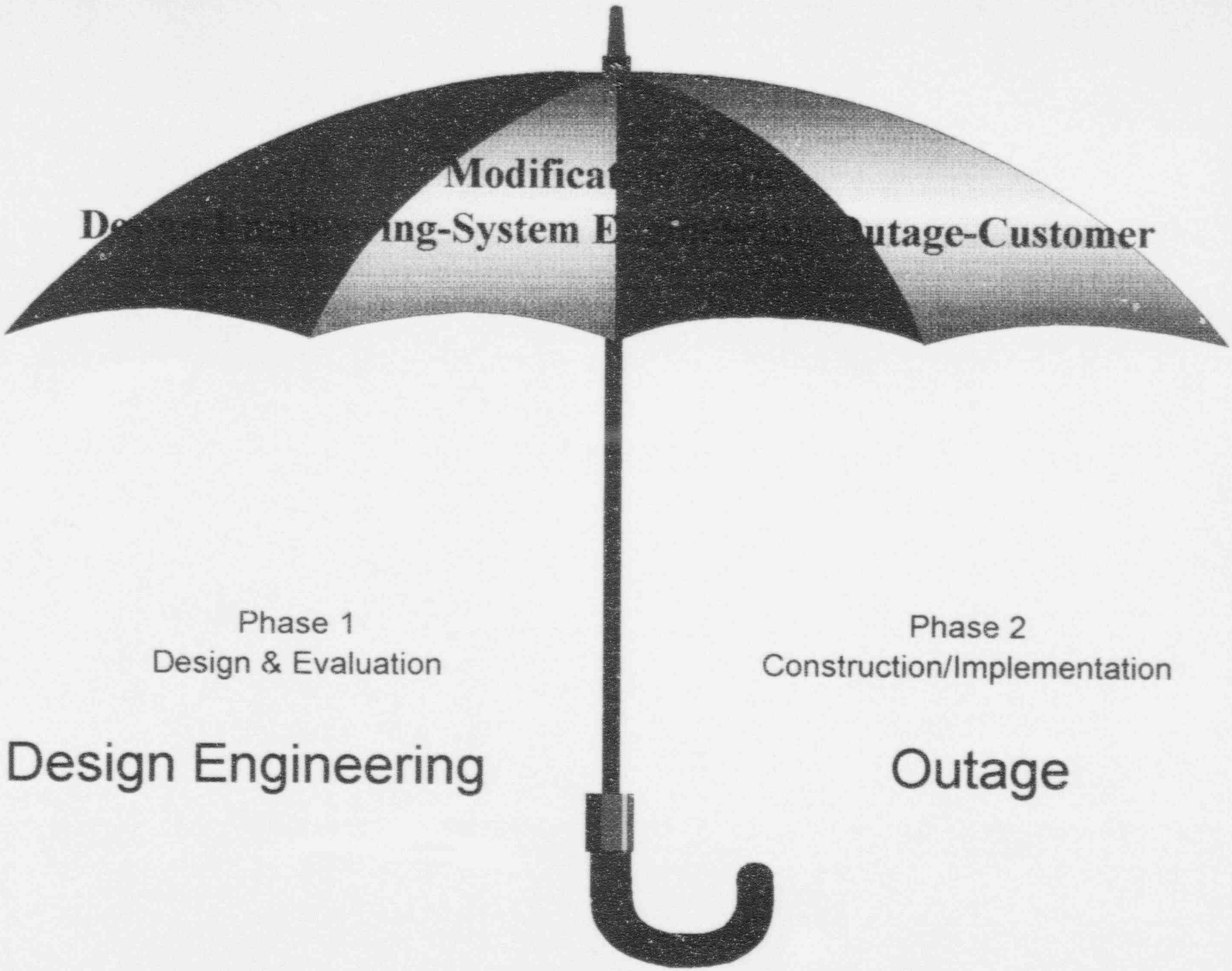
DIVISION OF RESPONSIBILITY

* MAJORITY DESIGNED "IN-HOUSE"

* DESIGN ENGINEERING IS RESPONSIBLE FOR THE EVALUATION AND DESIGN PHASES

* OUTAGE SUPPORT IS RESPONSIBLE FOR THE INSTALLATION, TESTING, AND FINAL CLOSURE

* MODIFICATION TEAM DESIGNATED FOR EACH MODIFICATION



Phase 1
Design & Evaluation

Design Engineering

Phase 2
Construction/Implementation

Outage

SOUTH TEXAS PROJECT

MODIFICATION PROGRAM

(CONTINUED)

PROCESS IMPROVEMENT

* THE DESIGN PROCESS IS ESSENTIALLY THE SAME FOR MAJOR AND MINOR MODIFICATIONS

* ADMINISTRATIVE BURDEN IS REDUCED FOR MINOR MODIFICATIONS

* SYSTEMS NOT REQUIRING CONFIGURATION CONTROL ARE REMOVED FROM THE CONFIGURATION CONTROL PROGRAM

SOUTH TEXAS PROJECT

MODIFICATION PROGRAM

(CONTINUED)

MODIFICATION EFFECTIVENESS

* TESTING IS DESIGNED TO VALIDATE DESIGN ASSUMPTIONS, PERFORMANCE AND OPERATIONAL CHARACTERISTICS
* TESTING IS SPECIFIED IN DESIGN PACKAGE
* EACH MODIFICATION UNDERGOES A POST-MODIFICATION CRITIQUE
* TRENDING IS PERFORMED AND RESULTS USED TO IMPROVE PROCESS

SOUTH TEXAS PROJECT
ENGINEERING WORK MANAGEMENT SYSTEM

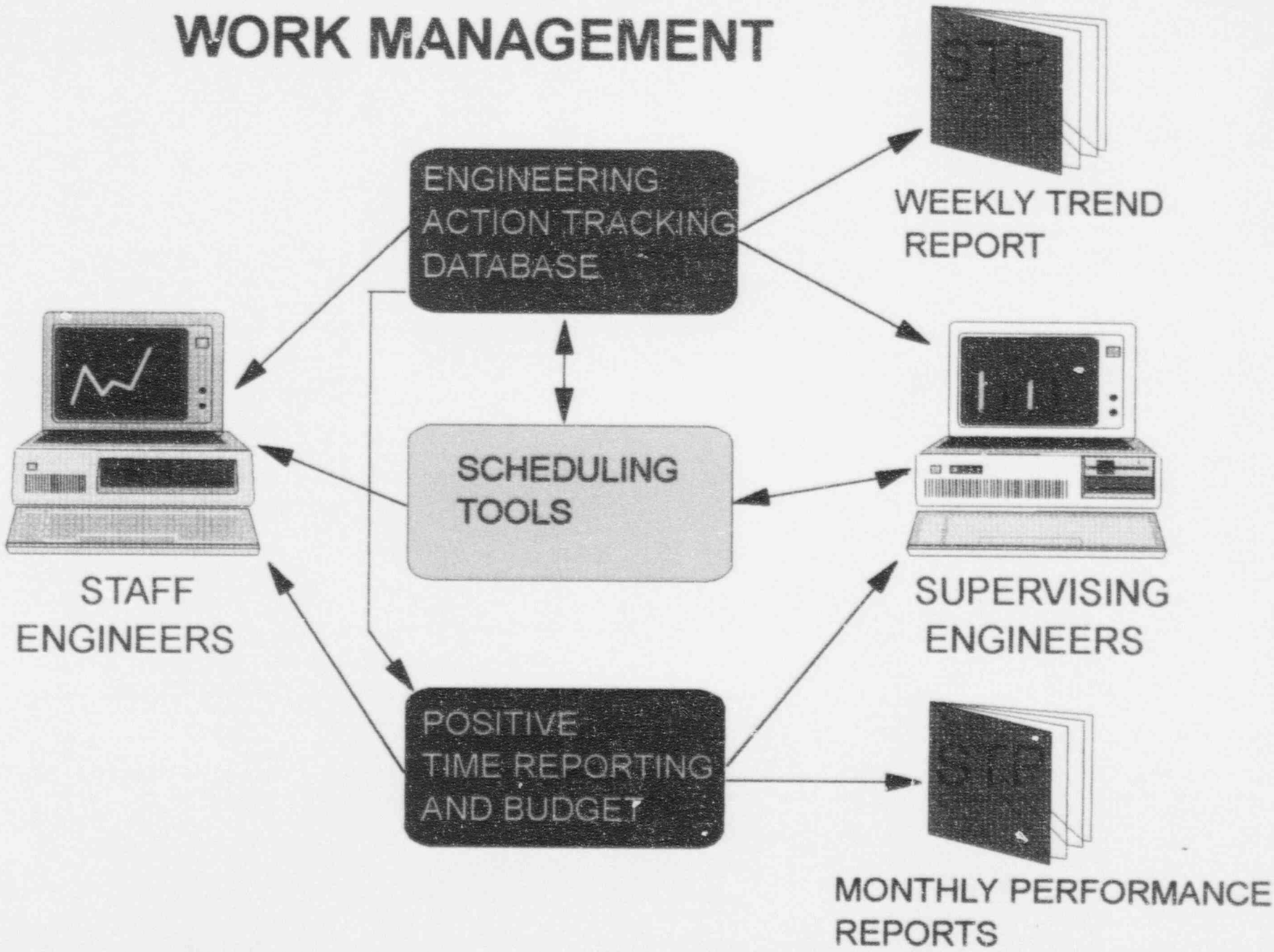
* PAST ENGINEERING WORK MANAGEMENT SYSTEM
  * MULTIPLE NON-INTEGRATED ENGINEERING ACTION TRACKING DATABASES
  * NO POSITIVE TIME REPORTING
  * NO ELECTRONIC TIES WITH OTHER SITE DATABASES
  * NO ELECTRONIC TIES WITH ENGINEERING SCHEDULING TOOLS
  * NO COMPREHENSIVE PERIODIC TRENDING REPORTS

SOUTH TEXAS PROJECT

ENGINEERING WORK MANAGEMENT
(CONTINUED)

* PRESENT ENGINEERING WORK MANAGEMENT SYSTEM
  * INTEGRATED ENGINEERING ACTION TRACKING DATABASES
  * POSITIVE TIME REPORTING ELECTRONICALLY TIED TO ENGINEERING ACTION DATABASE FOR PERFORMANCE MEASUREMENT
  * AUTOMATIC ELECTRONIC TIES WITH ENGINEERING SCHEDULING TOOLS
  * PUBLICATION OF WEEKLY TREND REPORT AND MONTHLY BUDGET AND PERFORMANCE REPORT
* FUTURE ENGINEERING WORK MANAGEMENT SYSTEM
  * ADD INTERCONNECTIVITY BETWEEN THE ENGINEERING ACTION TRACKING DATABASE AND OTHER SITE ACTIVITY TRACKING DATABASES

NUCLEAR ENGINEERING WORK MANAGEMENT



SOUTH TEXAS PROJECT

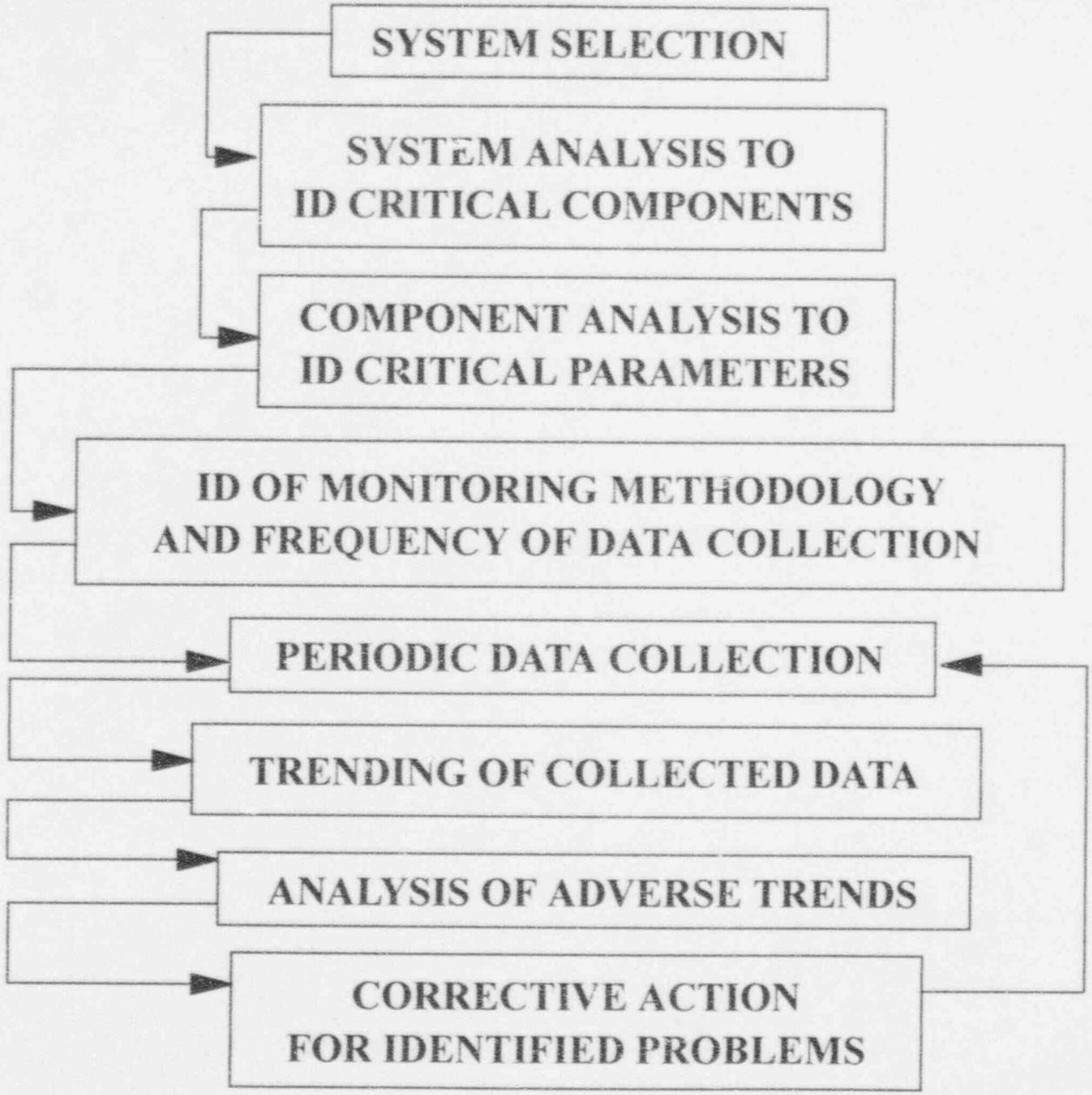
SYSTEM PERFORMANCE MONITORING

CHALLENGES

* IDENTIFICATION OF CRITICAL PLANT PARAMETERS

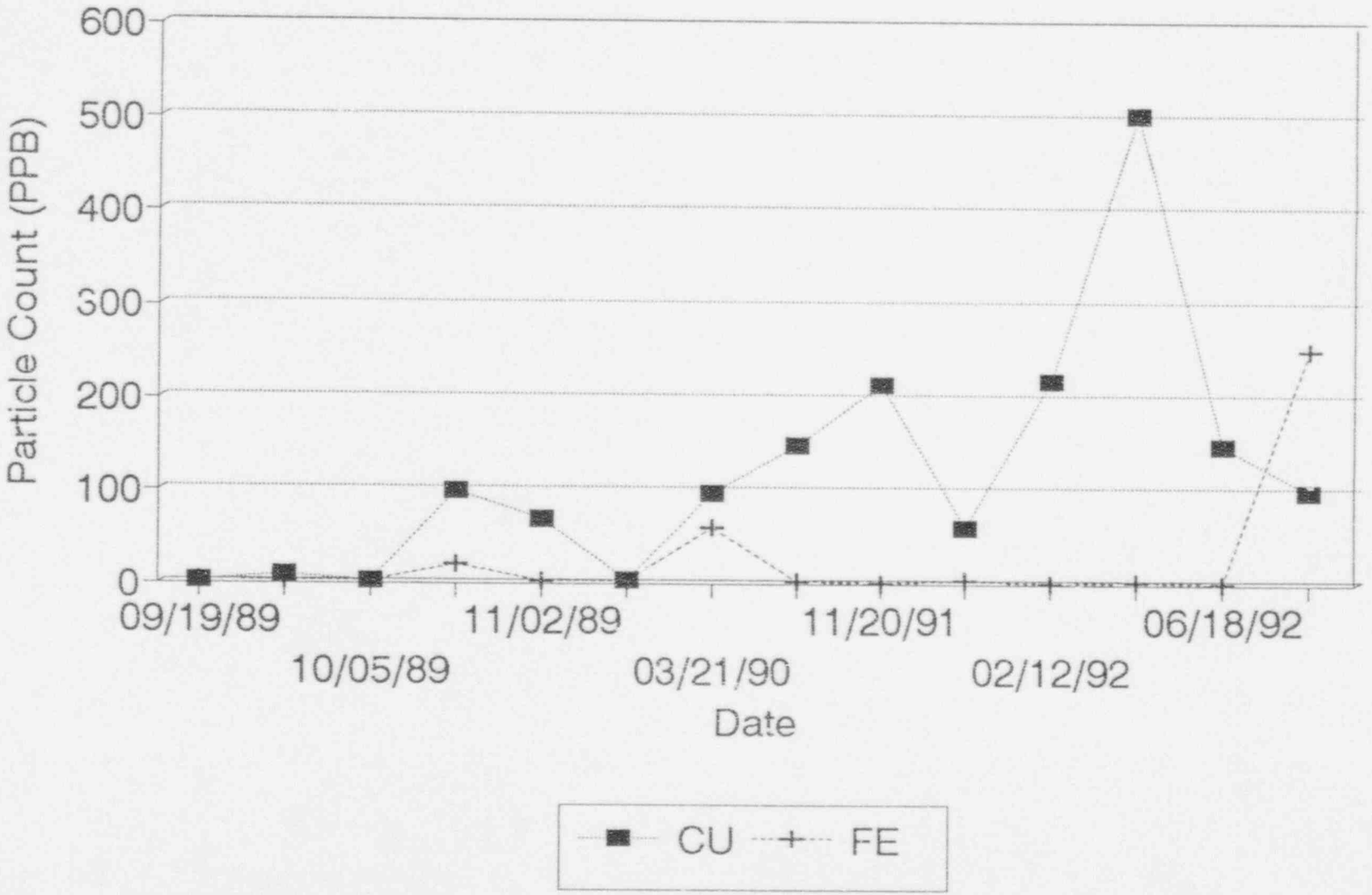
* EFFECTIVE COLLECTION AND ANALYSIS OF COMPONENT PERFORMANCE DATA

SOUTH TEXAS PROJECT
SYSTEM PERFORMANCE MONITORING



South Texas Project

Main Transformer Oil Particle Trend



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45
MR 3346

SOUTH TEXAS PROJECT

LUBRICATION PROGRAM

SELF ASSESSMENT

* LUBRICATION PROGRAM HAD MULTIPLE/DIVIDED OWNERSHIP
* NON-DEDICATED LUBRICANTS USED ON SAFETY RELATED COMPONENTS
* NO READILY ACCESSIBLE DISPENSING POINT FOR GREASES/OILS
* LUBRICANTS NOT ISSUED IN CONTAINERS SIZED FOR THE JOB
* LARGE NUMBER OF LUBRICANTS, APPROXIMATELY 200 CLASS BINS, REQUIRE EXCESSIVE WAREHOUSE SPACE

SOUTH TEXAS PROJECT

LUBRICATION PROGRAM

(CONTINUED)

SOLUTIONS

* SYSTEM ENGINEERING TOOK OWNERSHIP OF LUBRICATION PROGRAM AND HIRED A FULL-TIME LUBRICATION ENGINEER.

* NEW PROGRAM REQUIRES LUBRICANTS TO BE EITHER DEDICATED OR COMMERCIAL GRADE BUT NOT BOTH

* DISPENSING STATION CONSTRUCTED IN PROTECTED AREA AND CONTROLLED BY MAINTENANCE TOOL ROOM PERSONNEL

* OILS ARE NOW ISSUED IN UNIT SIZE REQUIRED FOR JOB

* 200 CLASS BINS WERE CONSOLIDATED TO 40, REDUCING WAREHOUSE SPACE AND ALLOWING DEDICATED PURCHASE OF LUBRICANTS VIA THE MOBILRAD PROGRAM

* HARD COPY LUBRICATION SPECIFICATIONS WERE CONVERTED TO THE COMPUTER BASED MASTER PARTS LIST

SOUTH TEXAS PROJECT
LUBRICATION PROGRAM
(CONTINUED)

RESULTS

* NO LUBRICATION STATION PROBLEM REPORTS WRITTEN AFTER THE IMPLEMENTATION PERIOD

* THE USERS OF THE NEW LUBRICANTS AND DISPENSING STATION GIVE THE PROGRAM GOOD MARKS DUE TO EASY ACCESS AND ISSUANCE OF LUBRICANTS IN QUANTITIES REQUIRED FOR THE JOB

* NEW PROGRAM MINIMIZES PROBABILITY OF LUBRICANT APPLICATION ERRORS SUCH AS USE OF COMMERCIAL GRADE OILS/GREASES ON SAFETY RELATED COMPONENTS

SOUTH TEXAS PROJECT

GL 89-10 MOV PROGRAM

SELF ASSESSMENTS

* JANUARY, 1994
  * EVALUATED THE IMPLEMENTATION AND OVERALL EFFECTIVENESS OF THE STP MOV PROGRAM IN ACCORDANCE WITH THE REQUIREMENTS OF GL 89-10.
  * 17 MEMBERS REPRESENTING 12 ORGANIZATIONS
  * DEVELOPED PLANS AND SCHEDULES FOR ADDRESSING AND RESOLVING ITEMS

* MAY, 1994
  * QUALITY ASSURANCE AUDIT CONFIRMED PROGRAM ADEQUACY

* JULY, 1994
  * FULL SCOPE AUDIT IN PROGRESS

SOUTH TEXAS PROJECT

GL 89-10 MOV PROGRAM

(CONTINUED)

APRIL, 1994 NRC IFI CLOSEOUT INSPECTION

* CLOSED 15 OF 17 PREVIOUSLY IDENTIFIED INSPECTION FINDINGS RELATED TO MOV'S

* THE TWO REMAINING IFI'S WERE RELATED TO GENERIC INDUSTRY ISSUES:

    * THERMAL BINDING/PRESSURE LOCKING

    * EXTRAPOLATION METHODOLOGY

SOUTH TEXAS PROJECT

GL 89-10 MOV PROGRAM

(CONTINUED)

COMPLIANCE PROCESS

* IDENTIFIED GL 89-10 SCOPE

* DEVELOPED MAXIMUM EXPECTED DIFFERENTIAL PRESSURE (MEDP) AND THRUST/TORQUE CALCULATIONS (DESIGN BASIS)

* PERFORMED AS FOUND AND AS LEFT STATIC TESTS AND APPLICABLE DYNAMIC TESTS

* ANALYZED AND RECONCILED TEST RESULTS AGAINST DESIGN BASIS REQUIREMENTS

* PERFORMED FINAL DESIGN BASIS REVIEWS AND PACKAGED IN VALVE SPECIFIC BINDERS

* DEVELOPED AND IMPLEMENTED A TRACKING AND TRENDING PROGRAM

* DEVELOPED A TRANSITION PLAN AND INITIATED SITE ORGANIZATIONAL RESPONSIBILITY CHANGES

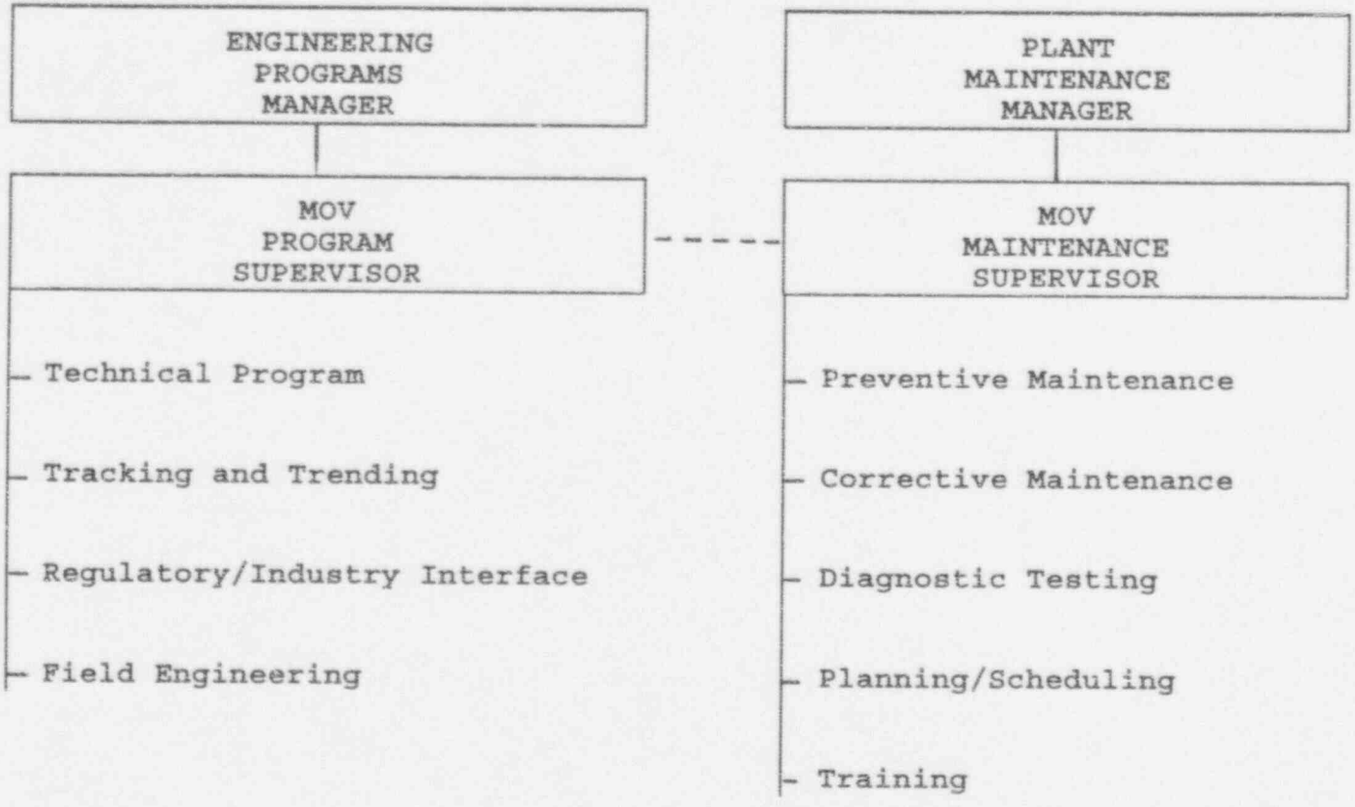
* SUBMITTED NRC CLOSURE DOCUMENT (JUNE 28, 1994)

SOUTH TEXAS PROJECT

GL 89-10 PROGRAM

(CONTINUED)

ORGANIZATION (LONG TERM)



SOUTH TEXAS PROJECT

INSERVICE TESTING PROGRAM

* DISCUSSION
  * INTERNAL REVIEWS POINTED OUT AREAS FOR IMPROVEMENT
  * NRC INSPECTION AFFIRMED THE NEED TO IMPROVE
  * ALTHOUGH WEAKNESS IDENTIFIED, PROGRAM IS COMPLIANT

* FOCUS AREAS FOR IMPROVEMENT
  * NO IST PROGRAM BASES DOCUMENT
  * ADEQUACY OF THE INTERFACING PROGRAMS THAT MAY REQUIRE REVISIONS TO THE PLAN
  * TIMELINESS OF COMPONENT EVALUATIONS AND PLAN UPDATES

SOUTH TEXAS PROJECT

INSERVICE TESTING PROGRAM
(CONTINUED)

* PLAN FOR IMPROVEMENT
  * SELF ASSESSMENT
    * VERIFY INFORMATION IN PLAN
    * IDENTIFY TEST PROCEDURES FOR ALL COMPONENTS
    * EVALUATE ORGANIZATION RESPONSIBILITIES, STAFFING AND TRAINING
    * EVALUATE EXISTING PROCEDURES AND PROGRAM
    * EVALUATE INTERFACING PROCEDURES AND PROGRAMS
      * DESIGN CHANGE PROGRAMS
      * MAINTENANCE PROGRAMS
      * SURVEILLANCE PROGRAM, ETC.
    * GATHER INFORMATION FROM OTHER PLANTS

SOUTH TEXAS PROJECT

INSERVICE TESTING PROGRAM

(CONTINUED)

* BASES DOCUMENT

  * PERFORM A SYSTEMATIC REVIEW OF THE DESIGN FUNCTION OF ALL ASME CLASS 1, 2, AND 3 COMPONENTS

  * DEVELOP A TECHNICAL JUSTIFICATION FOR THE INCLUSION OR EXCLUSION OF EACH ASME CLASS 1, 2, AND 3 COMPONENT

  * COMPILE THIS DOCUMENTATION IN A USABLE AND AUDITABLE FORMAT

* SUMMARY

  * THIS BASIS DOCUMENT WILL PROVIDE STP WITH AUDITABLE ASSURANCE THAT THE PLAN IS ACCURATE AND COMPREHENSIVE IN SCOPE

SOUTH TEXAS PROJECT

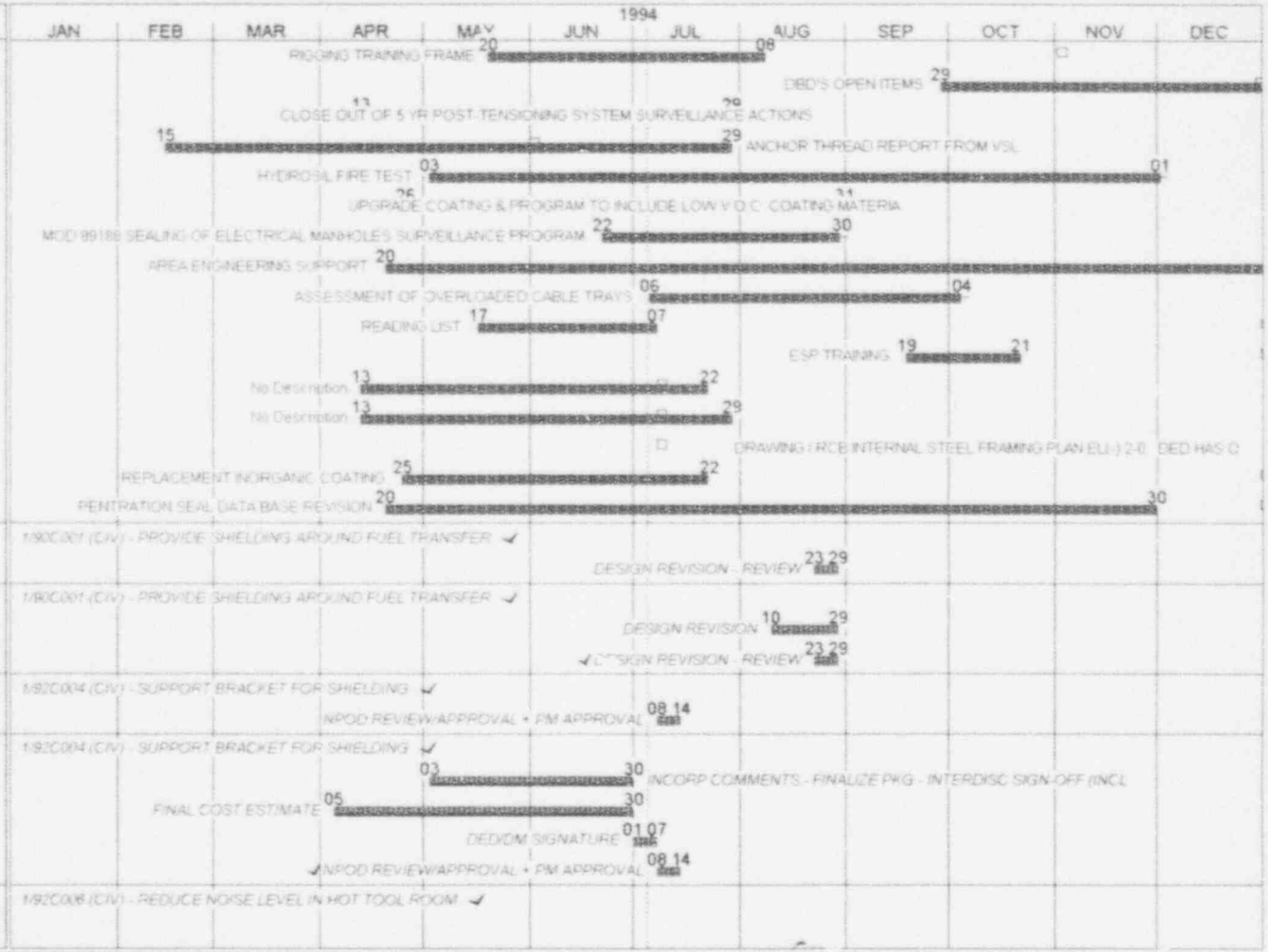
NUCLEAR ENGINEERING OVERVIEW

CLOSING REMARKS

05JUL94

Engineering Master Tracking System
ATTARRM

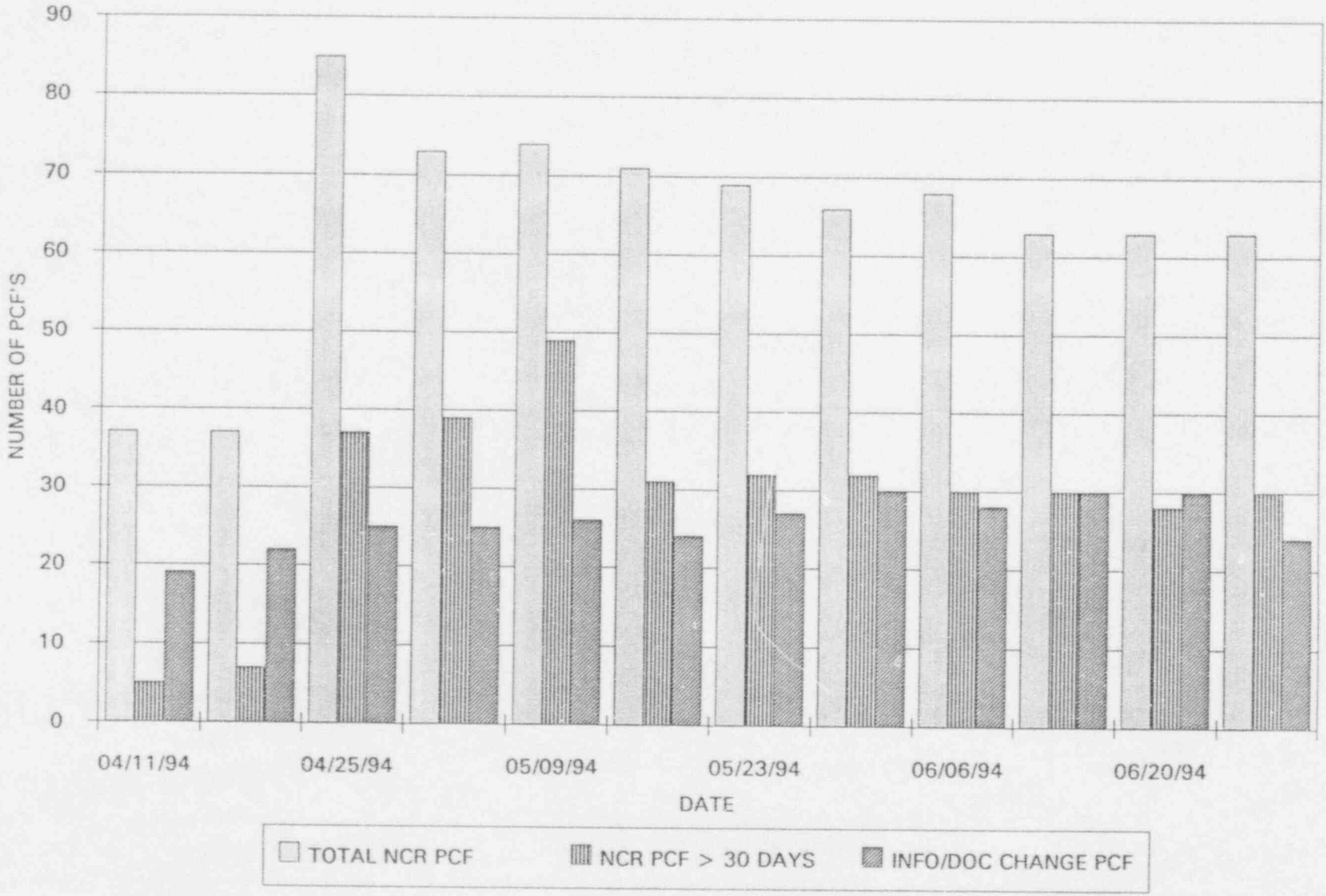
DOC TYPE	DOC #	RESOURCE	MHRS	NEED DATE	DEF	
CAL	CC-5076	WALESM	15	2-NOV-94	-	1
CIV	94-001	ATTARRM	100	30-DEC-94	-	2
CIV	94-007	ENGENRL	12	1-MAY-94	-	3
CIV	94-008	ENGENRL	15	1-JUN-94	-	4
CIV	94-009	ENGENRL	80	1-DEC-94	-	5
CIV	94-010	DUJKADL	100	31-AUG-94	-	6
CIV	94-011	DUJKADL	50	30-AUG-94	-	7
CIV	94-015	DUJKADL	222	3-JAN-95	-	8
CIV	94-016	DUJKADL	104	4-OCT-94	-	9
CIV	94-025	WALESM	40	31-DEC-94	-	10
CIV	94-026	WALESM	200	31-DEC-94	-	11
DBA	7A091A80340	ATTARRM	101	8-JUL-94	D	12
DBA	7A092A80340	ATTARRM	108	8-JUL-94	D	13
DCN	CD-0189	ROBERST	10	8-JUL-94	D	14
DCN	CD-0234	DUJKADL	25	31-DEC-94	-	15
DCN	CD-0235	ENGENRL	225	31-DEC-94	D	16
ECN	90C001	ENGENRL	0	-	-	17
ECN	90C001	ENGENRL	7	-	-	18
ECN	90C001	SKINNEJE	0	-	-	19
ECN	90C001	SKINNEJE	20	-	-	20
ECN	90C001	SKINNEJE	0	-	-	21
ECN	92C004	DUJKADL	0	-	-	22
ECN	92C004	DUJKADL	15	-	-	23
ECN	92C004	WALESM	0	-	-	24
ECN	92C004	WALESM	50	-	-	25
ECN	92C004	WALESM	10	-	-	26
ECN	92C004	WALESM	10	-	-	27
ECN	92C004	WALESM	0	-	-	28
ECN	92C006	ROBERST	0	-	-	29
ECN	92C006	ROBERST	0	-	-	30



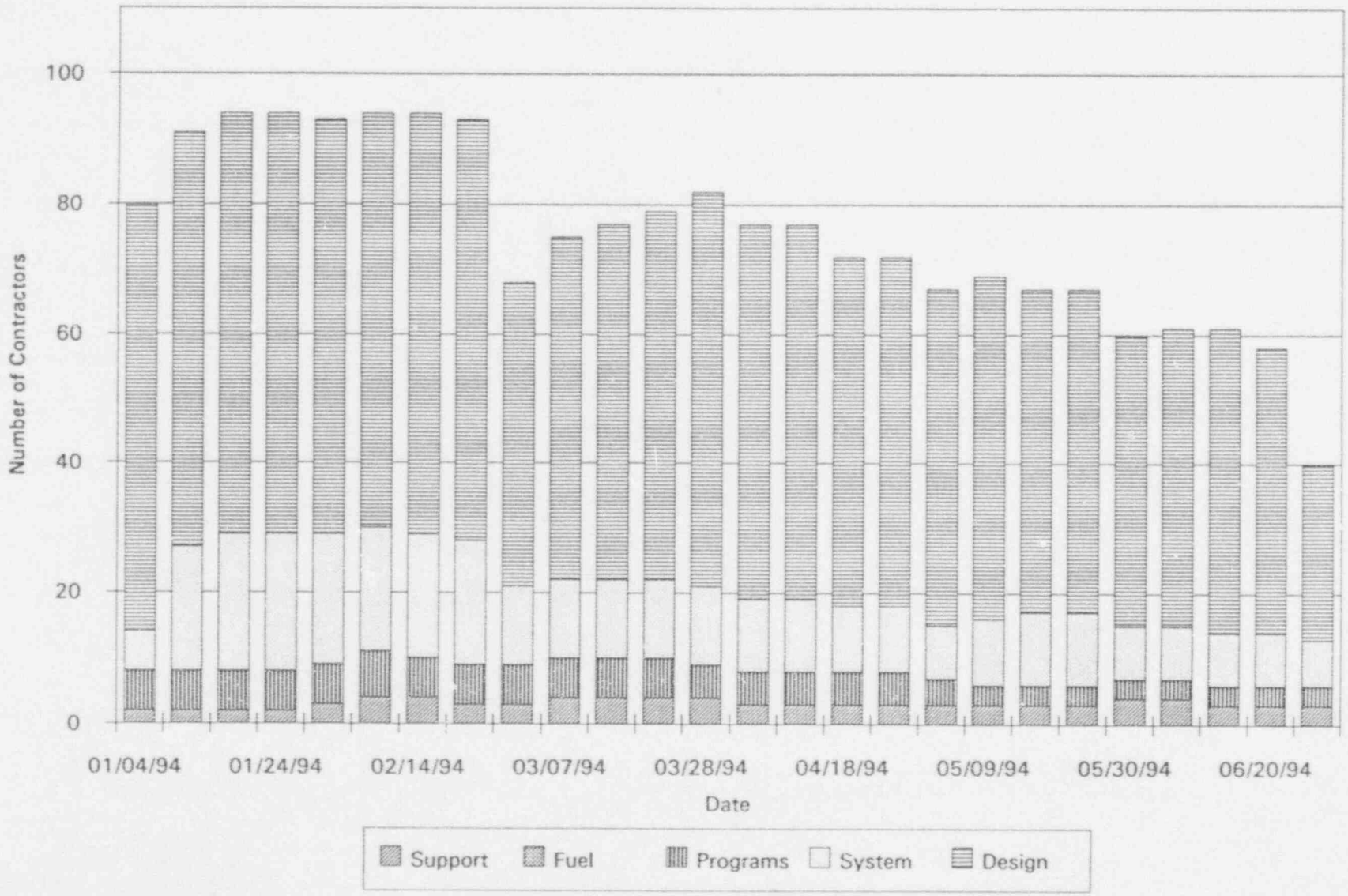
Engineering Manhours

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SKINNEJE	94.4	158.4	294.4	268.8	324.8	361.2	370.8	346.8	197.2	154.0	49.6	
WALESM	4.0	43.2	142.0	109.2	141.6	115.0	74.8	5.2	130.0	136.8	15.2	16.0
DCIV												
DSEIS												
DCIM												
TOTAL	261.6	396.8	719.4	734.0	1,000.0	998.0	1,143.0	947.2	631.4	542.6	181.2	52.8

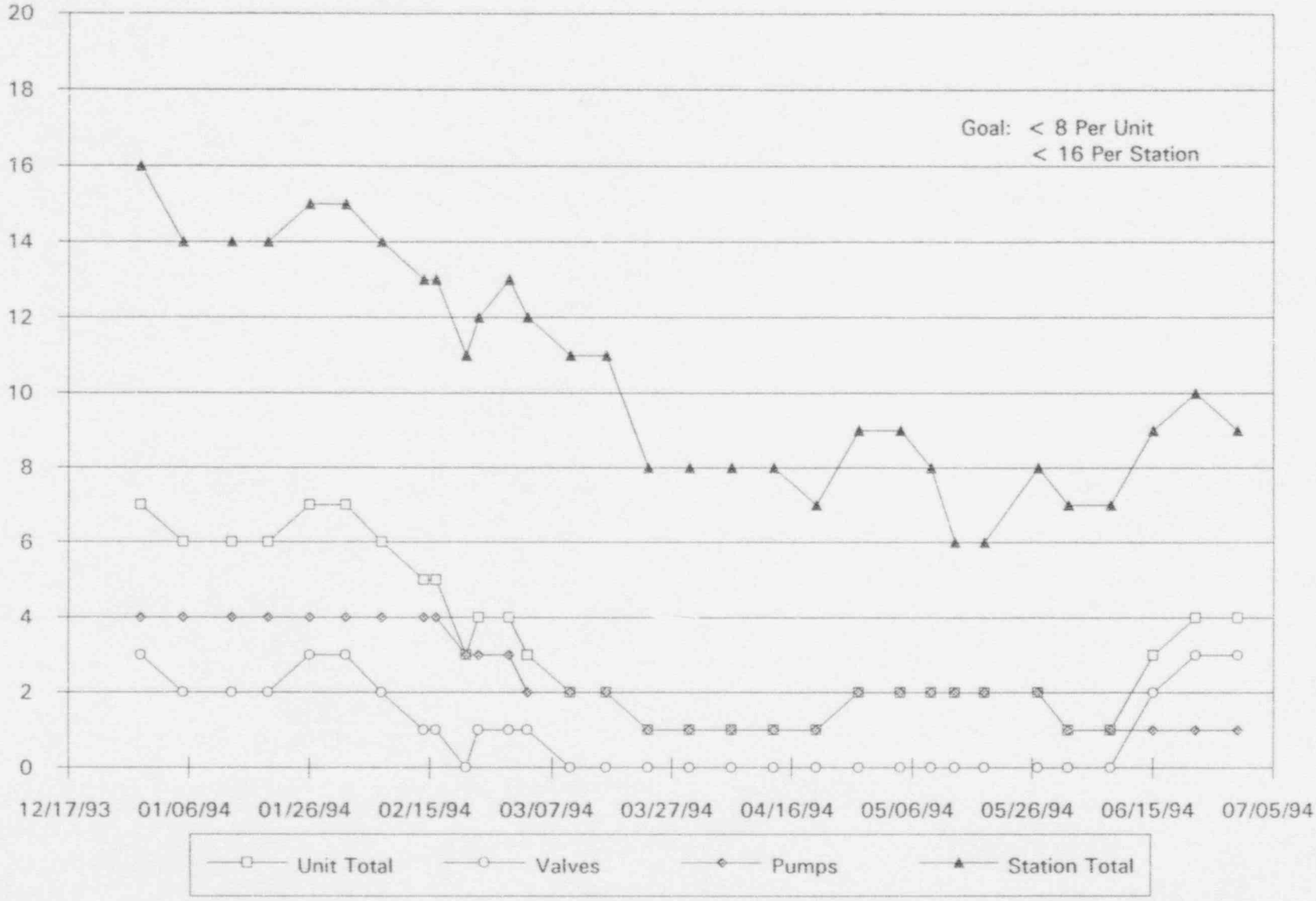
DESIGN ENGINEERING
PLANT CHANGE FORMS



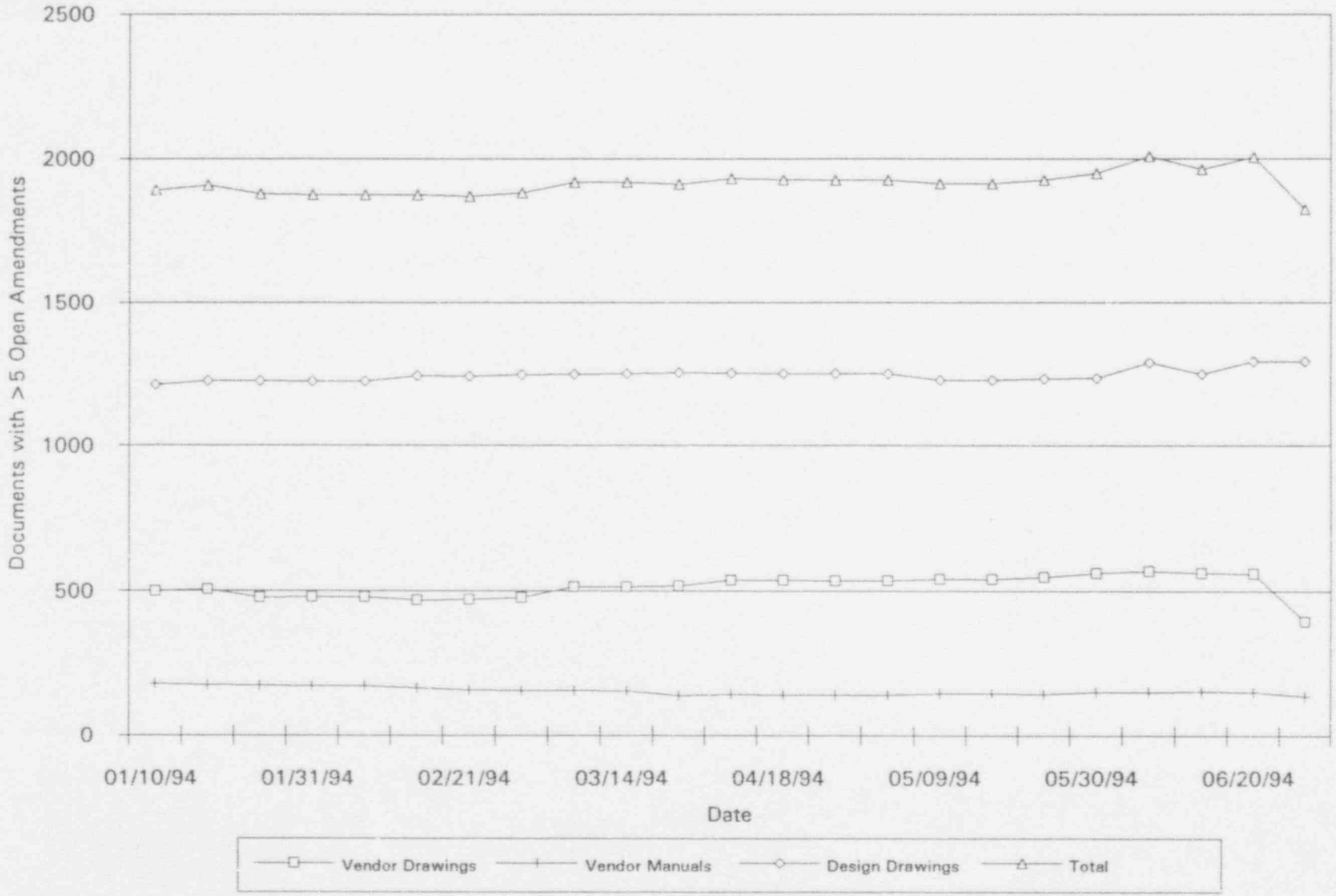
NUCLEAR ENGINEERING
Contractor Support on Site

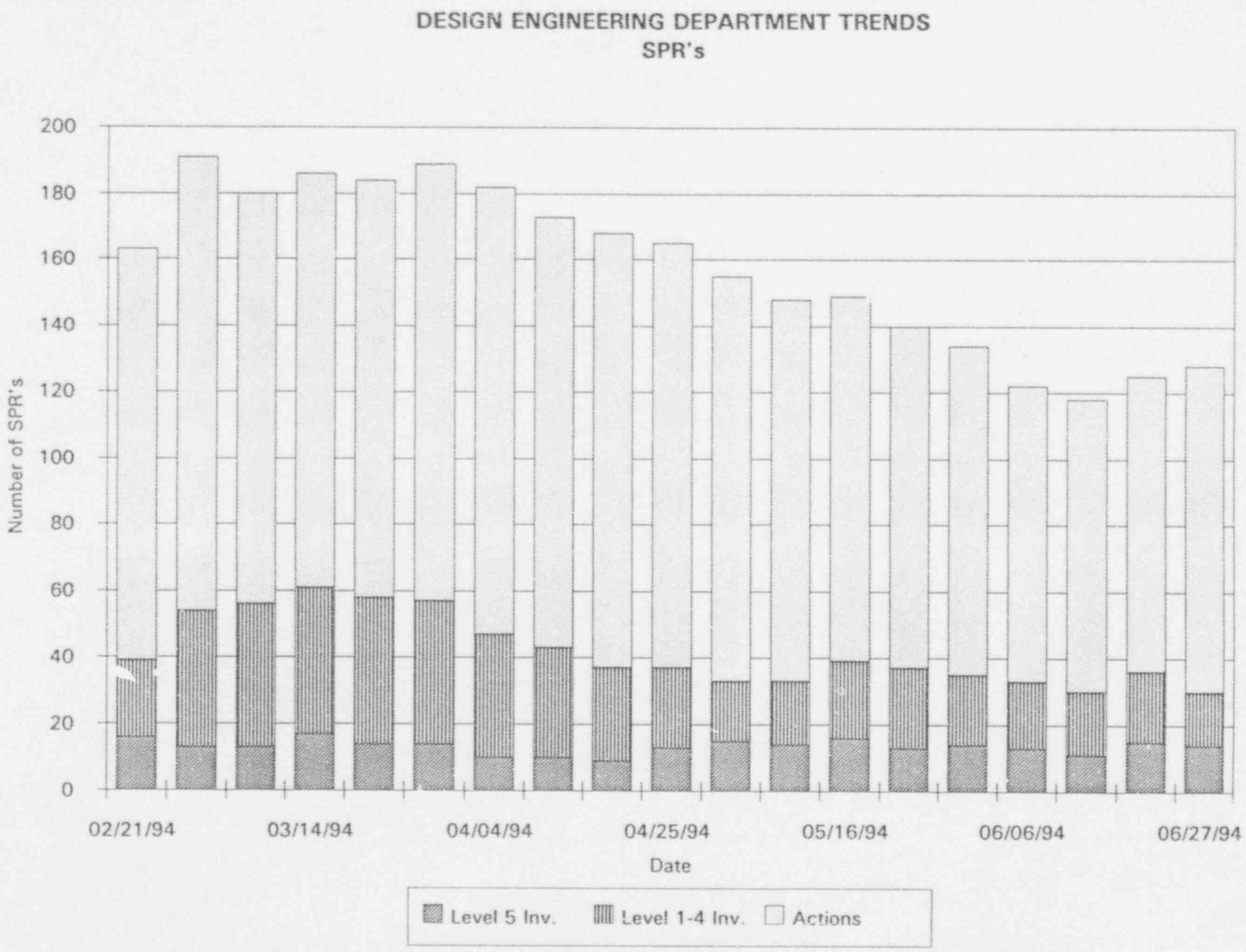


ENGINEERING PROGRAMS
UNIT 1 ITEMS ON INCREASED FREQUENCY

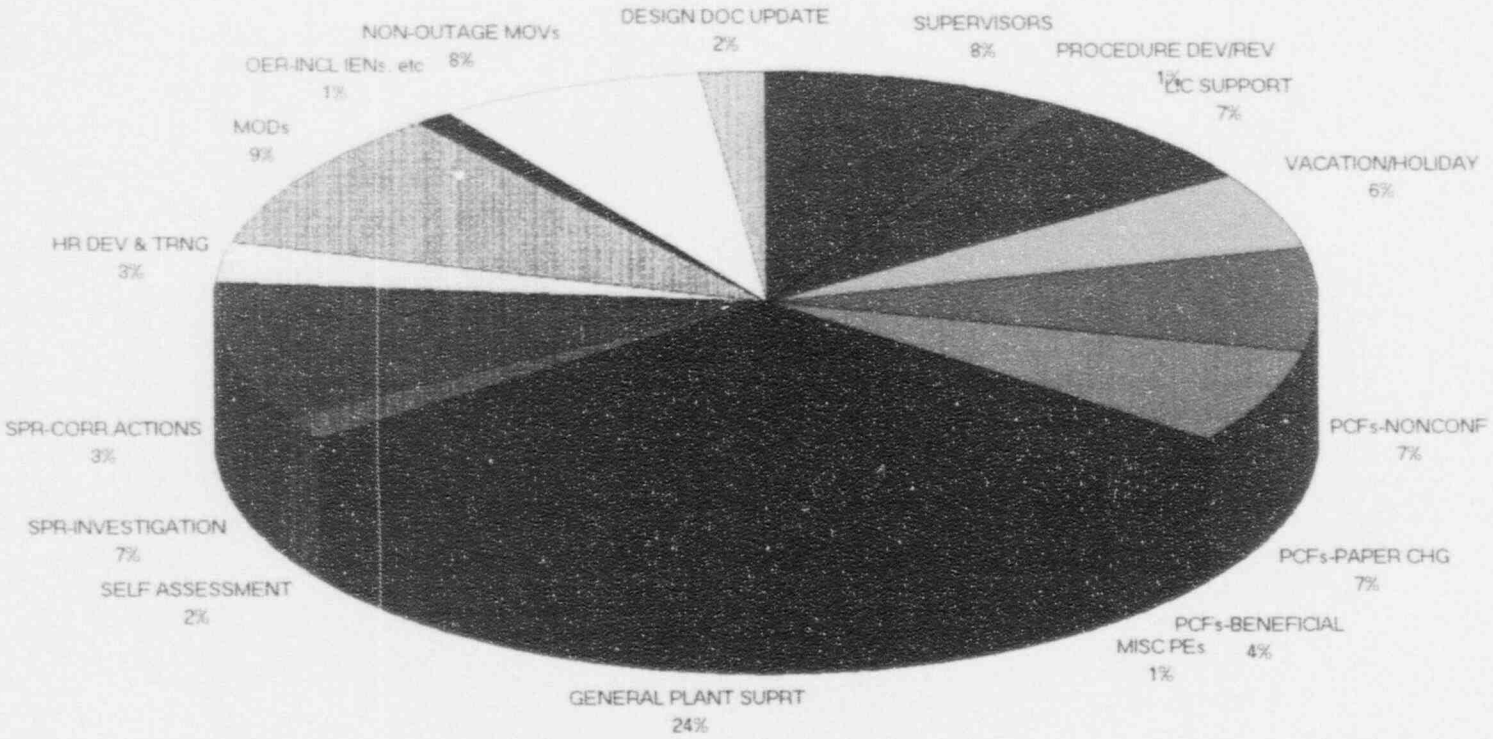


DESIGN ENGINEERING DEPARTMENT
Major Plant Documents




DESIGN ENGINEERING DEPARTMENT TRENDS
SPR's
Number of SPR's
200
180
160
140
120
100
80
60
40
20
0
02/21/94
03/14/94
04/04/94
04/25/94
05/16/94
06/06/94
06/27/94
Date
Level 5 Inv.
Level 1-4 Inv.
Actions

DESIGN ENGINEERING MANHOURS
MECHANICAL/CIVIL (CC:494)
THRU 4/24/94



DESIGN ENGINEERING - MECHANICAL/CIVIL