

MAY 10 1994

Docket Nos. 50-369, 50-370
License Nos. NPF-9, NPF-17

Duke Power Company
ATTN: Mr. T. C. McMeekin
Vice President
McGuire Site
12700 Hagers Ferry Road
Huntersville, NC 28078-8985

Gentlemen:

SUBJECT: MEETING SUMMARY - MCGUIRE

This refers to the May 2, 1994, meeting held to allow McGuire Nuclear Station management to discuss a plan on how they are going to improve performance at McGuire. I have enclosed a summary of your presentation at the meeting, which includes a list of attendees and a copy of the slides and handouts that were used at the presentation.

It is our opinion that this meeting was beneficial to us in aiding our understanding of your ongoing programs and activities.

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

No reply to this letter is required; however, if you have any questions concerning this matter, please contact us.

Sincerely,



Jon R. Johnson, Acting Director
Division of Reactor Projects

Enclosures:

1. Meeting Summary
2. Slides and Handouts

cc w/encls: (See page 2)

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PDR ADOCK 05000369
P PDR

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Duke Power Company

2

MAY 10 1994

cc w/encls:

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Charlotte, NC 28201-1006

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Duke Power Company
422 South Church Street
Charlotte, NC 28242-0001

J. Michael McGarry, III, Esq.
Winston and Strawn
1400 L Street, NW
Washington, D. C. 20005

Dayne H. Brown, Director
Division of Radiation Protection
N. C. Department of Environment,
Health & Natural Resources
P. O. Box 27687
Raleigh, NC 27611-7687

County Manager of Mecklenburg County
720 East Fourth Street
Charlotte, NC 28202

T. Richard Puryear
Nuclear Technical Services Manager
Carolinas District
Westinghouse Electric Corporation
2709 Water Ridge Parkway, Ste. 430
Charlotte, NC 28217

Dr. John M. Barry, Director
Mecklenburg County Department
of Environmental Protection
700 North Tryon Street
Charlotte, NC 28203

cc w/encls cont'd: See page 3

Duke Power Company

3

MAY 10 1994

cc w/encls cont'd:

Karen E. Long
Assistant Attorney General
N. C. Department of Justice
P. O. Box 629
Raleigh, NC 27602

bcc w/encls:

V. Nerses, NRR
R. Watkins, RII
M. Sinkule, RII
Document Control Desk

NRC Resident Inspector
U.S. Nuclear Regulatory Commission
12700 Hagers Ferry Road
Huntersville, NC 28078-8985

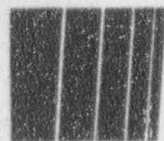
RII
RW
RWatkins
04/05/94

RII
MS
MSinkule
04/06/94

ENCLOSURE 1

MEETING SUMMARY

- A. A meeting was held on May 2, 1994, at the Region II (RII) office in Atlanta, GA, with the McGuire Nuclear Station to discuss their plan for improving performance at McGuire.
- B. Attendees From NRC
 - S. Ebnetter, Regional Administrator, Region II (RII)
 - E. Merschhoff, Acting Deputy Regional Administrator, RII
 - J. Johnson, Acting Director, Division of Reactor Projects, RII
 - A. Gibson, Director, Division of Reactor Safety, RII
 - M. Sinkule, Chief, Division of Reactor Projects Branch 3, RII
 - P. Kellogg, Chief, Operational Programs Section, Division of Reactor Safety, RII
- C. Attendees From Duke Power Company
 - E. Geddie, Station Manager, McGuire Nuclear Station (MNS)
 - P. Herran, Manager, Engineering, MNS
 - T. McMeekin, Vice President, MNS

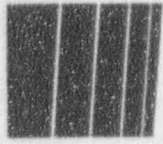


McGUIRE NUCLEAR STATION

AGENDA

- ✓ **INTRODUCTION - TED**
- ✓ **STEAM GENERATORS - TED**
- ✓ **HUMAN PERFORMANCE - MAC**
- ✓ **EQUIPMENT RELIABILITY - PETE**
- ✓ **CORRECTIVE ACTION PROGRAMS - TED**
- ✓ **CHANGE MANAGEMENT - TED**
- ✓ **CONCLUSION - TED**

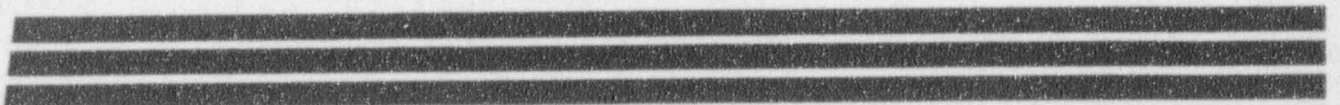


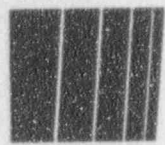


McGUIRE NUCLEAR STATION

Our Vision.....

***We will be recognized as World Class
by our Customers, Employees, Owners,
Regulators and Competitors!***



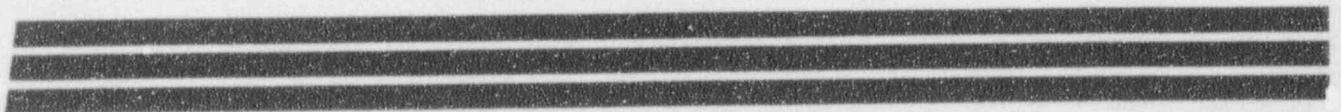


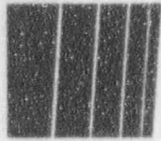
McGUIRE NUCLEAR STATION

Vision Measures

BY 1997:

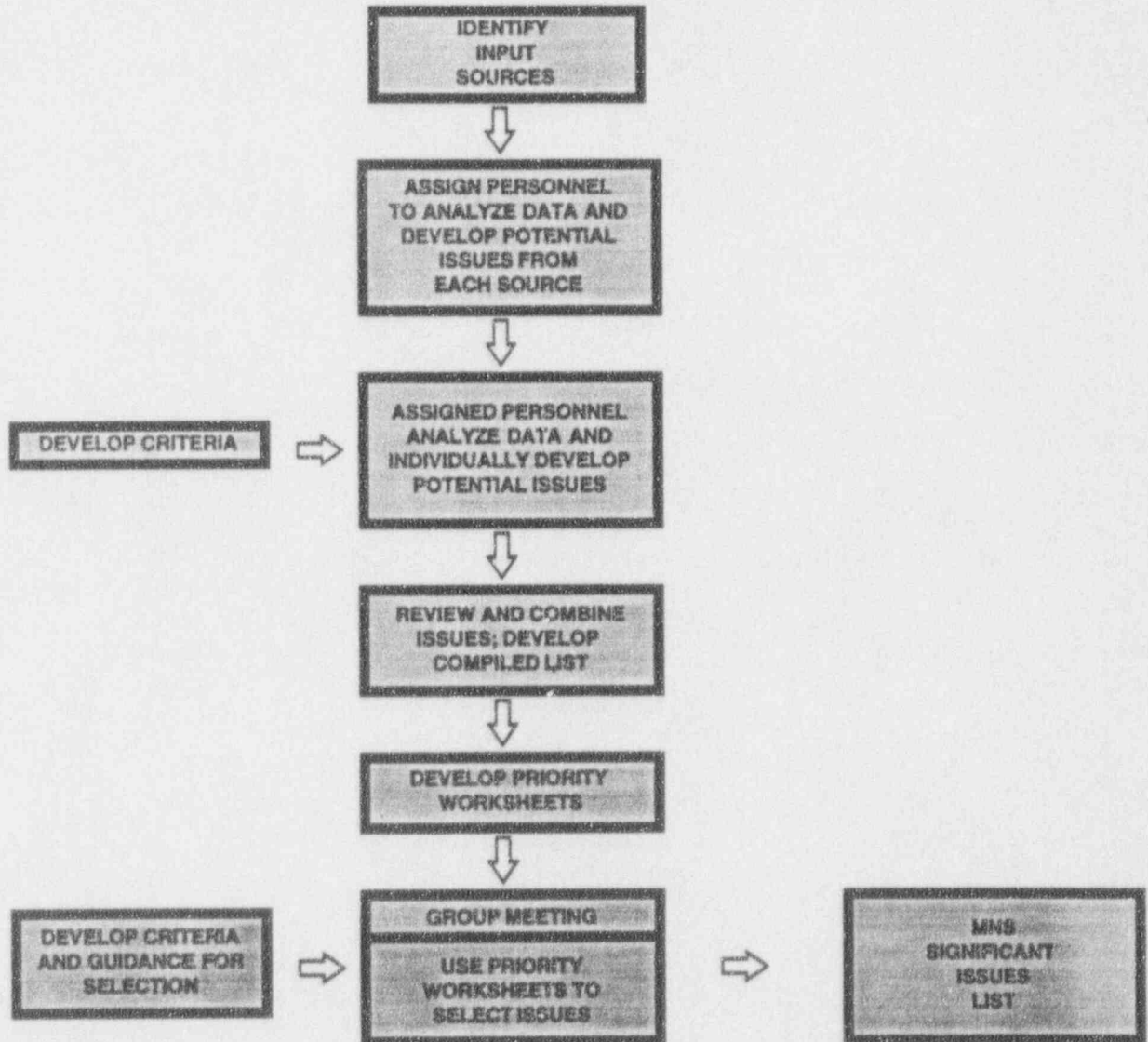
- INPO RATING ↑
- NRC SALP ↑
- SITE CAPACITY FACTOR OF 82%
- SITE INDUSTRY INDICATOR OF 90 / SAFETY INDEX OF 90 (BY 1998)
- ZERO OSHA RECORDABLE INJURIES
- ZERO REPORTABLE ENVIRONMENTAL INCIDENTS
- TOP TEN IN THE U.S.. IN PRODUCTION COST

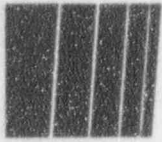




McGUIRE NUCLEAR STATION

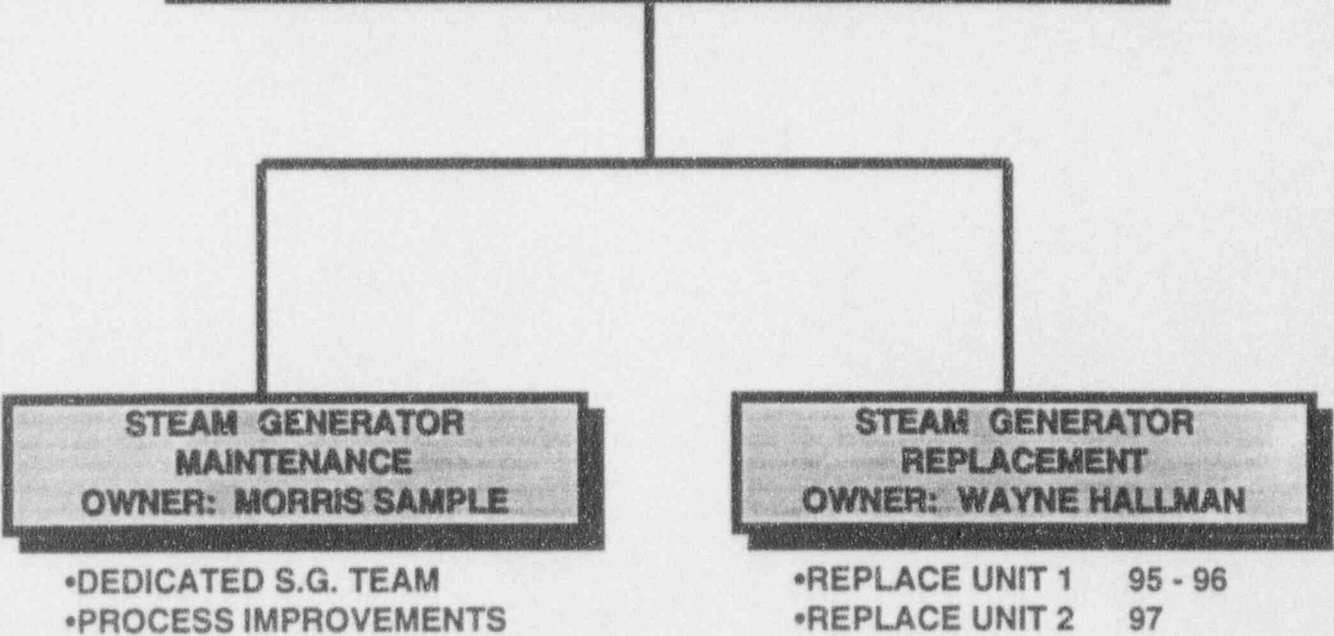
OUR PROCESS.....





McGUIRE NUCLEAR STATION

**STEAM GENERATOR
MAINTENANCE AND REPLACEMENT
OWNER: TONY McCONNELL**



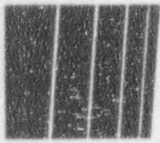
- DEDICATED S.G. TEAM
- PROCESS IMPROVEMENTS

- REPLACE UNIT 1 95 - 96
- REPLACE UNIT 2 97

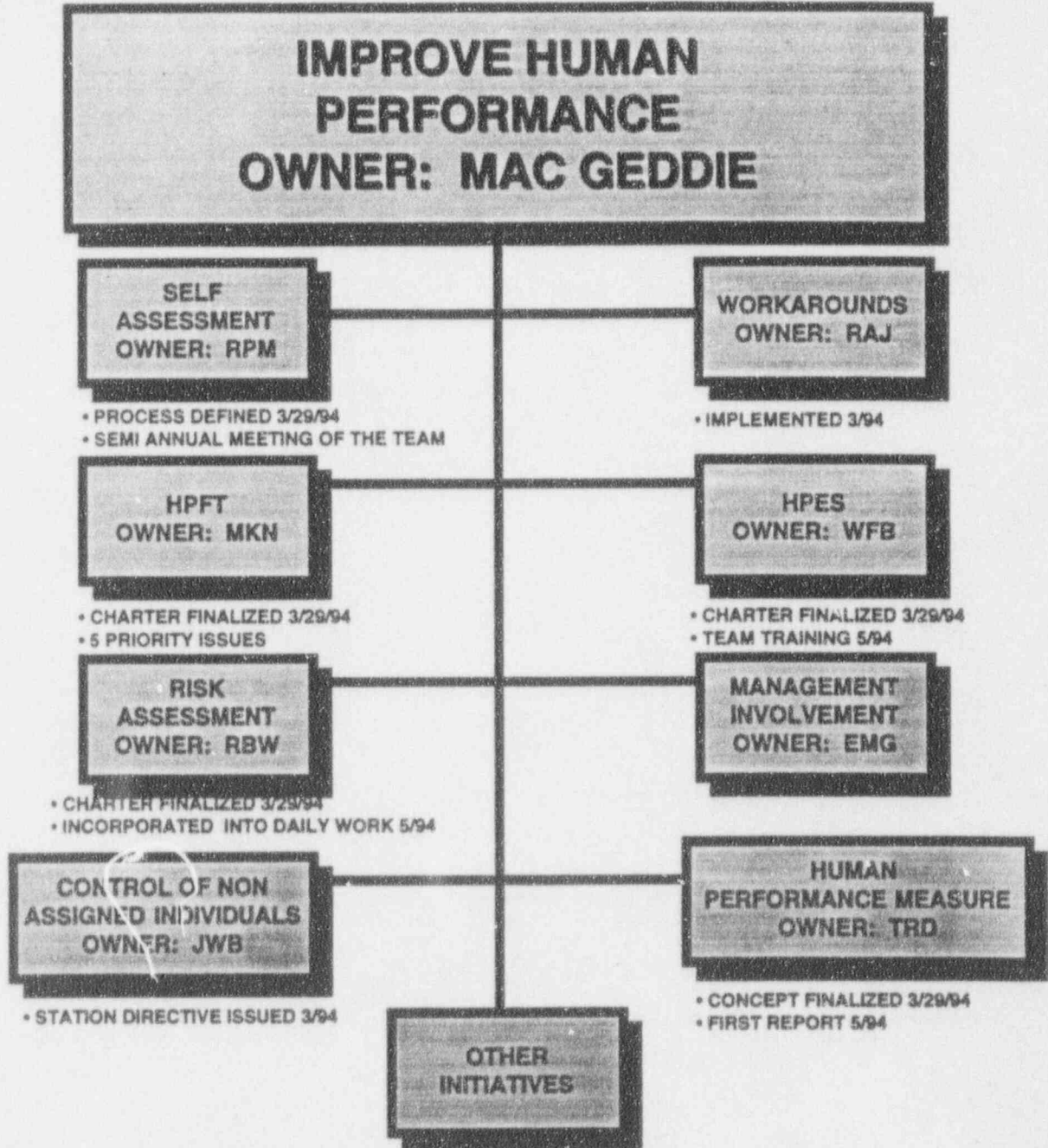
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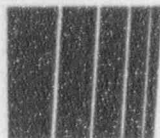
- COMPLETE METALLURGICAL ANALYSIS
- COMPLETE NRC APPROVAL OF ELBOW TAP CHANGE



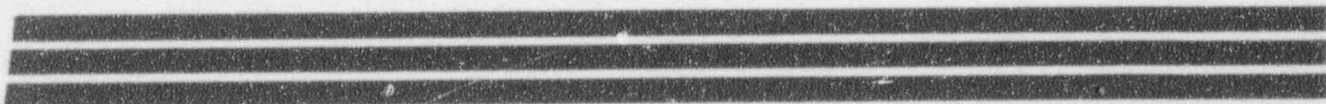


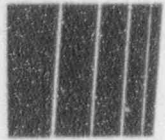
McGUIRE NUCLEAR STATION



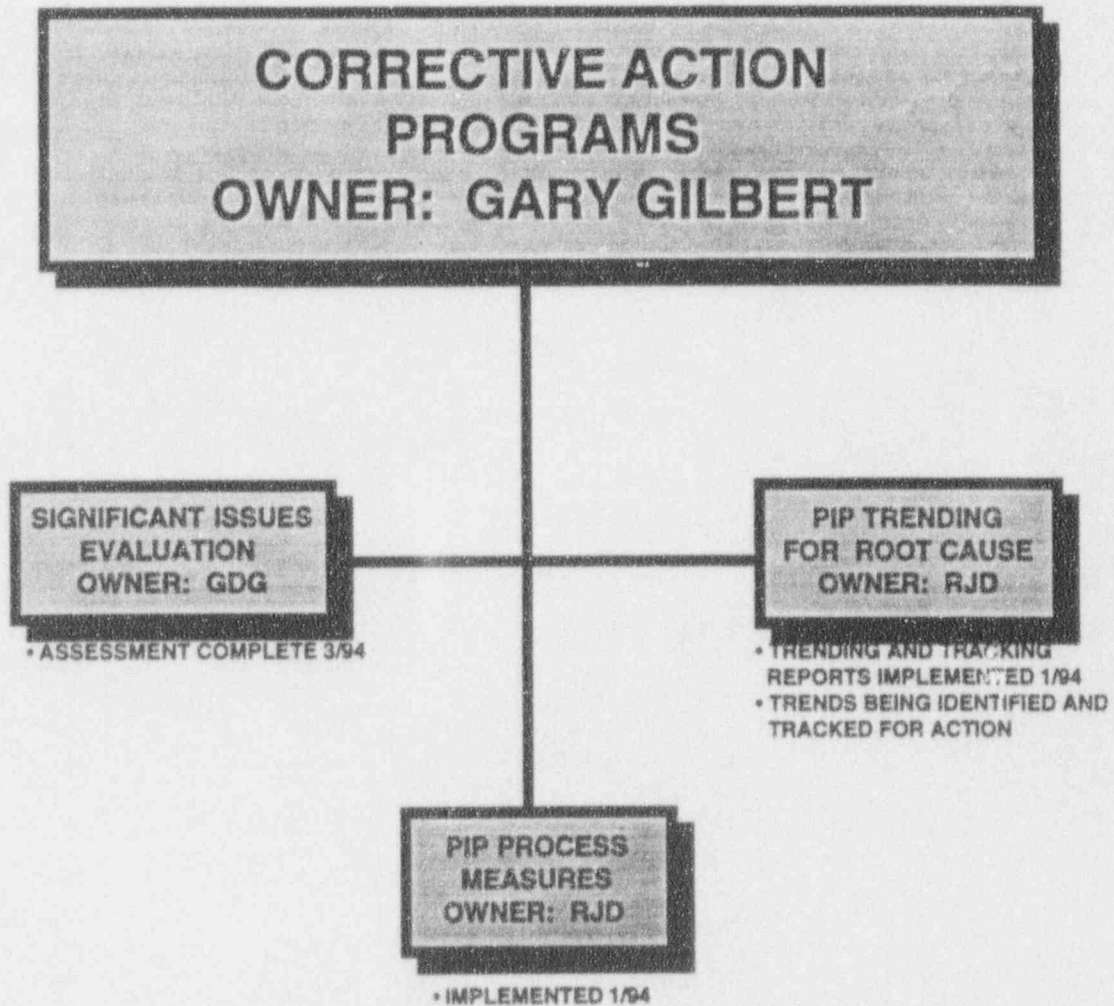


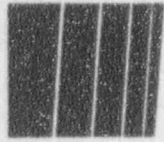
McGUIRE NUCLEAR STATION



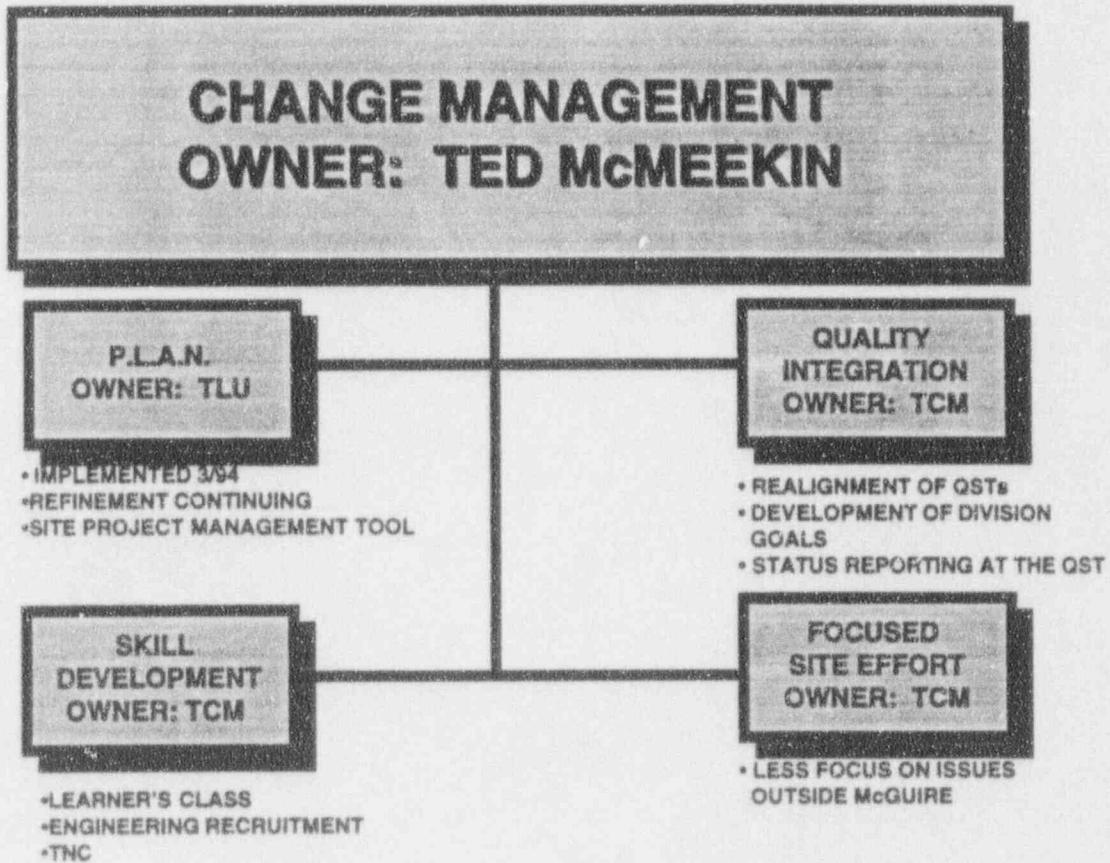


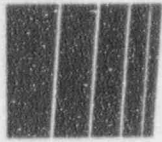
McGUIRE NUCLEAR STATION





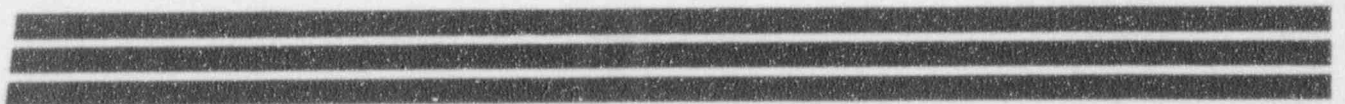
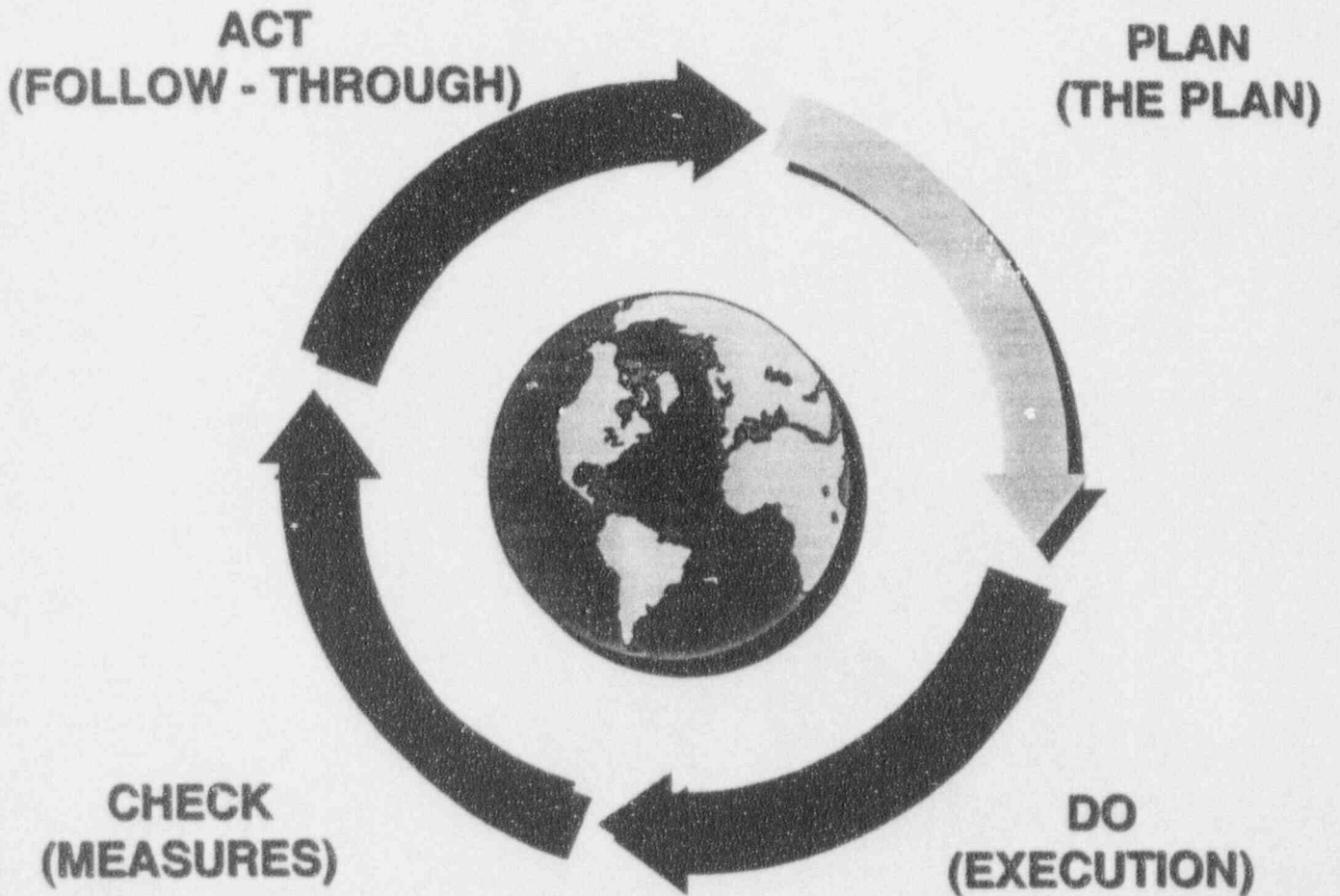
McGUIRE NUCLEAR STATION





McGUIRE NUCLEAR STATION

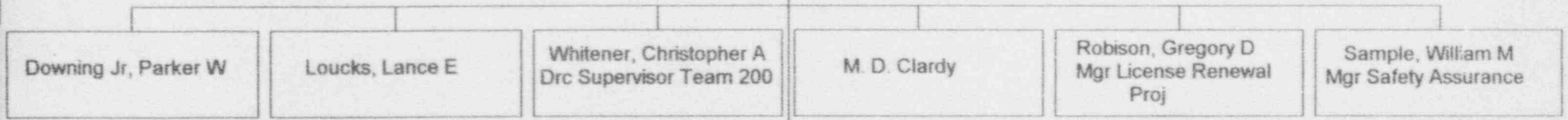
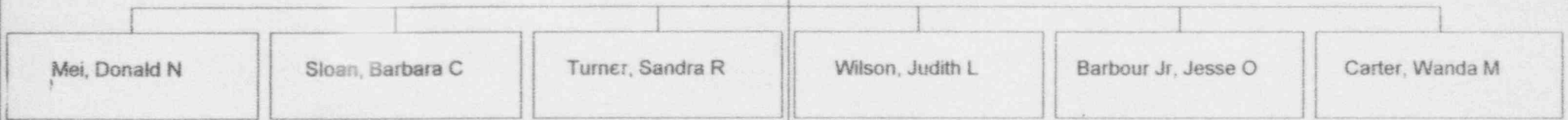
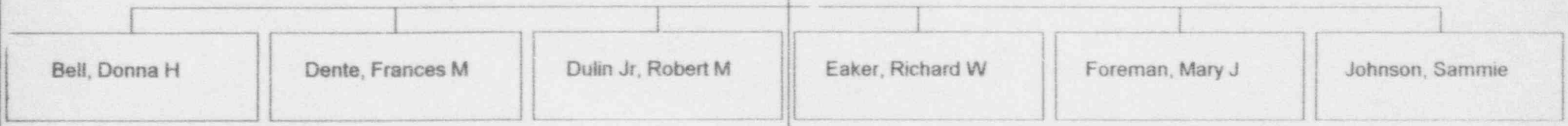
CLOSING THE LOOP ON OUR VISION.....



**STEAM GENERATOR
MAINTENANCE
AND
REPLACEMENT**

McConnell, Tony L
Mgr Station Support

Gerrald, Pat M
Hayes, Pamela R



- Alley, Mark S
- Bramblett, Jeffrey W
- Davenport, Stephen D
- Johnson, Mendel K
- Lee, Tel P
- Lowery, Jane Y
- Martin, Robert A
- Rochester, Dewey P
- Sain, Gary W
- Vaught, Mary B
- Ward, Gary L
- Wilson, Larry A

See Organization

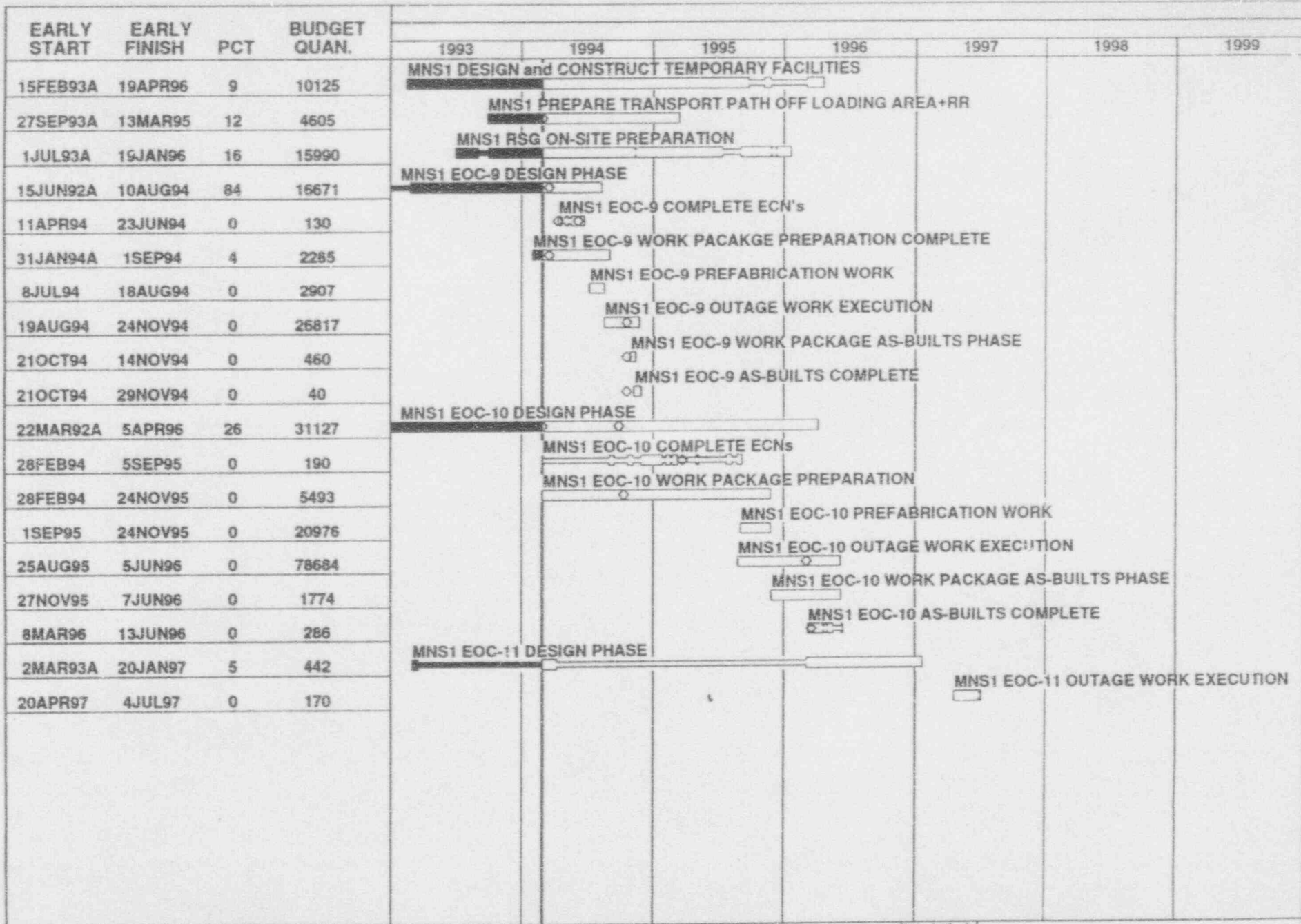
- Bowden, James H
- Craig, Clarence D
- Green, Sue D
- Herrin, James L
- Heuertz, Samuel W
- Hull, Reginald G
- Oglesby, Donald E
- Ragliand III, Hugh T

- Colaiani, R Paul
- Cox, Terry C
- Gill Jr, Robert L
- Ramsey, Debra V
- Semmler, Michael G

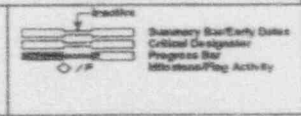
See Organization

Hallman, G W
Mgr Steam Generator
Replacement

See Organization

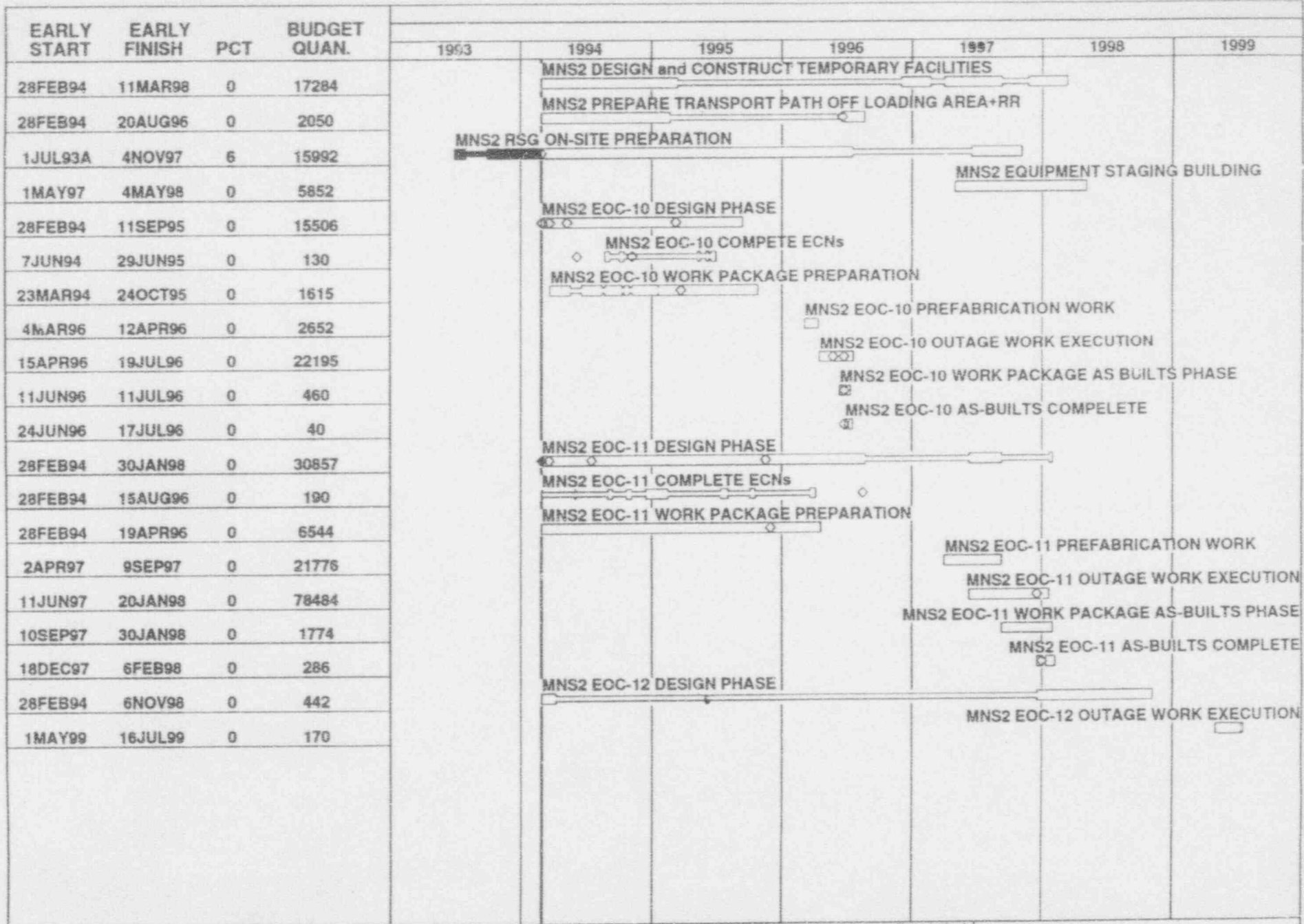


Plot Date 13APR94
 Date Date 28FEB94
 Project Start 10APR92
 Project Finish 4AUG99

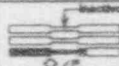


DUKE POWER COMPANY
 MCGUIRE UNIT-1 PROJECT MASTER PLAN
 SUMMARY SCHEDULE

Date	Revision	Checked	Approved



Plot Date 13APR94
 Date Data 28FEB94
 Project Start 10APR92
 Project Finish 4AUG99



Summary Bar(s) by Date
 Critical Design
 Progress Bar
 Milestone/Flag Activity

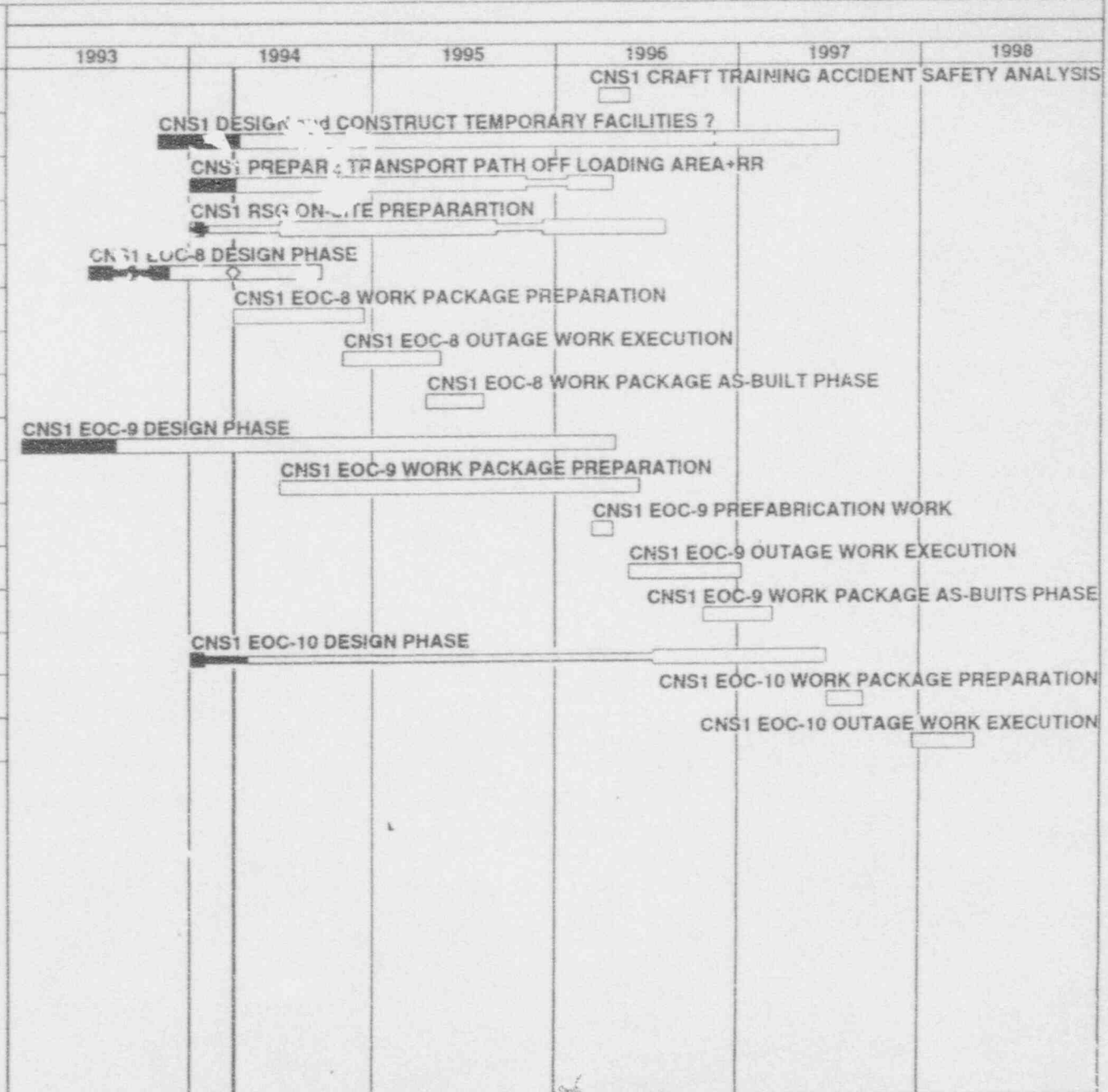
CMGB

Sheet 1 of 1

DUKE POWER COMPANY
 MCGUIRE UNIT-2 PROJECT MASTER PLAN
 SUMMARY SCHEDULE

Date	Revision	Checked	Approved

EARLY START	EARLY FINISH	PCT	BUDGET QUAN.
27MAR96	27MAY96	0	400
1NOV93A	18JUL97	12	37573
3JAN94A	24APR96	11	2460
3JAN94A	8AUG96	4	855
15JUN93A	22SEP94	35	9970
31MAR94	15DEC94	0	2146
4NOV94	18MAY95	0	12260
20APR95	11AUG95	0	905
31JAN93A	30APR96	16	34159
1JUL94	17JUN96	0	14218
15MAR96	25APR96	0	1138
28MAY96	8JAN97	0	7302
25OCT96	11MAR97	0	3942
3JAN94A	27JUN97	9	770
30JUN97	10SEP97	0	260
19DEC97	21APR98	0	165



Plot Date 15APR94
 Date Date 31MAR94
 Project Start 10APR92
 Project Finish 4AUG99

Inactive
 Summary Bar/Early Dates
 Critical Designator
 Progress Bar
 Milestone/Flag Activity

MAR

DUKE POWER COMPANY
 CATAWBA UNIT-1 PROJECT MASTER PLAN
 SUMMARY SCHEDULE

Sheet 1 of 1

Date	Revision	Checked	Approved

McGUIRE STEAM GENERATOR REPLACEMENT PROJECT (SGRP)

I. Project Overview

Current schedule for Steam Generator (SG) replacement at McGuire:

Unit 1:	EOC-10	11/95 - 3/96
Unit 2:	EOC-11	9/97 - 1/98

The project is currently on schedule and under budget. We have recently completed developing a fully integrated Project Master Plan (PMP) that includes all activities associated with replacing Steam Generators at McGuire and Catawba. The PMP logically links these activities and will allow us to develop contingency plans, evaluate impact of various scenarios, and integrate SG replacement activities with station refueling activities.

II. Project Organization

Duke's SGRP is staffed primarily with a dedicated project team under Wayne Hallman in the Nuclear Generation Department/Station Support Division. Project team members are located at the General Office and both site locations (McGuire, Catawba). Craft personnel will be provided by the Generation Services Department (GSD). Location responsibilities include:

<u>General Office</u>	<u>Sites</u>
Project Controls	Work Control
Procurement	Materials/Facilities
Replacement Technology	Engineering
Licensing/QA	Contract Administration
Radiation Protection/ALARA	GSD Service Manager
	Radiation Protection

III. Steam Generator Manufacturing

Sumitomo Tubing successfully passed the fourth preproduction qualification run for SG tubing and was released for production in early March 1994. The first few lots have been good quality with low rejection rates. We have Duke personnel in Sumitomo's shops monitoring production very closely. The schedule for tubing delivery supports Babcock & Wilcox, International (BWI) steam generator manufacturing schedule.

BWI is currently manufacturing the lower assemblies for McGuire Unit 1 and working on the first tubesheet for McGuire Unit 2. The SG fabrication schedule remains very tight and BWI has had trouble meeting short term manufacturing schedules. BWI is taking a number of steps to reverse this trend, including bringing on a new manufacturing lead who has worked with shop personnel to develop a new manufacturing schedule. BWI's SG delivery schedule supports the current schedule for SG replacement at McGuire.

IV. Prior Outage Preparations

We are planning to implement a number of modifications during the refueling outages prior to SG replacement outage. This will allow project personnel to gain experience in integrating SGRP activities with station refueling activities, and will reduce the scope of work to be performed during the replacement outage. Engineering and implementation planning have been completed for seven (7) modifications to be implemented during the upcoming Unit 1 outage in August (EOC-9). These modifications include platforms, SG movement and piping interference removal, and preliminary piping and pipe support work associated with Main Steam, Main Feedwater, Nuclear Sampling, and Blowdown Recycle Systems. With an implementation estimate of 27,000+ craft workhours, this is a challenging scope of work for the project to complete during the outage.

We will also be implementing a number of projects and temporary structures during the innage period prior to the replacement outage. These projects include building the Retired SG Storage Facility, erecting the exterior SG support trestle, building a temporary containment access facility, and upgrading as necessary structures along the SG transportation route. Engineering is on-going for these projects and implementation will begin following completion of the EOC-9 outage for Unit 1.

V. Replacement Outage

The work breakdown structure for the SG replacement effort consists of about about forty (40) projects per Unit. Most of these projects will involve work during the replacement outage. A number of these projects are plant modifications required due to the design of the replacement SG (upper feeding vs. preheater). These plant modifications include piping changes for Main Feedwater, Nuclear Sampling, and Blowdown Recycle Systems, replacement of the SG Upper Lateral Support, and changes to SG level control system and instrument tubing. SGRP plant modifications will be designed and implemented using the same processes as other station modifications. There are also a number of temporary structures and plant changes that will be implemented during the replacement outage to facilitate SG removal. These include:

- * Temporary support of Main Steam and Reactor Coolant System piping
- * Removal of SG side enclosure and dome, and portion of Main Steam piping
- * Installation of Temporary Lifting Device on Polar Crane
- * Installation of SG support trestle

Engineering and implementation planning for replacement outage projects is currently on-going and is scheduled to complete at least three (3) months prior to outage start. Discussions are also on-going between SGRP personnel and station counterparts in areas such as Engineering, Work Control, Commodities and Facilities, and Radiation Protection to ensure a smooth integration of SGRP and station activities during the SG replacement outage.

4/22/94

**EQUIPMENT
RELIABILITY**

THE TEPR PROJECT REVIEW TEAM

- OPS Superintendent
 - Maintenance Superintendent A
 - Maintenance Superintendent B
 - Work Control Superintendent
 - Chemistry Manager
 - Mechanical Systems Engineering Manager
 - Mechanical/Civil Equipment Engineering Manager
 - Electrical System/Equipment Engineering Manager
-

TOP EQUIPMENT PROBLEM RESOLUTION

INITIAL LISTS

A) The following is the Major Equipment Problem Resolution List:

- 1) Feedwater Reg Valve Reliability
- 2) Current S/G Reliability
- 3) CLA Out Leakage
- 4) EMF Availability
- 5) U1 ND Suction Line Pressurization
- 6) 7300 System Reliability
- 7) DP Battery Capacity
- 8) High Priority Chronic Valve Problems (ECCS Checks, VP & RV Pen Valves, Prz Cavity Valves)
- 9) Cuttler Hammer E-30 Switches
- 10) Containment Pen Bellows

B) The following is the Top Plant Work-Around List:

- 1) U2 Boric Acid Flow Controller
- 2) U1 LT Excessive Water In Leakage
- 3) NC System Heat Up and Cool Down Limits
- 4) Excessive Secondary Water Usage
- 5) Nuisance Alarms from Cont Fire Zones
- 6) D/G Fuel Oil Tank Instr
- 7) Diaphragm Valve Bolting
- 8) Use of Alligator Clips for Routine Tests
- 9) NCP Oil Level Instr
- 10) BB Pump Availability
- 11) RA System Reliability and Availability
- 12) Pressurizer Heater Problems
- 13) CT Lab Fume Hood
- 14) Rainwater Leakage into U2 D/G Room and LT Pit
- 15) Duel Tower Gas Dryers
- 16) Reach Rod Re-work
- 17) NV-238 Failure to Control in Auto
- 18) Chronic Oil Leaks (FWPTs, CBPs, D/Gs)
- 19) U1 HPT Steam Seal Leaks
- 20) Laundry Machine Drain Pumps

Primary Systems Health.....see Primary Systems Team Report 94105DUK0168
 (put cursor at doc #, enter)

	UNIDENT NC LEAKAGE	ACCUMULATOR MAKEUP	HPI UNAVAILABILITY
GOAL	< 0.5 gpm	< (TBD)	< 0.4%
Unit 1	0.4 gpm unstable	0.6/day increasing	0.2% decreasing
Unit 2	0.4 gpm stable	3.5/day increasing	0.3% decreasing
CAUSES	INV-238 control	NI check valve leaks	

CONCERNS: 1A CLA out-leakage
 INV-238 control stability
 NC leakage program errors

1B CLA in-leakage
 KC drain header monitoring
 and testing

Secondary Systems Health...see Secondary Systems Team Report 94104DUK0289

	MW LOSSES	SECONDARY WATER USE	OFF-GAS FLOW
GOAL	< (TBD)	< 37,500 gpd	< 14 SCFM
Unit 1	34 MWe	15,000 gpd	40 SCFM
Unit 2	11 MWe	40,000 gpd	10 SCFM
CAUSES			

	SSF UNAVAILABILITY	AFW UNAVAILABILITY	EMERG AC UNAVAILABILITY
GOAL	< (TBD)	< 0.6%	< 1.0%
Unit 1	(TBD)	0.3%	A 0.8% B 0.3%
Unit 2	(TBD)	0.7%	A 1.3% B 0.5%
CAUSES		Inappropriate work sched on U1 TDP(24hr)	Planned work & tests; 2B test probe drop(5hr)

CONCERNS: Nozzle swap effect on S/Gs
 Feed isol valve stability

High Unit 1 off gas
 RN->CA press switch cal frequency

Balance-of-Plant Systems Health...see BOP Systems Team Report 94100DUK0015

	RN UNAVAILABILITY	VC UNAVAILABILITY	VI AIR USAGE
GOAL	< 1.0 %	< 8.0%	< (TBD)
Unit 1	0.1 %	0.9%	(TBD)
Unit 2	0.0 %	N/A	N/A
CAUSES		Chiller work planned	

CONCERNS: Inoperable VR dampers
 VP cont. isol. vlv. leakage
 Oil in containment VI

VI air leakage and reliability
 VI moisture upstream of dryers
 Replace VI filter/regs by 1/2EOC9

Reactor Performance.....see Reactor Summaries 94096DUK0351 & 94097DUK0128

	FAILED FUEL	REACTOR TRIPS	REACT MANAGEMENT
GOAL	0 pins	0 trips	0 events
Unit 1	4 pins	0 trips	0 events
Unit 2	0 pins	0 trips	0 events
CAUSES			

CONCERNS: U1 S/G tube plugging
 effects on EOC MTC test

Scheduling fuel work for 1EOC9
 Reactivity Computer open items

McGuire

PERFORMANCE INDICATORS

1Q	2Q	3Q	4Q
CURRENT			

EQUIPMENT RELIABILITY			

SAFETY SYSTEM AVAILABILITY UNIT 1	SAFETY SYSTEM AVAILABILITY UNIT 2

LEAK TIGHT. & EFF. UNIT 1	LEAK TIGHT. & EFF. UNIT 2

EQUIP. RELIABILITY TOP PROJECT	EQUIP. RELIABILITY WORK AROUNDS

CRITERIA	GREEN	YELLOW	RED	ACTUAL
SAFETY SYS. AVAIL.- No. SYS MEETING GOALS:				
UNIT 1	≥6	<6 & >3	≤3	
UNIT 2	≥6	<6 & >3	≤3	
LEAK TIGHT. & EFFICIENCY:				
UNIT 1	≥4	3	≤2	
UNIT 2	≥4	3	≤2	
EQUIPMENT RELIABILITY:				
TOP PROJECTS - AVG. SCORE	≥2.5	<2.4 & >1.1	≤1.0	
WORK AROUNDS - No. ITEMS COMPLETE / MONTH	≥4	≥3	≤2	

ON TARGET
 IMPROVEMENT NEEDED
 SIGNIFICANT IMPROVEMENT NEEDED
 UNREPORTED

McGuire

PERFORMANCE INDICATORS

STATUS THRU _____
ENGINEERING DIVISION

SAFETY SYSTEM AVAILABILITY - UNIT 1		
SYSTEM	CRITERIA (SPEC./ACT.)	ON/OFF
HPI Aux. Feedwater Cont. Rm Vent. Nuc. Service Water SSF Emerg. AC Power Emerg. DC Power		
SAFETY SYSTEM AVAILABILITY - UNIT 2		
SYSTEM	CRITERIA (SPEC./ACT.)	ON/OFF
HPI Aux. Feedwater Cont. Rm Vent. Nuc. Service Water SSF Emerg. AC Power Emerg. DC Power		
LEAK TIGHTNESS & EFFICIENCY - UNIT 1		
ITEM	CRITERIA (SPEC./ACT.)	ON/OFF
NC Leakage Fuel Pin Leaks SEC SYS make-up Thermal Eff VI Leakage Condenser Inleakage		
LEAK TIGHTNESS & EFFICIENCY - UNIT 2		
ITEM	CRITERIA (SPEC./ACT.)	ON/OFF
NC Leakage Fuel Pin Leaks SEC SYS make-up Thermal Eff VI Leakage Condenser Inleakage		