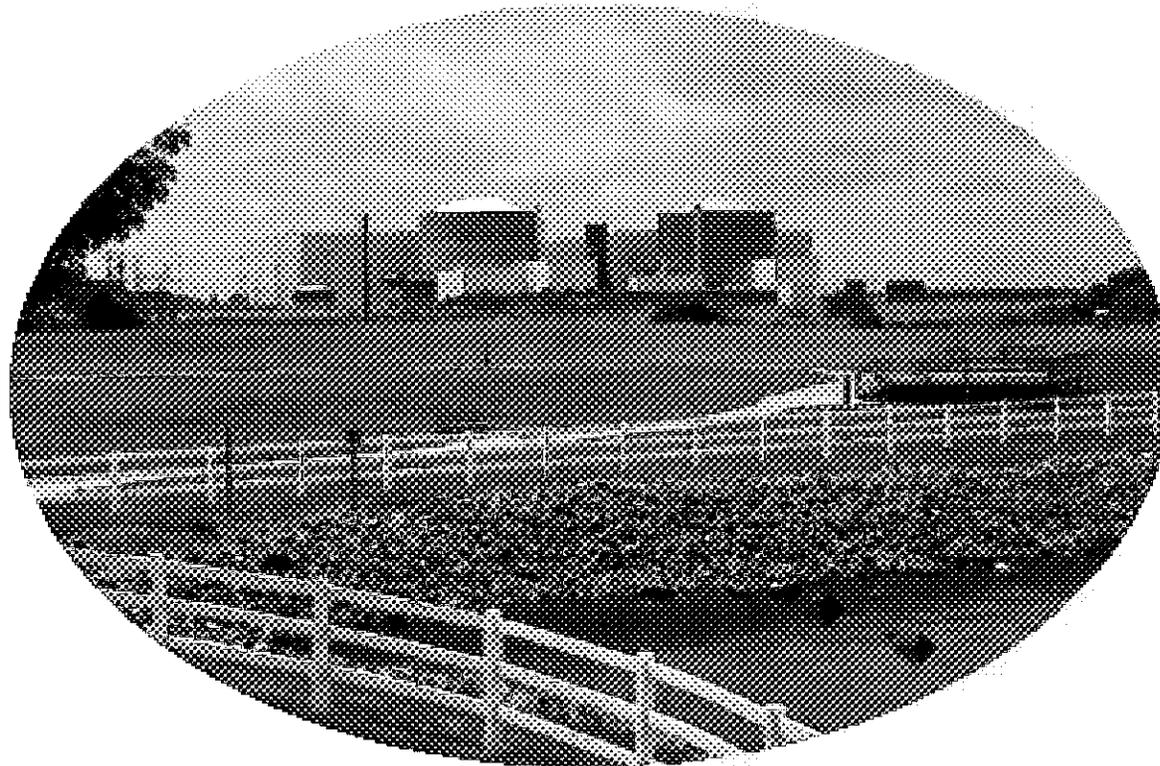

Plant Performance Update Meeting



July 20, 2004

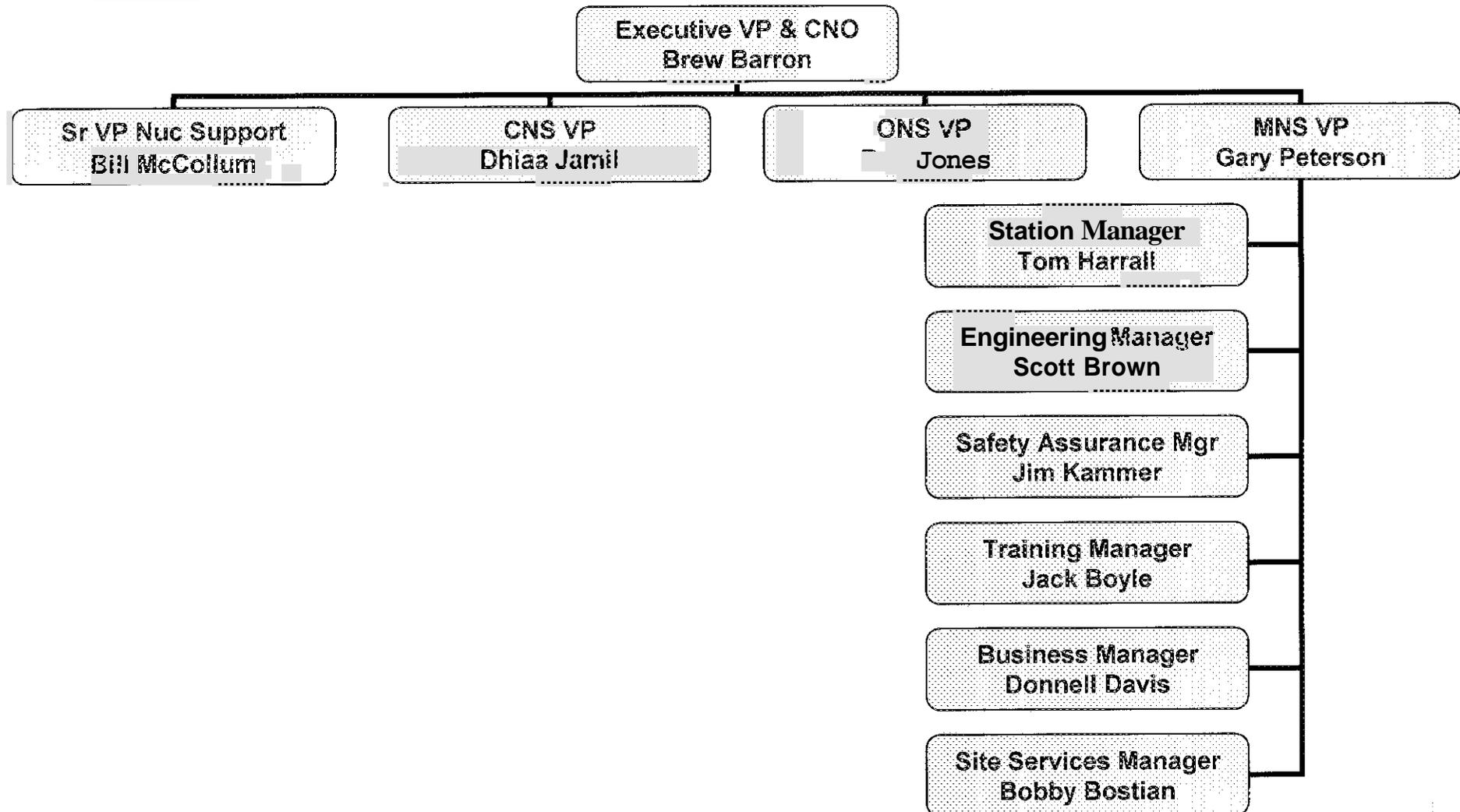
McGuire Nuclear Station

McGuire Nuclear Station Agenda

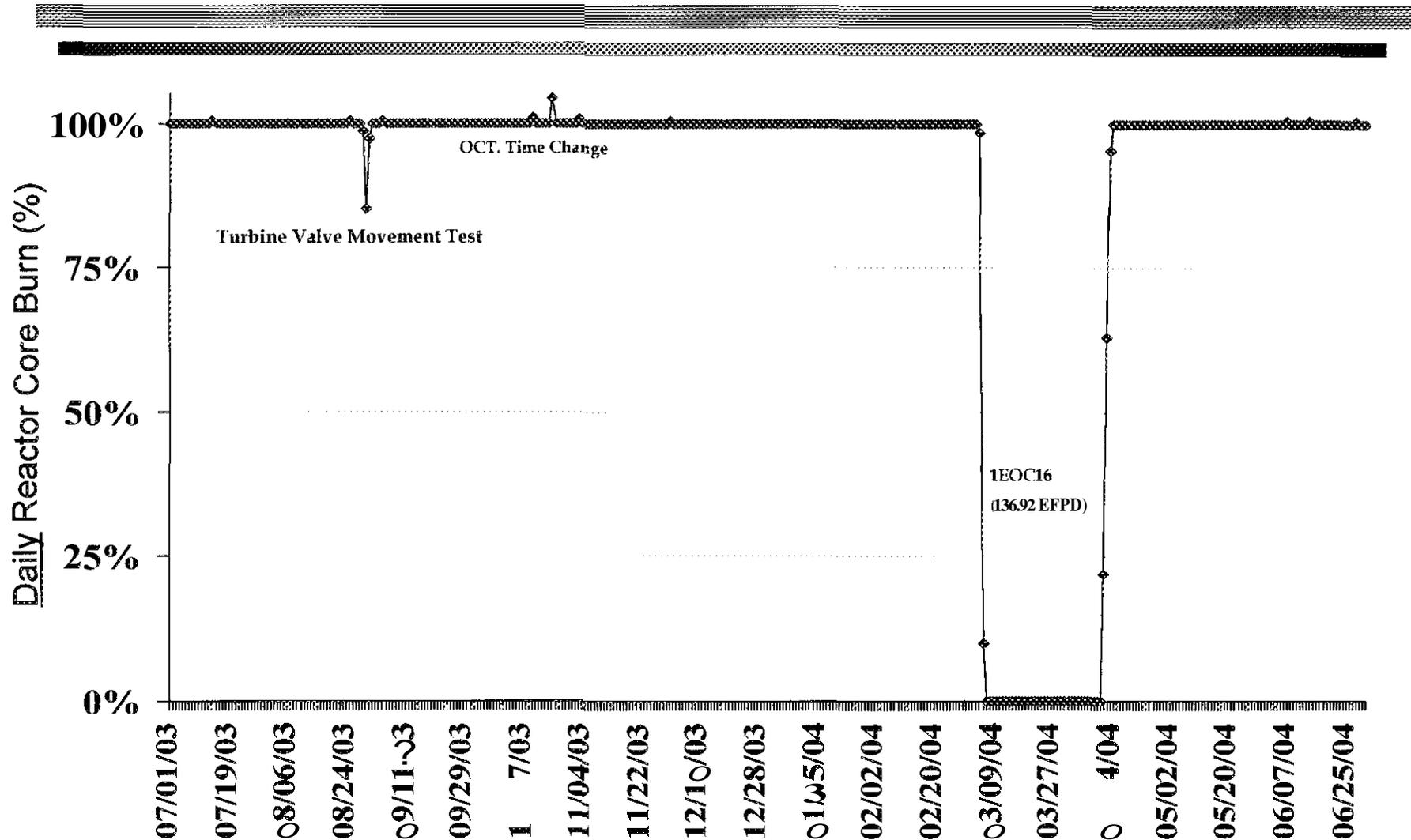


- ❖ **Organization Update** – *Gary Peterson*
- ❖ **Plant Performance Review** – *Gary Peterson*
- ❖ **Site Initiatives** – *Tom Harrall*
- ❖ **Dose and Contamination Control** – *Tom Harrall*
- ❖ **Fire Protection** – *Scott Brown*
- ❖ **Security Update** – *Jim Kammer*

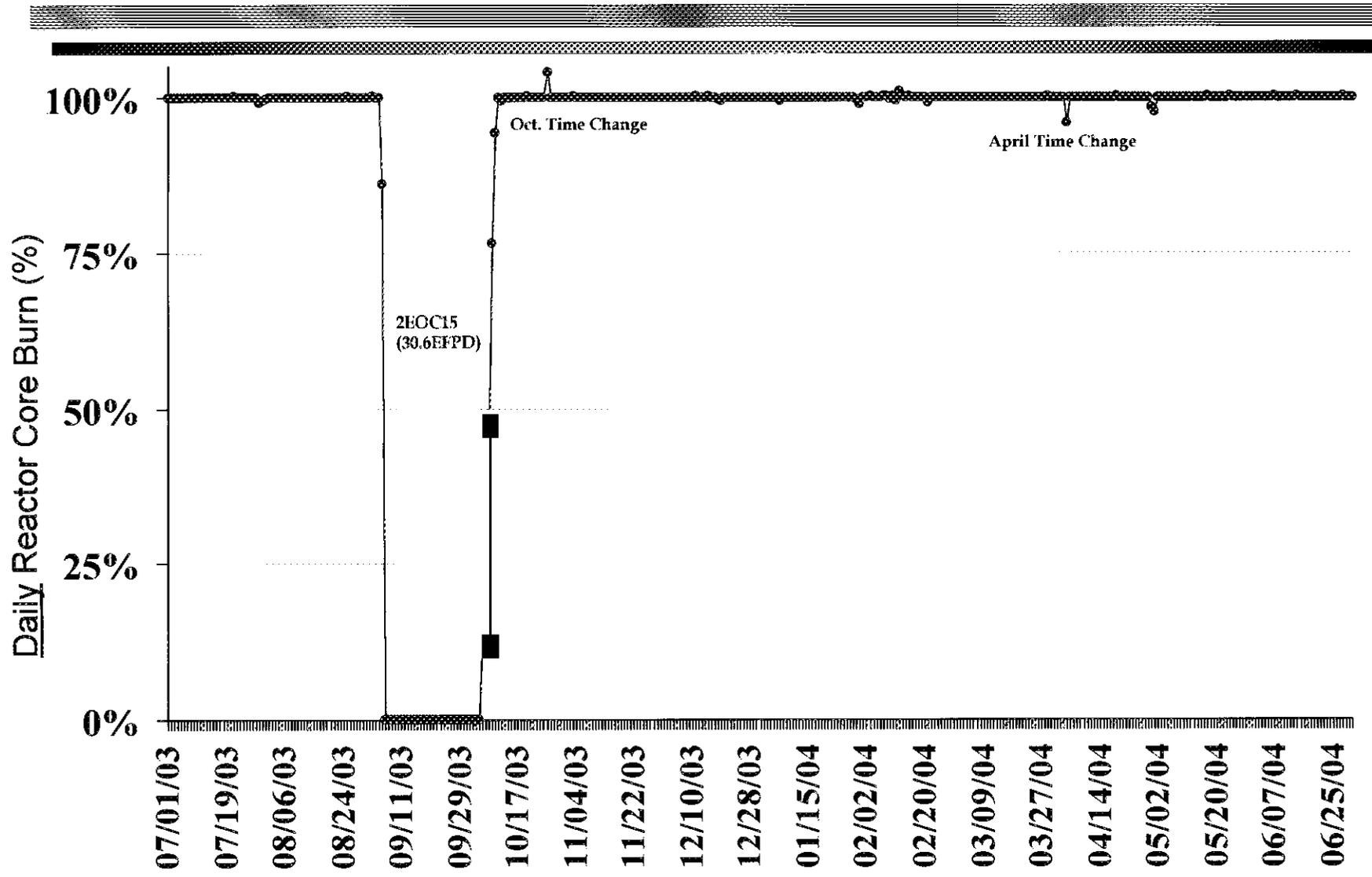
McGuire Nuclear Station Organization Update



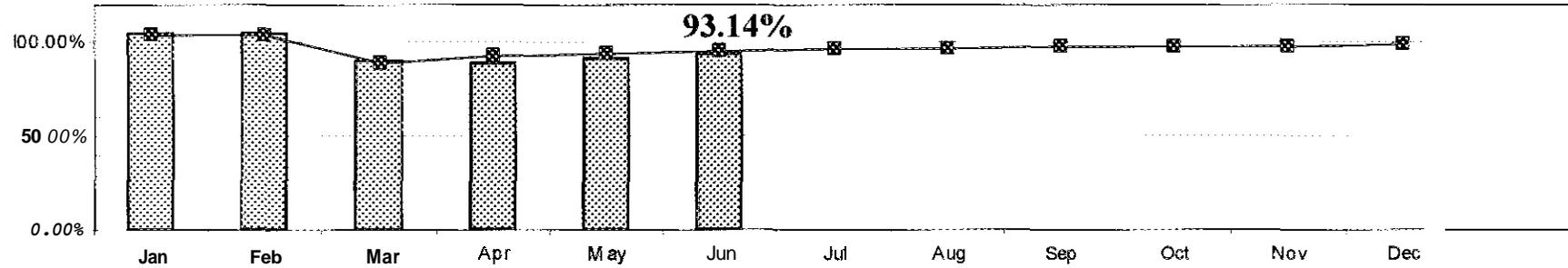
McGuire Plant Performance Unit 1 Power History Curve



McGuire Plant Performance Unit 2 Power History Curve

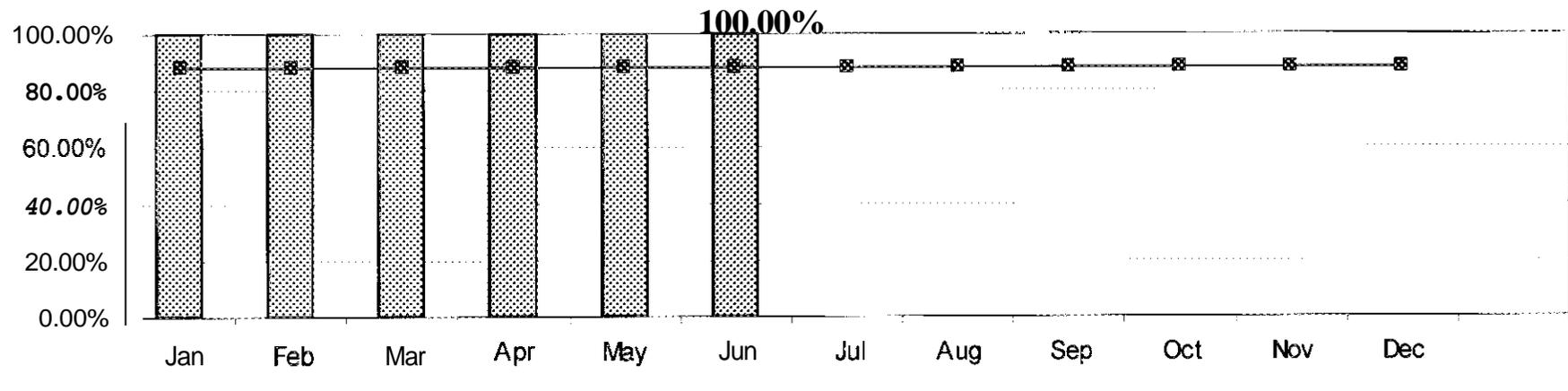


McGuire Plant Performance Capacity Factor



2004 YTD - 93.14%
2003 Actual - 98.3%
2002 Actual - 93.5%

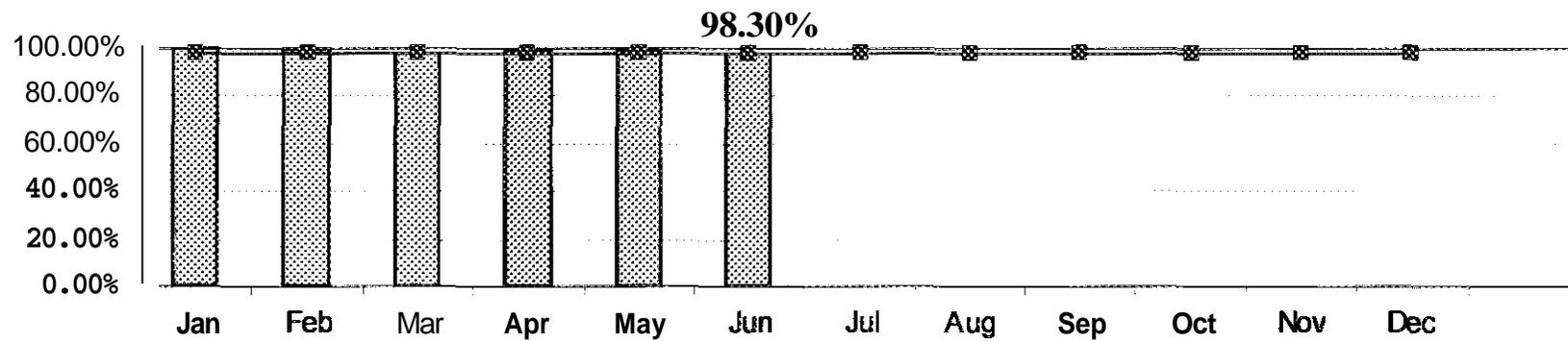
McGuire Plant Performance Nuclear Safety Index



2004 YTD - 100.00%
2003 Actual - 100.00%
2002 Actual - 95.00%



McGuire Plant Performance INPO Performance Indicator Index



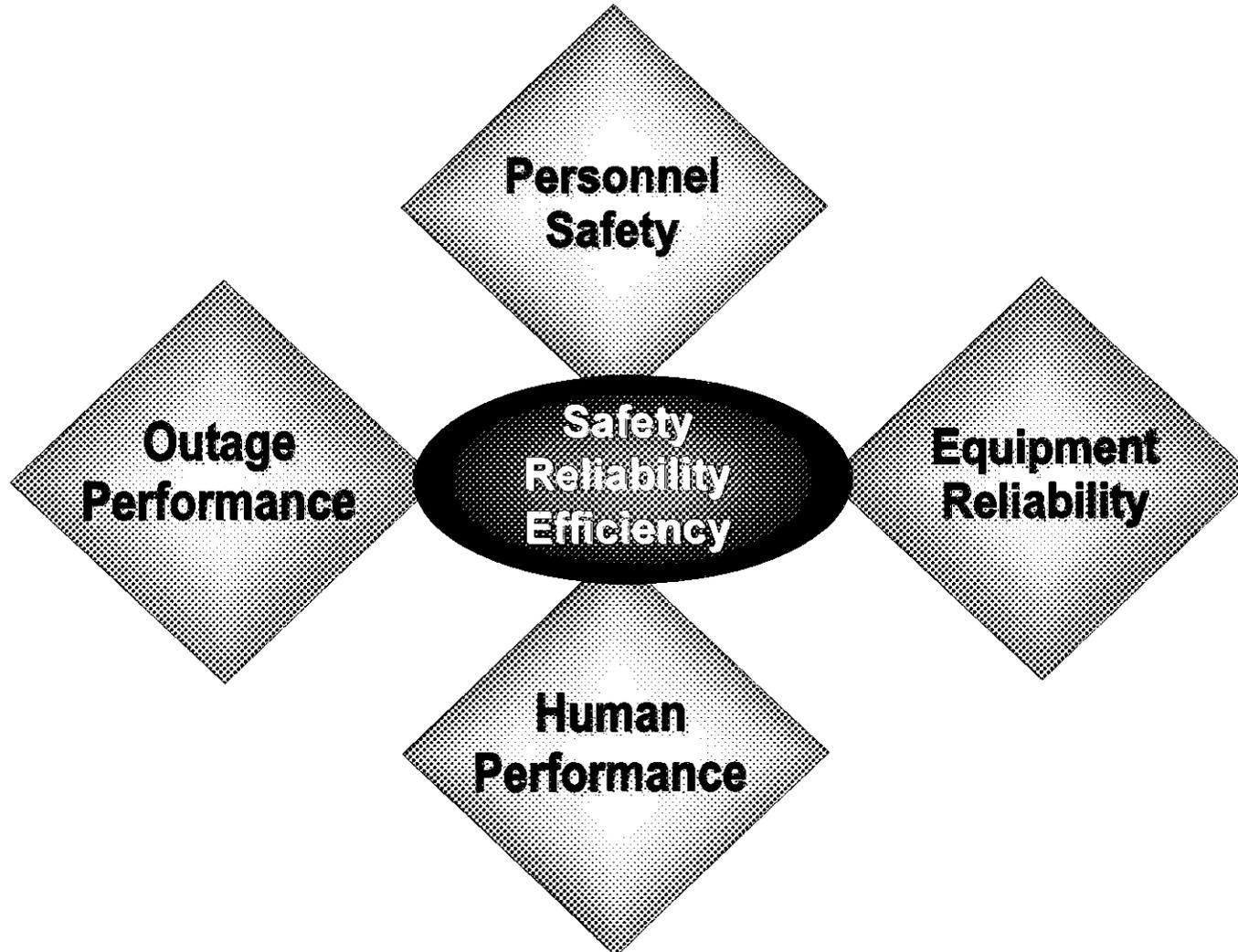
2004 YTD - 98.30%
2003 Actual - 100.00%
2002 Actual - 98.57%

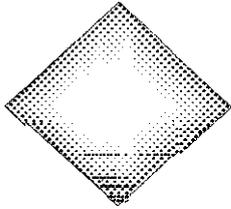


McGuire Plant Performance NRC Performance Indicators

Nuclear Operations NRC Performance Indicators Year-To-Date June 30, 2004				
#	Performance Measures NRC Performance Indicators	McGuire		NRC Threshold
		Unit 1	Unit 2	
IE-1	Unplanned Scrams Per 7000 Critical Hours	0	0	3
IE-2	Scrams with a Loss of Normal Heat Removal	0	1	2
IE-3	Unplanned Power Reductions (Transients) Per 7000 Critical Hours	0.0	0.0	6
MS-1	SSU - Emergency AC Power	0.8%	0.8%	2.5%
MS-2	SSU - High Pressure Safety Injection	0.4%	0.4%	1.5%
MS-3	SSU - Auxiliary Feedwater	1.1%	0.7%	2.0%
MS-4	SSU - Residual Heat Removal	0.5%	0.7%	1.5%
MS-5	Safety System Functional Failures	0	0	5
BI-1	Reactor Coolant System (RCS) Specific Activity	0.1%	0.0%	50.0%
BI-2	RCS Identified Leak Rate	0.8%	2.0%	50.0%
EP-1	Drill/Exercise %	96.4%	96.4%	90.0%
EP-2	ERO Drill Participation	98.8%	98.8%	80.0%
EP-3	Alert & Notification System Reliability	98.9%	98.9%	94.0%
OR-1	Occupational Exposure Control Effectiveness	1	1	2
PR-1	RETS/ODCM Radiological Effluent Occurrence	0	0	1
PP-1	Protected Area Security Equip. Perf. Index	0.004	0.004	0.080
PP-2	Personnel Screening Program Performance	0	0	2
PP-3	Fitness-For-Duty/Personnel Reliability Program	0	0	2

McGuire Nuclear Station 2004 Site Initiatives





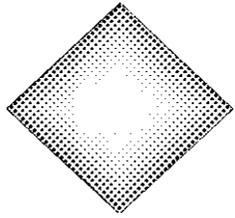
McGuire Site Initiatives ea

Personnel Safety

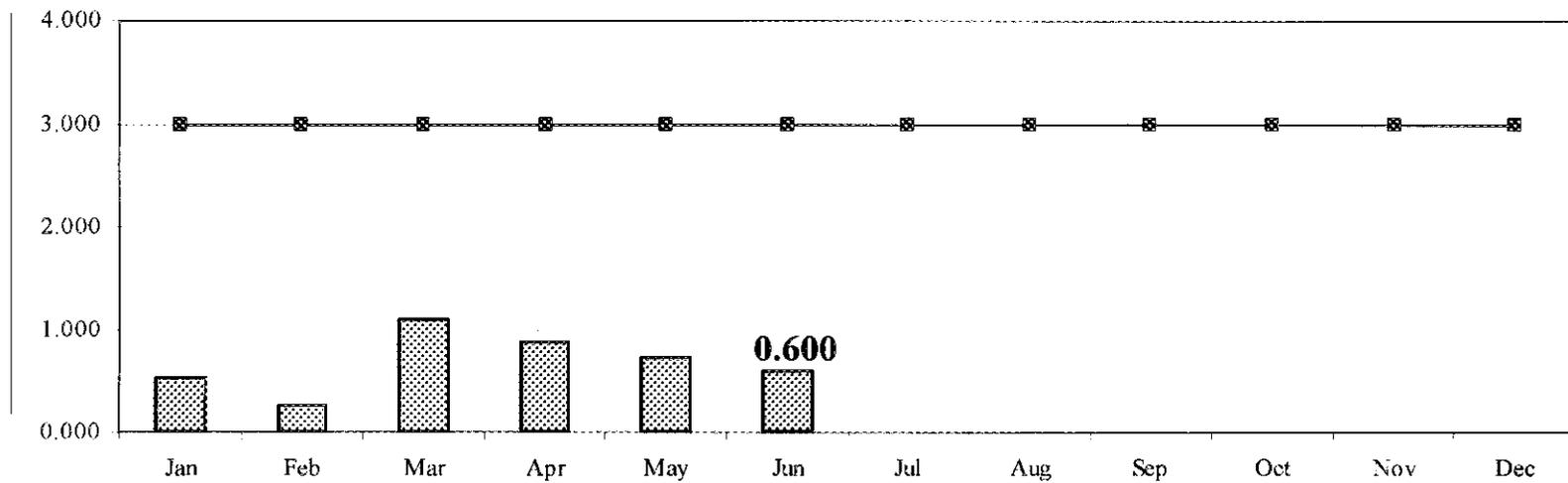


- **Goal**
 - Continuously improve McGuire's focus on industrial safety by reducing injuries

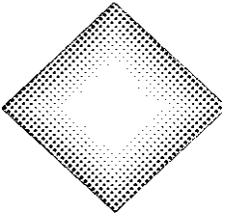
- **The Plan**
 - Strengthen safety attitude
 - Improve field observations
 - Improve safety awareness



McGuire Site Initiatives - Nuclear Injury Severity Index



2004 YTD - 0.600
2003 Actual - 2.99
2002 Actual - 1.23



McGuire Site Initiatives - Human Performance

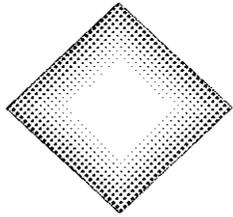


- **Goal**

- To improve McGuire's performance by reducing Procedure Use & Adherence (PU&A) and Correct Component Verification (CCV) events due to human error

- **The Plan**

- Improve performance by decreasing PU&A and CCV errors
- Identify / eliminate/ protect against error-likely situations
- Improving human factors in procedure development

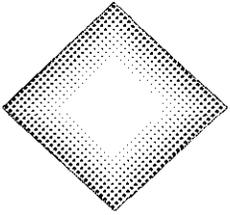


McGuire Site Initiatives - Human Performance



- **Results**

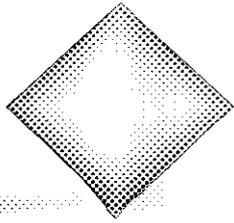
<u>Human Performance Measure</u>	<u>Target Goal</u>	<u>YTD avg</u>
Human performance error rate	≤5	2.8
Avg number of days between HP events	≥28	122



McGuire Site Initiatives - Outage Performance



-
- **Goat**
 - Significantly improve McGuire's outage performance
 - **The Plan**
 - Improve / expand Outage Control Center
 - Develop a high-level critical path schedule
 - Improve bulk work management
 - Levelize / resource work load

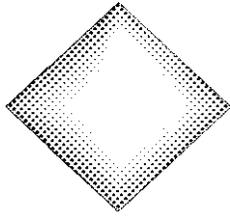


McGuire Site Initiatives - Outage Performance



• Results

- Improved core damage probability
- No License Event Reports
- Improved execution time in 4 of 9 outage windows
- Major Activities
 - Reactor vessel lower head inspection
 - Reactor Coolant Pump shaft inspection
 - Steam generator 100% Eddy Current on A&D testing
 - Steam generator 50% Eddy Current on B&C testing
 - 127 modifications successfully implemented
 - Repair of MSIV 1SM0007
- Duration of 36 days, 22 hours



McGuire Site Initiatives - Equipment Performance

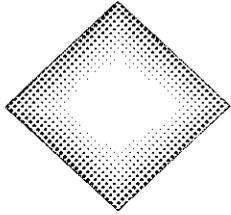


Goal

- Improve our system / equipment reliability while maintaining high availability

The Plan

- Improve Plant Health Committee process
- Improve PM task oversight process
- Find and fix single point vulnerabilities



McGuire Site Initiatives - Equipment Performance



• Results

- Lost generation days due to equipment failures

Current: 7.35 Days

- Lost generation events due to equipment failures

Current: 1

- Safety system unavailability

Current: NRC Performance Indicators
Mitigating Systems - all green

McGuire Nuclear Station

Dose / Contamination Control

- ⊗ Dose / Contamination Issues – 1EOC16 Mar 04 outage
- ⊗ Event Investigation Team (EIT) formed – Broad based team including INPO, EPRI, and Industry Experts
- ⊗ Findings and Results
 - Number of Reactor Coolant (NC) Pumps run during CRUD burst cleanup affected contamination levels in SGs
 - Major contribution to dose rates appears due to adherent CRUD on fuel
 - Probe scrubbers were inadequate

McGuire Nuclear Station

Dose / Contamination Control

- ◆ Corrective Actions

- Run maximum number of reactor coolant pumps during CRUD burst
- Improve eddy current equipment contamination control
- Implement appropriate improvements to filtering program
- Implement ultrasonic fuel cleaning system

McGuire Nuclear Station Fire Protection

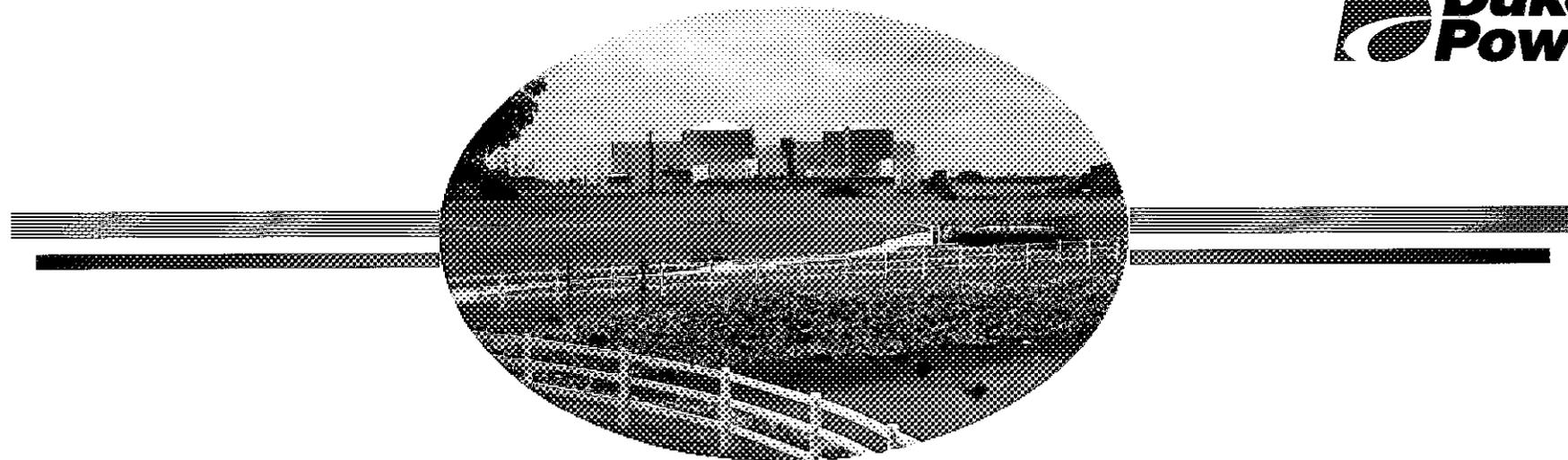


- McGuire Design
 - Safe Shutdown Facility (SSF)
 - Armored Cable
 - Fire Barrier Configuration Management
- Issue
 - Six non-cited violations in 2004
 - Six open URIs

McGuire Nuclear Station Fire Protection



- Actions to Restore Health
 - Reorganized approach; separate Fire Protection and Appendix R Program Working Groups
 - Working Groups are developing a fleet-wide strategy to address and resolve program deficiencies
 - McGuire-specific Fire Protection and Appendix R recovery plans have been developed
 - Recovery plans to be actively monitored by Senior Management



Other Issues