



**Edwin I. Hatch Nuclear Plant
NRC Region II Status Meeting
August 15, 2007**

**Dennis Madison – Hatch Vice President
Steve Douglas – Plant Manager**

Southern Nuclear Operating Company



Agenda



- Introduction
- Hatch Project Overview
 - Plant Performance
 - Site Vice President Reorganization
- Topical Updates
- Major Projects
 - Major Projects Underway
 - Recently Completed Projects
- Open Discussion

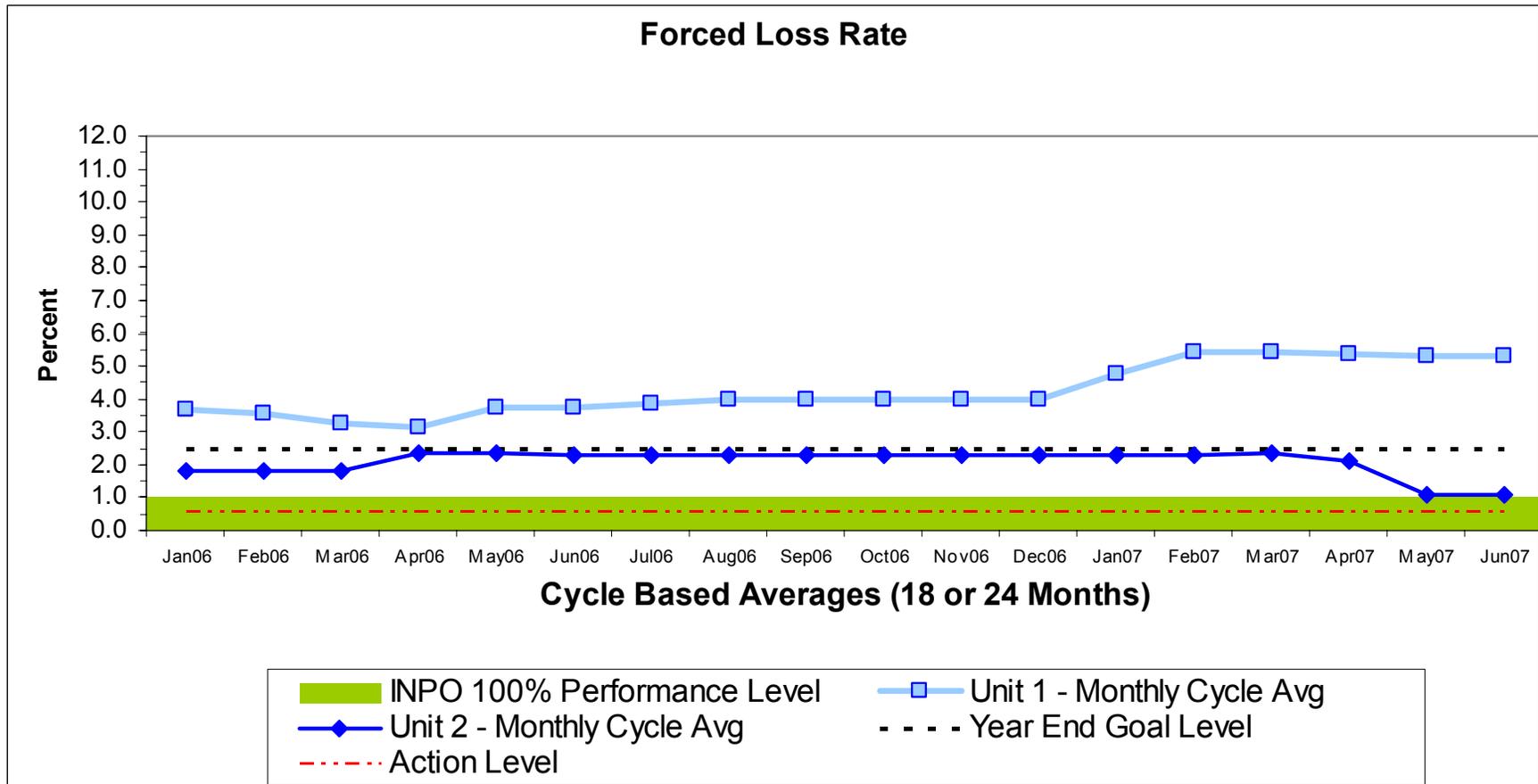
Plant Performance

August 7, 2007 Unit 2 Reactor Trip

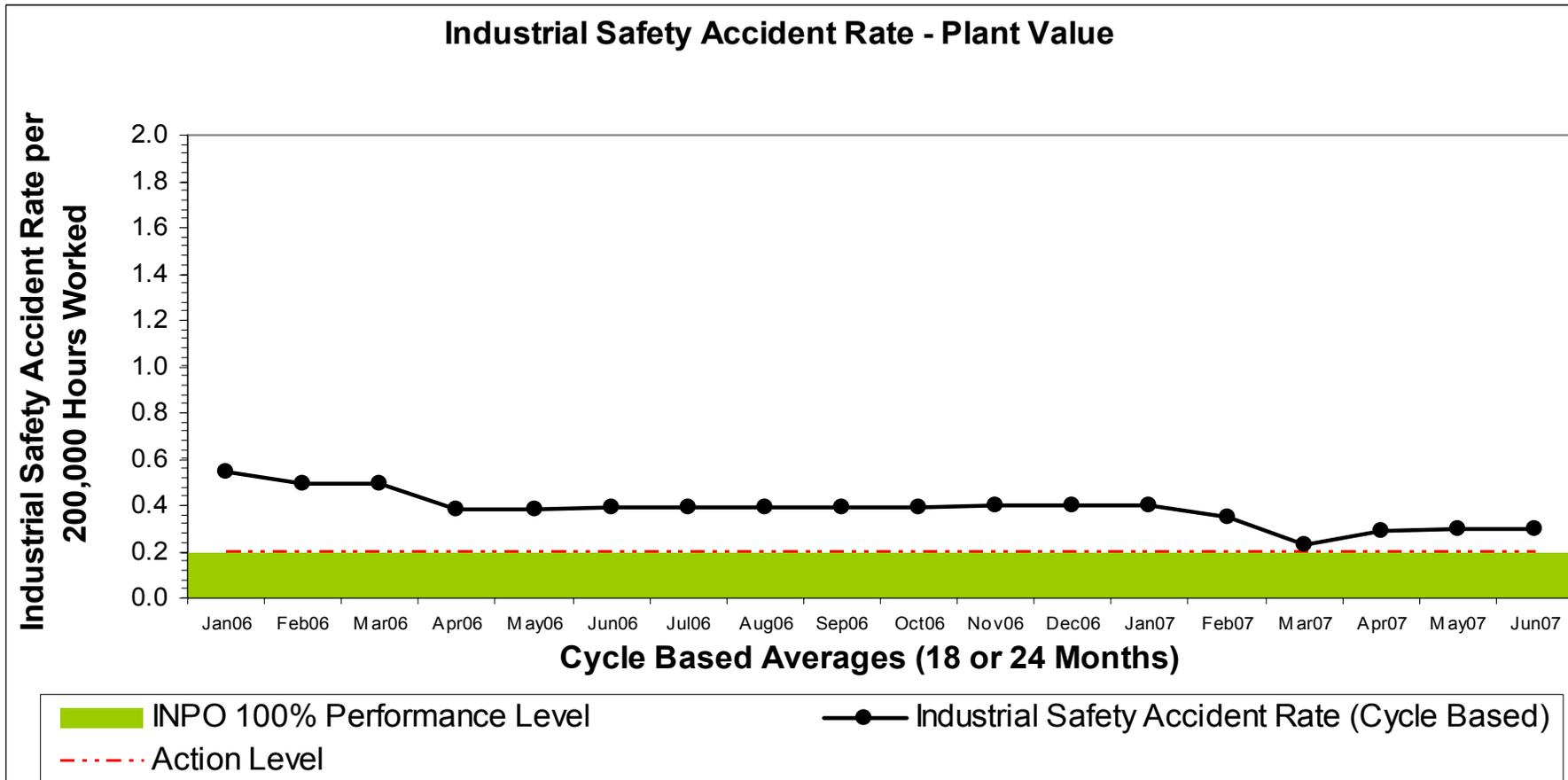


- I&C technician inadvertently tripped an overcurrent relay on the normal incoming feeder breaker for "D" 4160 VAC bus during calibration
- Loss of this bus resulted in a loss of 2 condensate pumps and 2 booster pumps, as well as a recirc runback
- Plant scrambled on low reactor water level
- All systems responded as designed; no actuation of HPCI or RCIC
- Bus re-energized about 1.5 minutes from alternate source
- Breakdown in risk assessment process

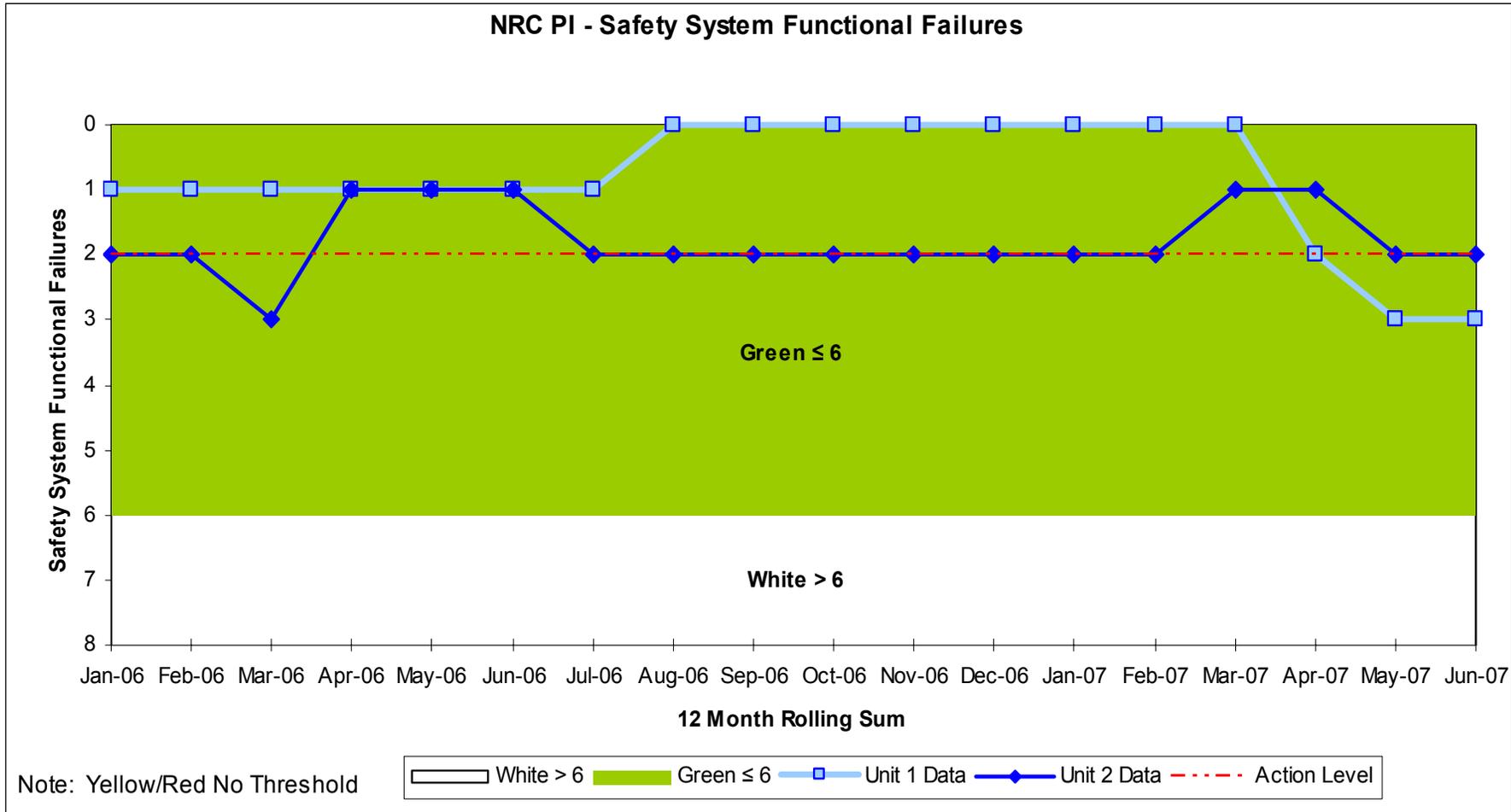
Forced Loss Rate - Hatch



Industrial Safety - Hatch



NRC Performance Indicators - Hatch



Unit 1 HPCI

SOUTHERN
COMPANY



Unit 1 RCIC

SOUTHERN
COMPANY



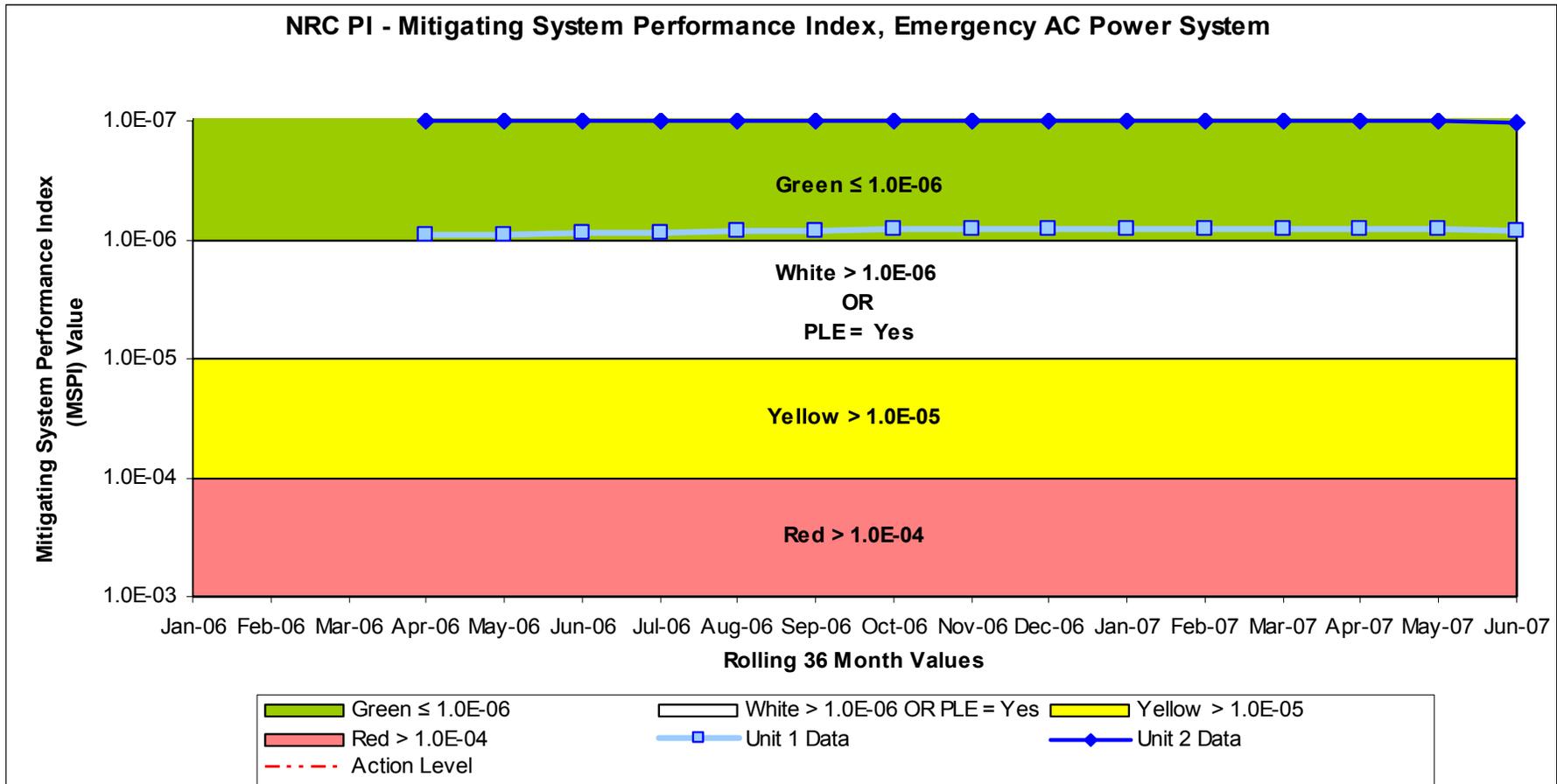
Unit 2 HPCI



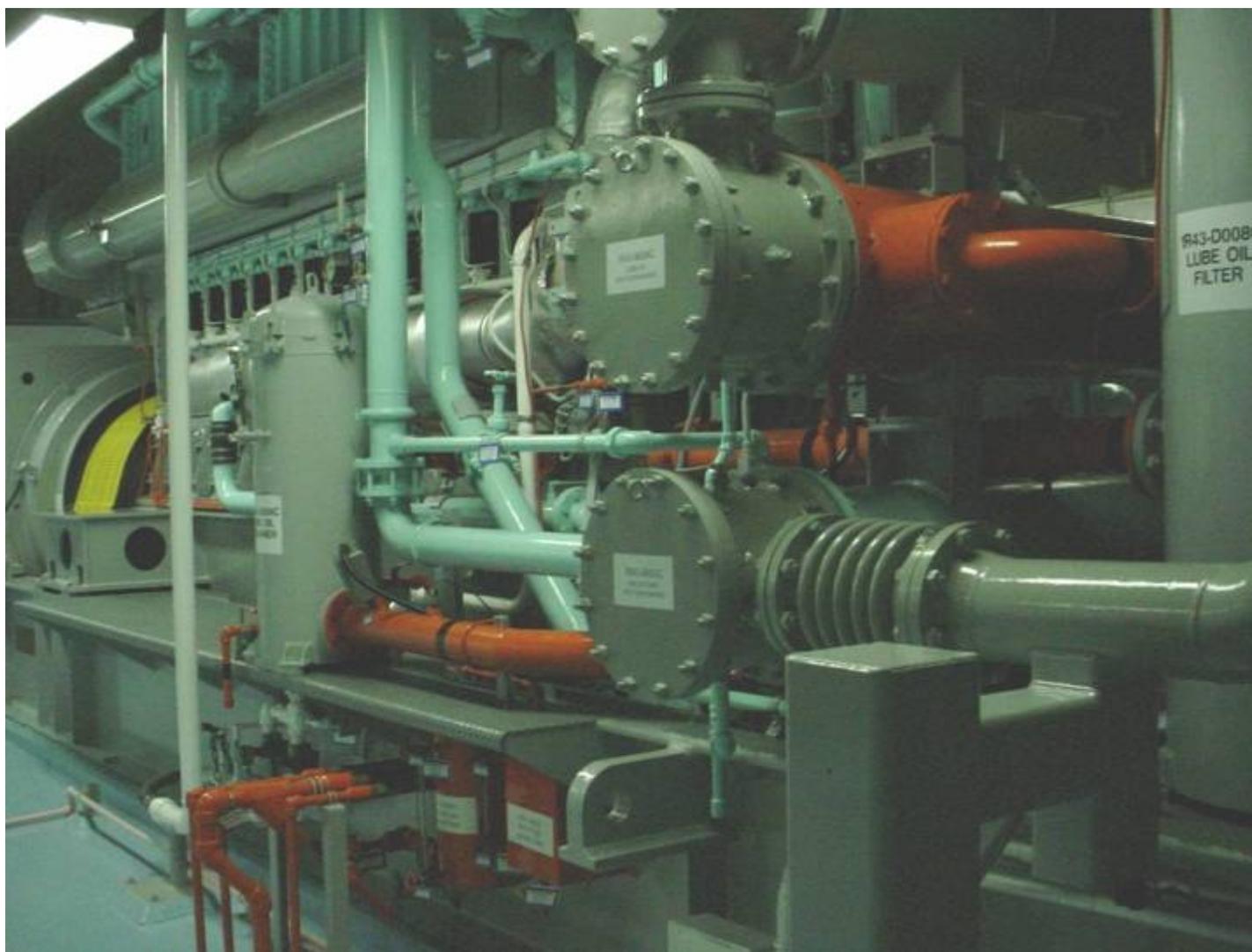
Unit 2 RCIC



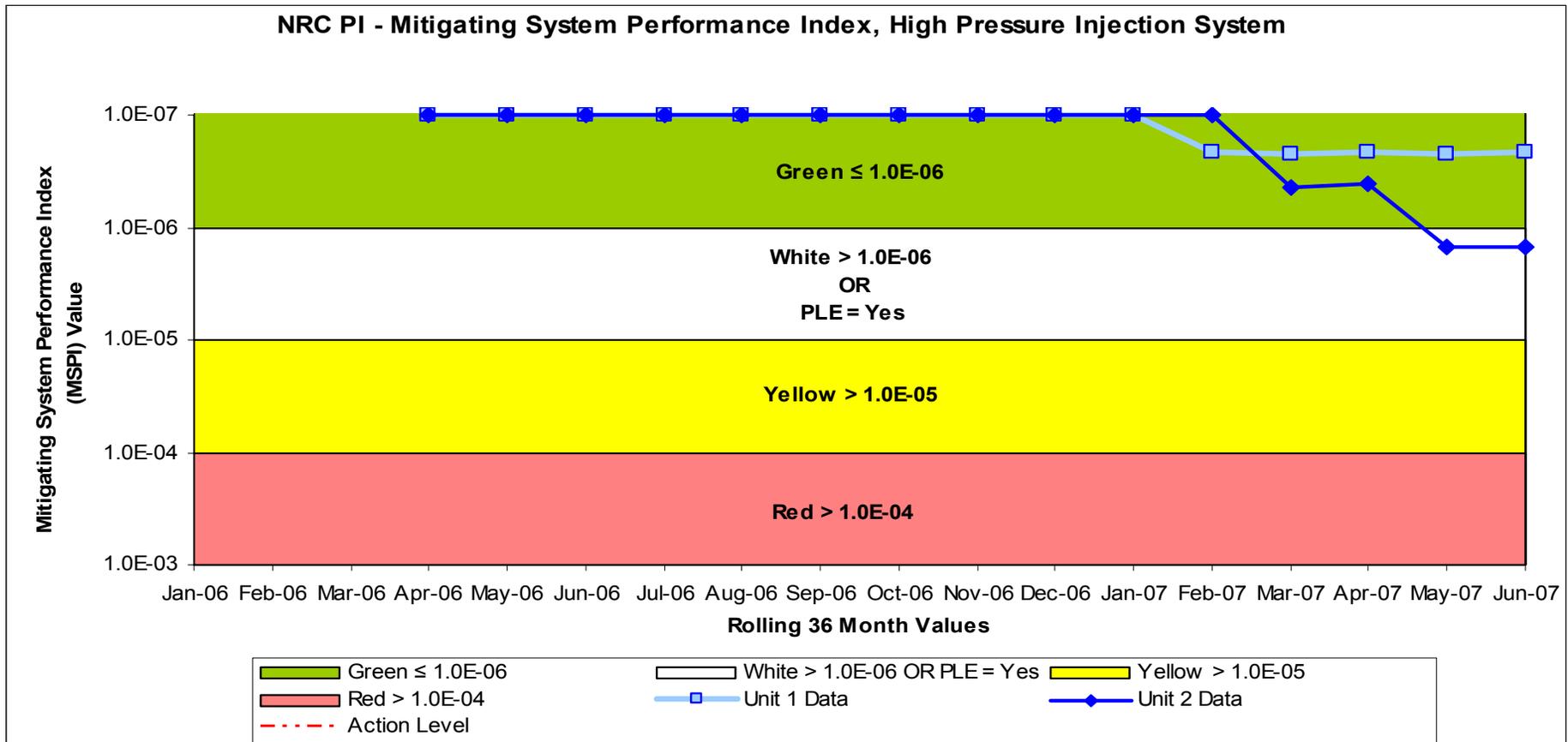
NRC Performance Indicators - Hatch



Emergency Diesel Generator

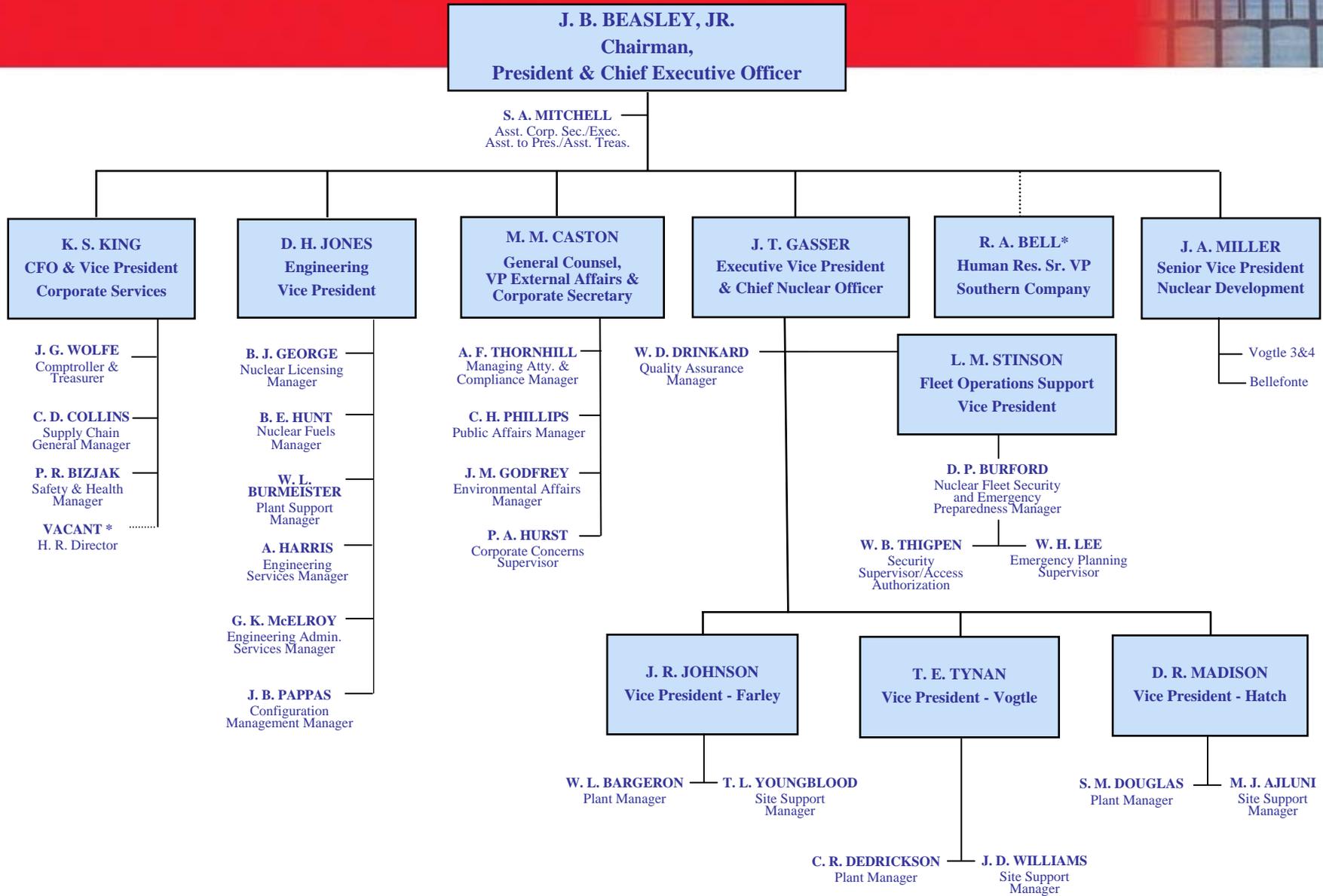


NRC Performance Indicators - Hatch



Site Vice President Reorganization

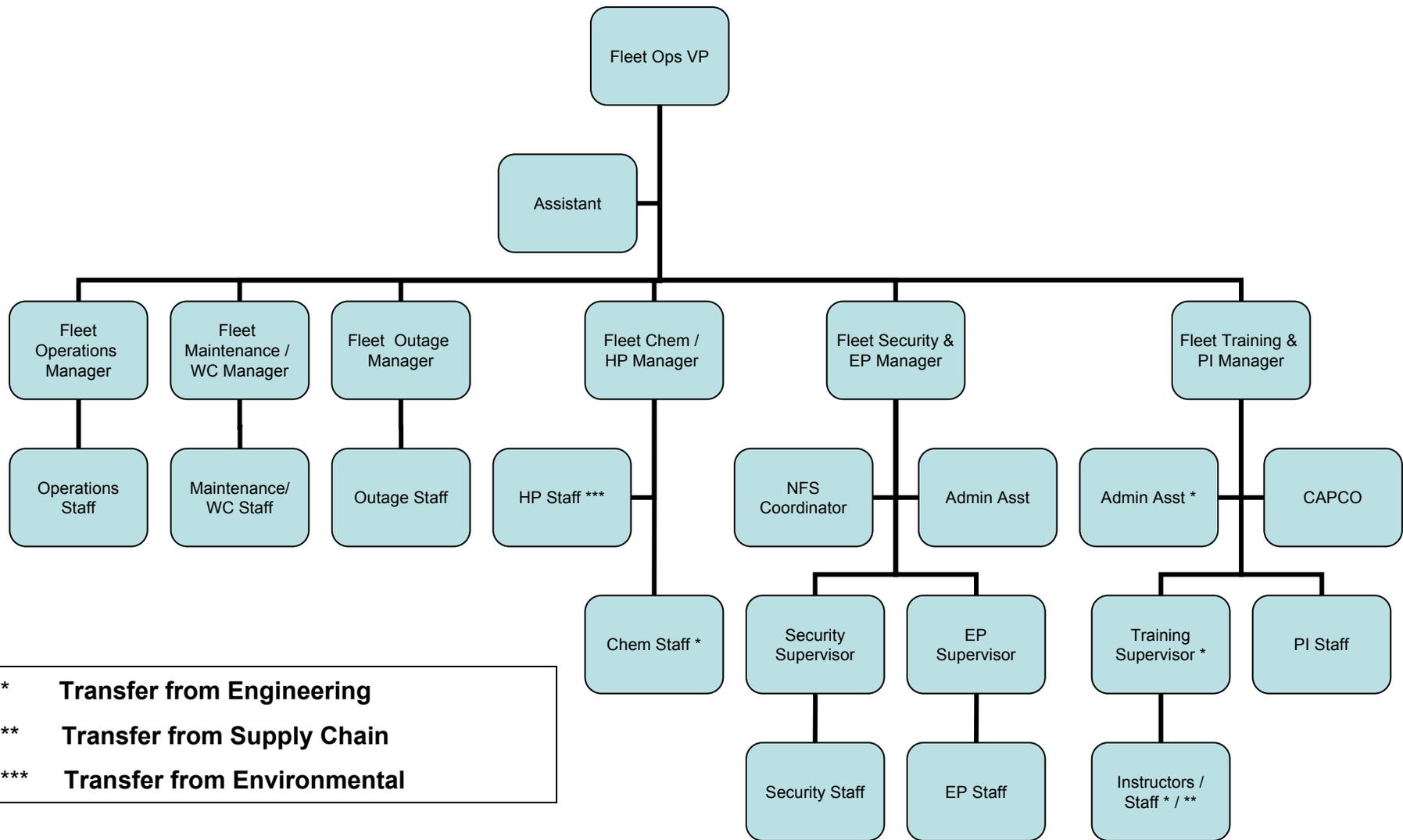
Site Vice President Reorganization – January 2007



0407

*SCS Employee

Fleet Operations Support (proposed)

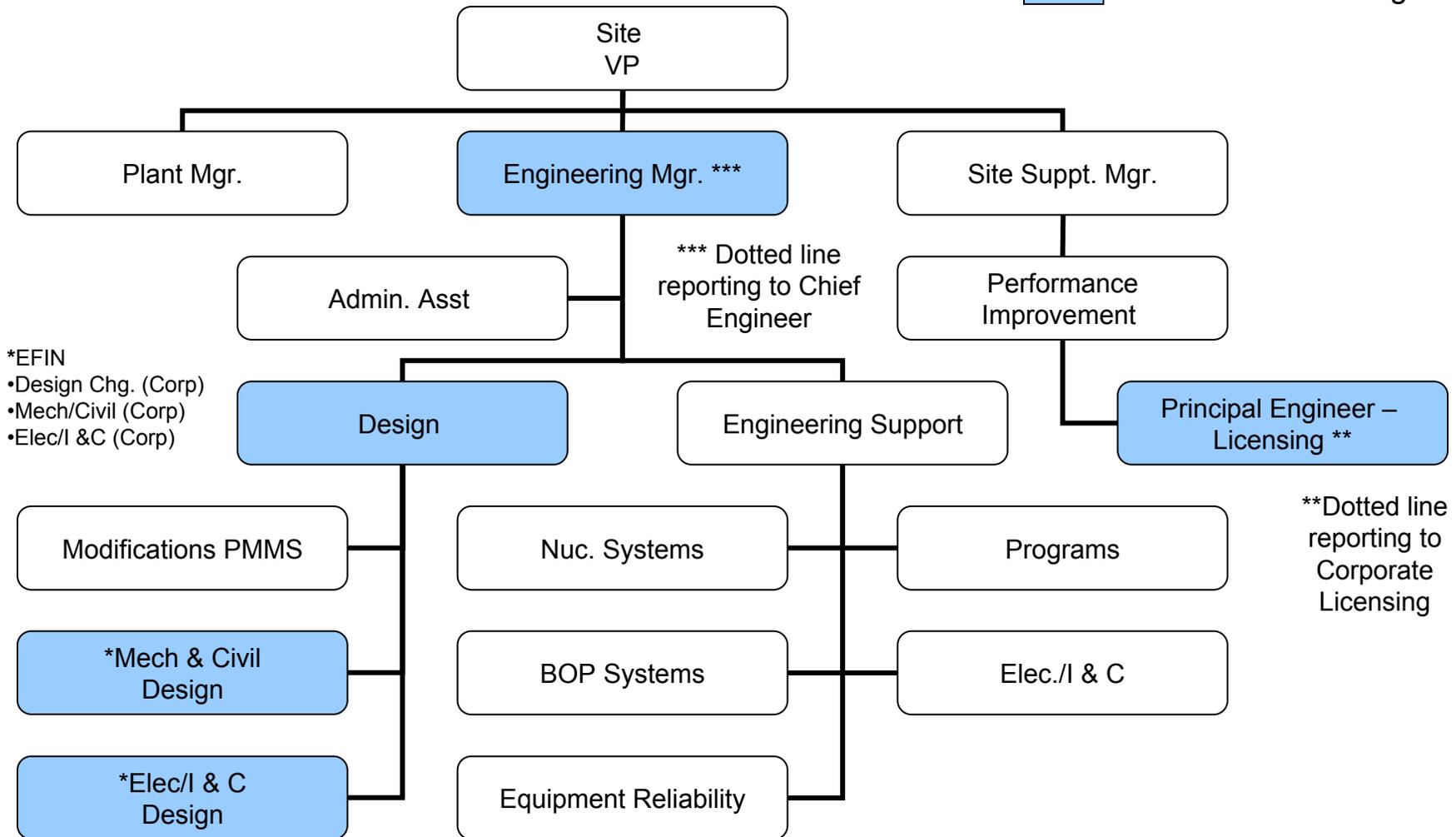


* Transfer from Engineering
 ** Transfer from Supply Chain
 *** Transfer from Environmental

Site Engineering (proposed)



New or Modified Org.



Topical Updates

SNM Update



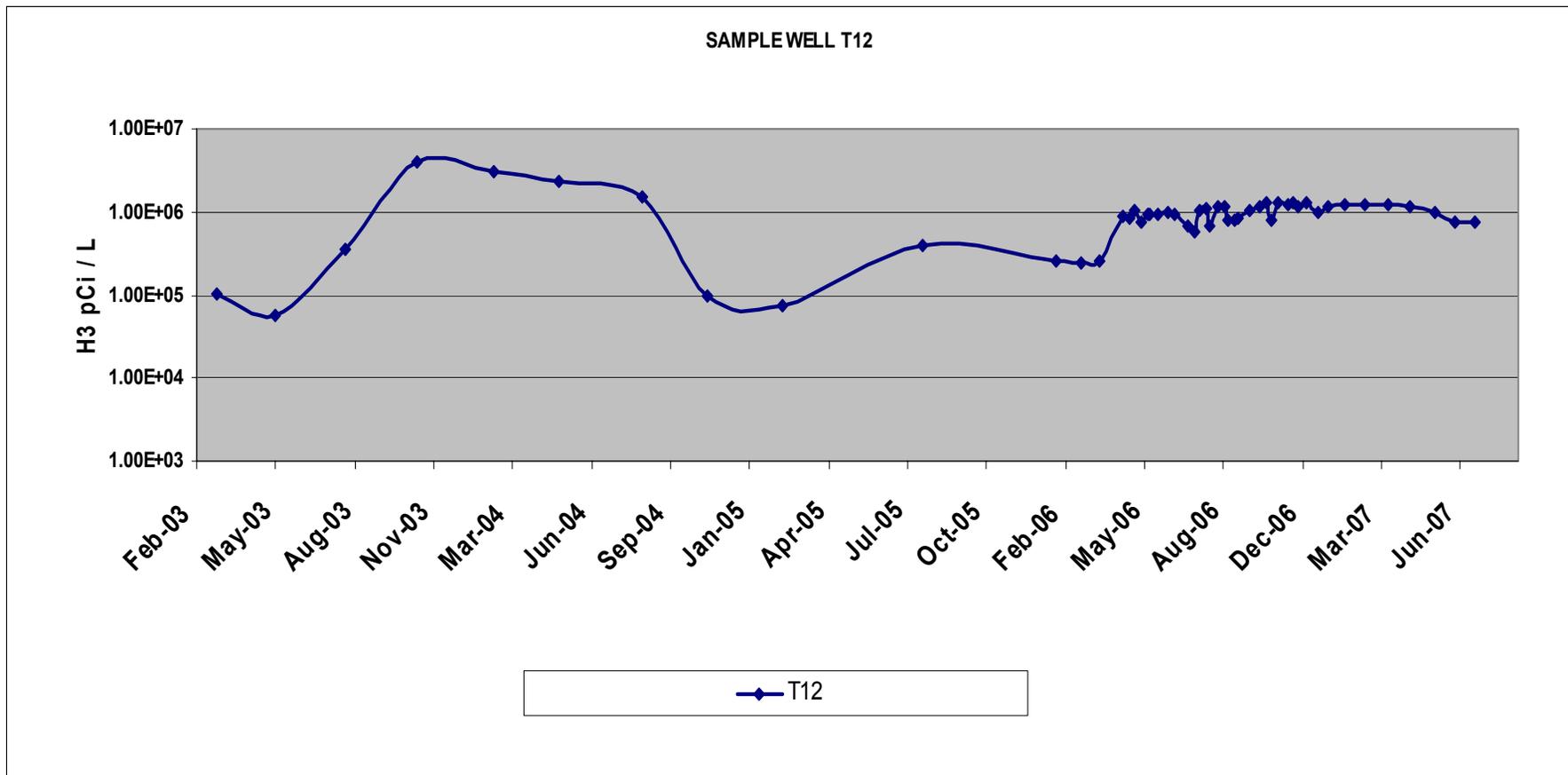
- Procedure revisions implemented to upgrade SNM accountability practices for in-core detectors following conclusion of SNM retrieval activities last year
- Initial results indicated that 4 in-core detectors were not at the location specified
- All 4 detectors were subsequently located and accounted for
- Fuel pool legacy cleanup scheduled 3rd/4th quarter 2007

Tritium Sampling

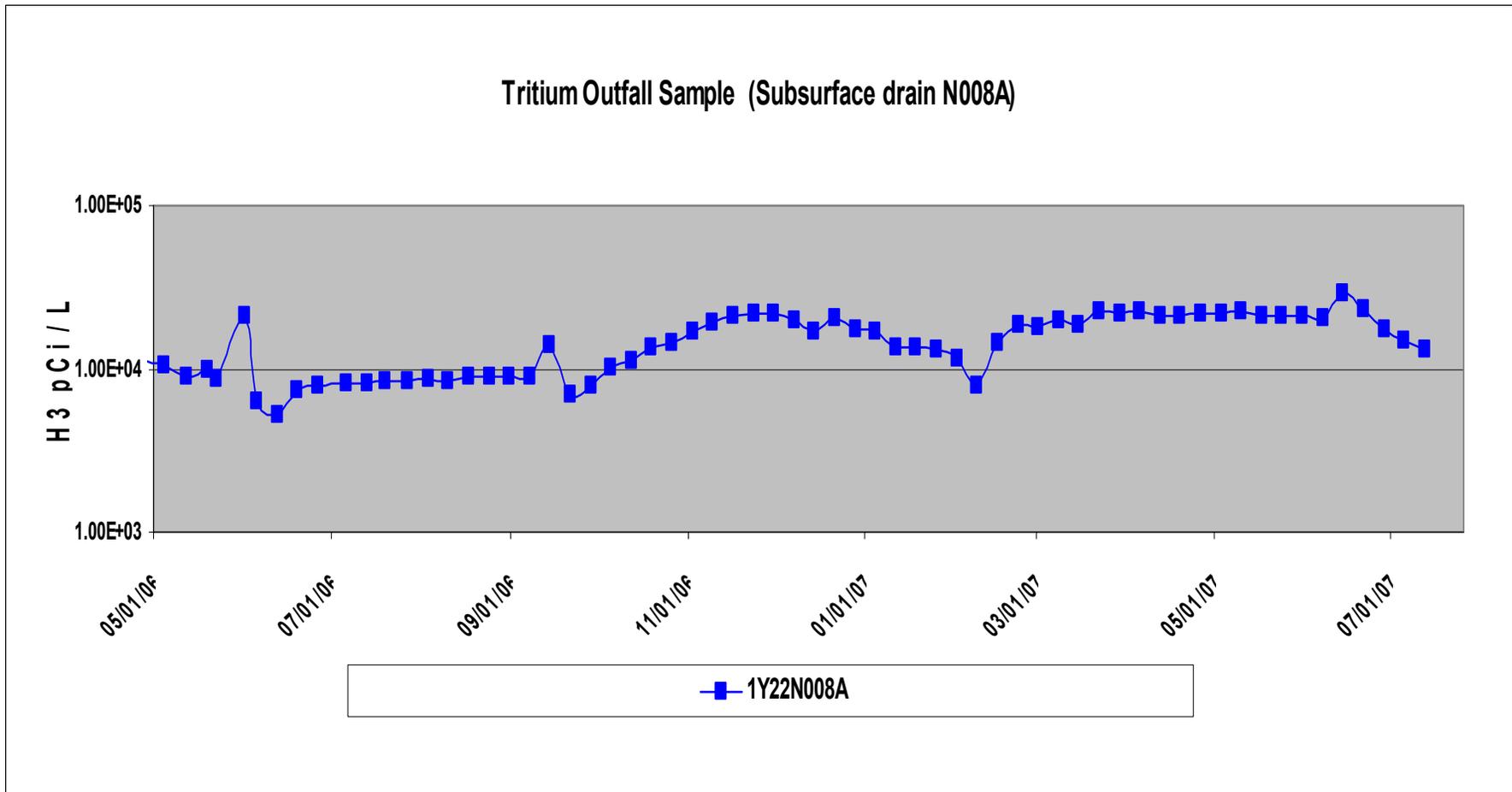


- Update on tritium graphs (T12, NW10, N008A)
- Mactec Status
 - Phase 2 Report (2007)
 - Complete hydrology study (determine need)
- Unit 2 CST pipe Replacement Update

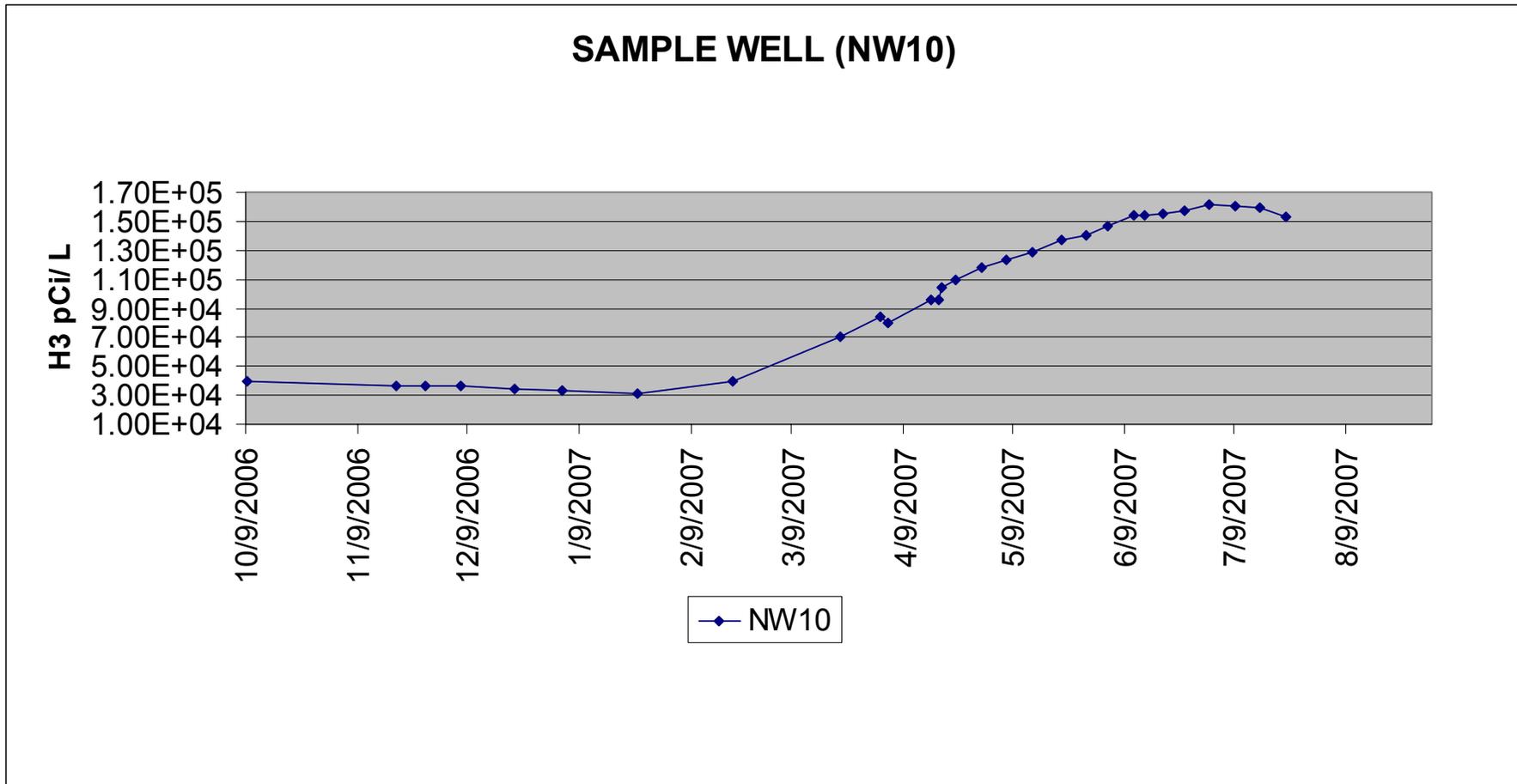
Tritium Sampling



Tritium Sampling



Tritium Sampling



1A RHR Pump Vibration



- Vibration observed on 1A RHR pump only during two pump flow in Division 1 (Pumps A & C)
- Occurs only in loop flow range of 4000 – 6000 gpm
- Cause of vibration has not been determined
- Conceptual design being developed to increase natural frequency of the loop

Alternative Source Term



- Full scope AST analysis submitted to NRC 8/29/2006
- Addresses control room inleakage concerns of Generic Letter 2003-01
- Control room inleakage testing showed good results, well within interim licensing basis limits
- Approval of AST submittal required by 5/31/2010
- Significant interdisciplinary review at NRR is in progress
- Planned and potential modifications to support AST are scheduled to complete by spring 2010

Staffing



- Pipeline Replenishment
 - Strategies for hiring entry level workers and engineers
 - License classes
 - 8 candidates to finish this December
 - 10 SRO candidates started June 2007
 - 16 candidates to start March 2008
 - 16 candidates to start March 2009
 - Average class size of 16
 - All other initial programs up and running (Chemistry, HP, Maintenance, etc.)

Steam Chase Grating Analyses



- Tool boxes were staged over grated vent openings between Reactor Building steam pipe chase and torus room
- Hinged vent covers were strapped to vent grating on Unit 2
- Tool boxes were removed from grating on both units and strap was removed on Unit 2

Tool Box



Steam Chase Grating Analyses



- Unit 1 limiting parameter is differential pressure on wall between torus room and ECCS pump rooms
- Unit 1 analysis demonstrated that as-found vent paths provided adequate opening to meet differential pressure limits
- Unit 2 limiting parameter is differential pressure on wall between torus room and reactor building ground level floor
- Unit 2 analysis is at the preliminary results stage (not checked)
- Preliminary results indicate that correcting for mass flow conservatisms will result in differential pressures within the analyzed limits

TSC HVAC Availability



- Event represents good incorporation of corrective actions from 2005 TSC white finding
- EP and work planning personnel discussed work activity during planning phase
- Work was placed on hold when first phase took longer than expected so issue could be discussed with NRC Region II personnel
- Region II provided timely feedback regarding SNC's planned course of action

Planned Major Projects

Unit 1 Main Transformer Replacement



- Unit 1 Main transformer replacement (2008)
 - Asset management/Life Cycle management
 - Replaces leased Alabama Power transformer with permanent transformer
 - Spare transformer delivered early 2008 for infant mortality issue
 - New transformer good to end of plant life

Shroud Tie Rod Upper Restraints



- Unit 1 Shroud tie rod upper restraint replacement (2008)
- Unit 2 Shroud tie rod upper restraint replacement (2009)
 - Equipment reliability/safety
 - Replaces upper supports with larger components to remove susceptibility to IGSCC
 - Restores to BWRVIP criteria for repaired shrouds
 - Eliminates need to re-inspect shroud horizontal welds
 - Licensing submittal for Unit 1 has been issued

Condenser Bypass Sparger Replacement



- Unit 1 and Unit 2 Condenser bypass sparger replacements (Unit 1 in 2008. Unit 2 in 2009)
 - Replaces degraded bypass spargers
 - Spargers currently limit Operations use of bypass (i.e., length of time in Hot shutdown)

Adjustable Speed Drives



- Adjustable speed drives (Unit 1 in 2010 and Unit 2 in 2011)
 - Asset management/Life Cycle management
 - Replaces the Recirculation M-G sets with Variable Frequency drives
 - Eliminates Recirculation flow step changes from fluid coupling positioner
 - Does not eliminate step changes from Bi-stable flow
 - Equipment reliability

Feedwater Sparger End Pins



- Feedwater sparger end pin replacement (Unit 1 in 2008, no Unit 2 installation)
- Remote tooling will allow the installation of the Feedwater Sparger End Pins simultaneously with other work activities on the refueling floor

Completed Major Projects

Mark VI Turbine Controls



- Unit 1 and Unit 2 Mark VI Turbine Controls
 - Completed on both units
 - Asset management/Life Cycle management
 - Installs triple redundant digital controls
 - Replaces obsolete Mark I control system

Unit 2 Generator Exciter Controls



- Unit 2 Generator Exciter Controls
 - Completed on Unit 2 – Unit 1 to complete in 2008)
 - Asset management/Life Cycle management
 - Replaces obsolete exciter with EX 2100 alterex

Condenser Bellows Replacement



- Unit 1 and Unit 2 Condenser Bellows Replacement
 - Completed on both units
 - Equipment reliability – Industry OE
 - Replaced bellows that were beyond design life

Unit 1 Drywell Cooler Replacement



- Unit 1 Drywell Cooler Replacement
 - Equipment reliability
 - 2005 shutdown due to drywell leakage and containment integrity issue (leak from drywell into cooler)
 - Replaced all 16 Drywell cooler coils

Open Discussion

