



TENNESSEE VALLEY AUTHORITY BROWNS FERRY NUCLEAR PLANT

UNITS 2 AND 3 STATUS

**Atlanta, GA
July 25, 2006**



Introduction

- Welcome to the status meeting for Browns Ferry Units 2 and 3
- Purpose
 - Review the site status
 - Discuss upcoming activities and strategy
 - Solicit feedback

Agenda

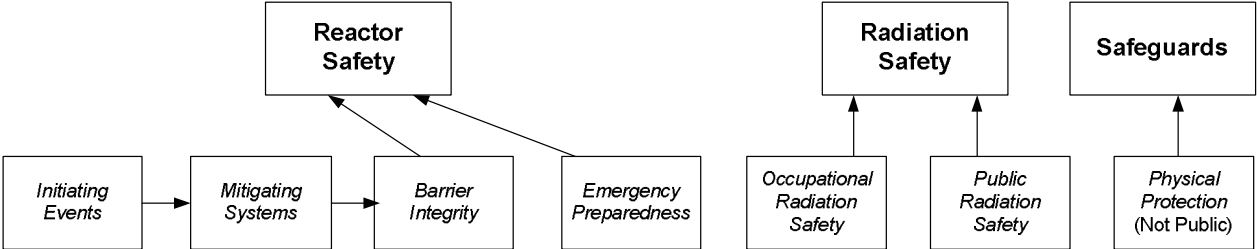


- Introduction B. Crouch
- Performance Indicators B. Aukland
- Plant Performance T. Elms
- Unit 3 Cycle 12 Outage Performance B. Aukland
- Unit 2 Cycle 14 Outage Plans B. Aukland
- Performance Improvements B. O'Grady
- Three Unit Readiness B. O'Grady
- Open Discussion



Performance Indicators

Browns Ferry 2 - Current Performance Summary



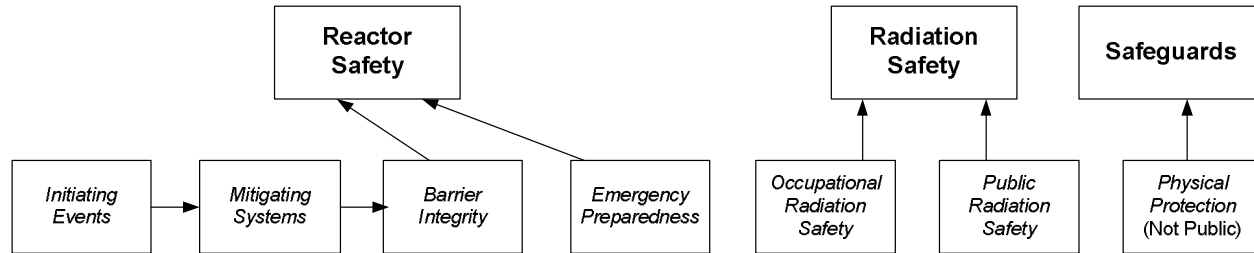
Performance Indicators

Unplanned Scrams (G)	Emergency AC Power System Unavailability (G)	Reactor Coolant System Activity (G)	Drill / Exercise Performance (G)	Occupational Exposure Control Effectiveness (G)	RETS / ODCM Radiological Effluent (G)
Scrams With Loss of Normal Heat Removal (G)	High Pressure Injection System Unavailability (G)	Reactor Coolant System Leakage (G)	ERO Drill Participation (G)		
Unplanned Power Changes (G)	Heat Removal System Unavailability (G)		Alert and Notification System (G)		
	Residual Heat Removal System Unavailability (G)				
	Safety System Functional Failures (G)				

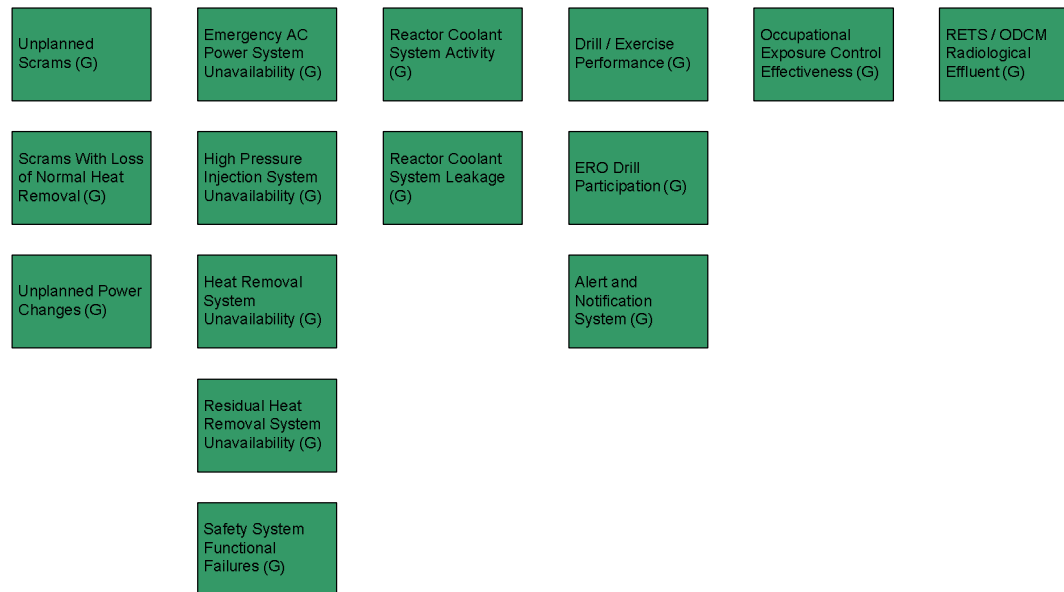
Data through June 2006

Performance Indicators

Browns Ferry 3 - Current Performance Summary

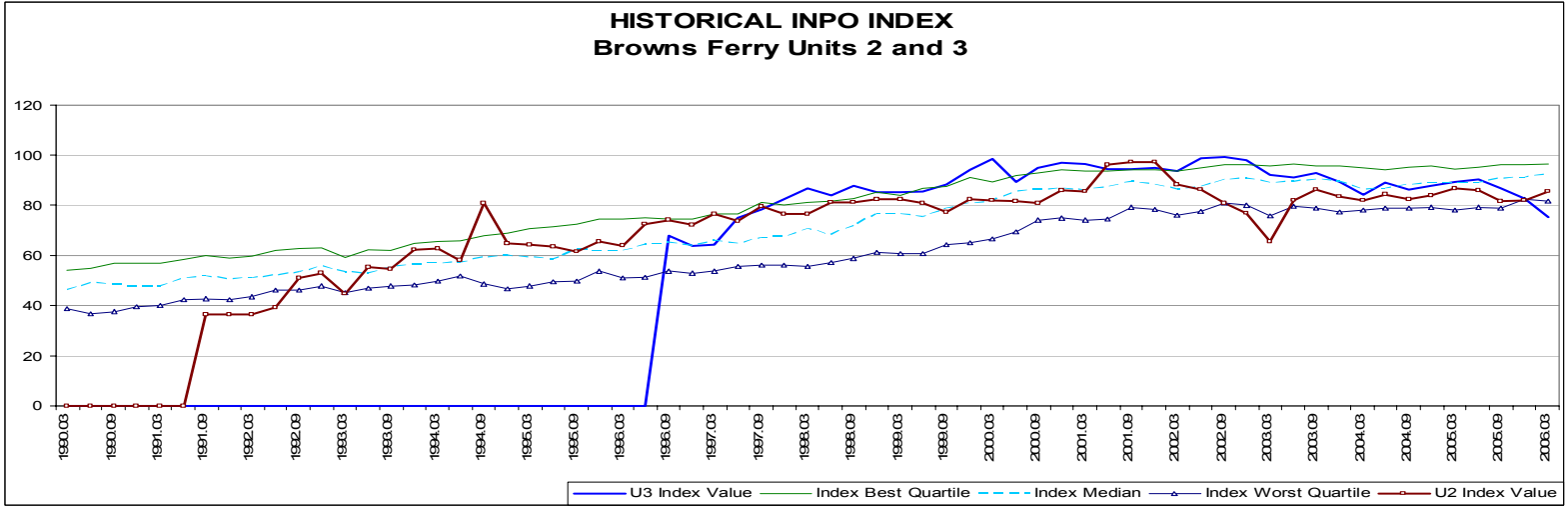
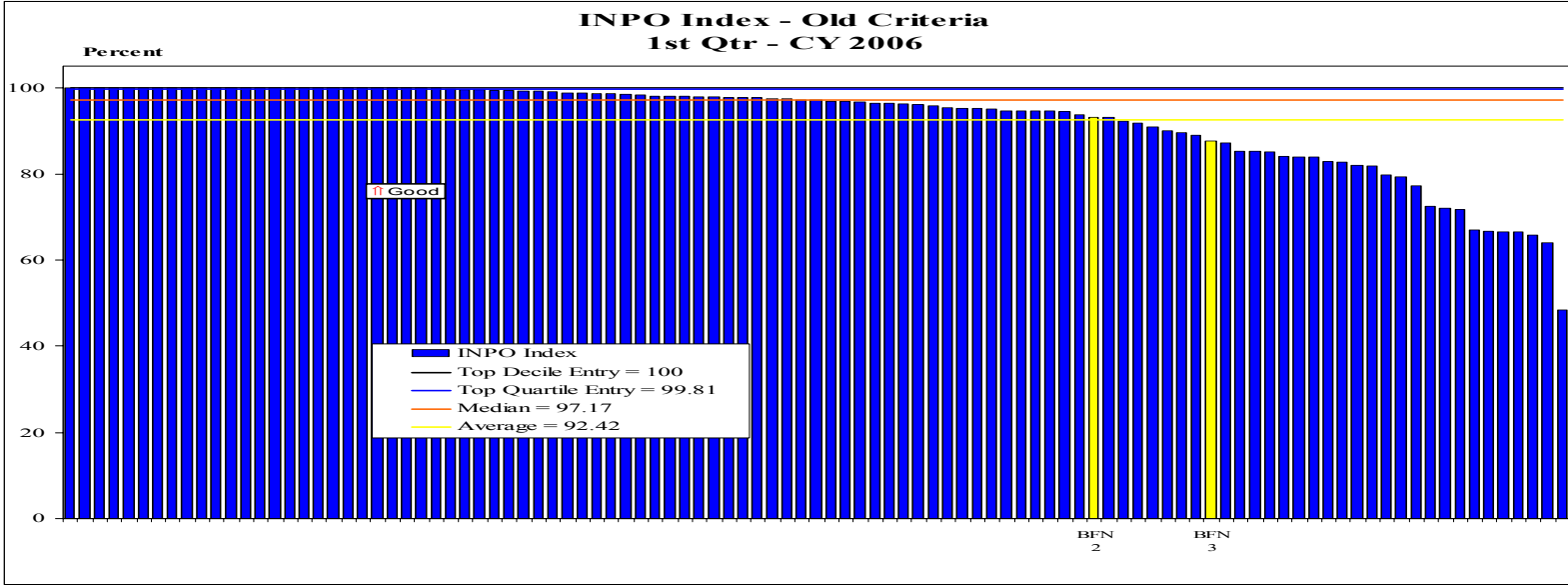


Performance Indicators



Data through June 2006

Performance Indicators



Plant Performance

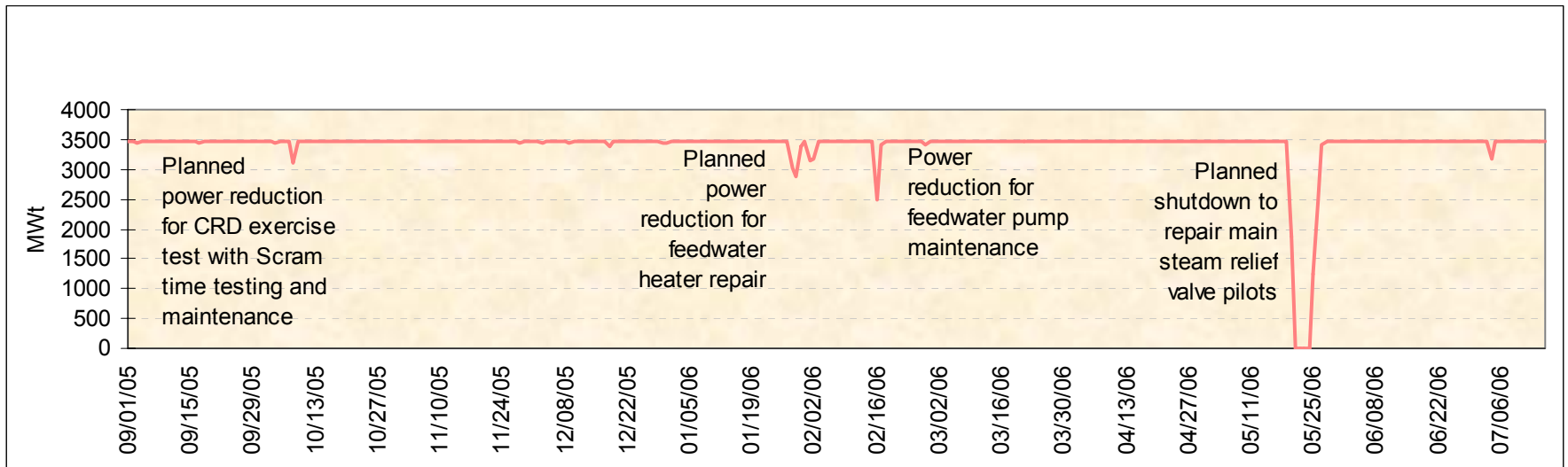


- Unit 2 Cycle 14
 - Currently operating at 100%
 - Online for 60 days
- Unit 3 Cycle 13
 - Currently operating at 100%
 - Online for 124 days



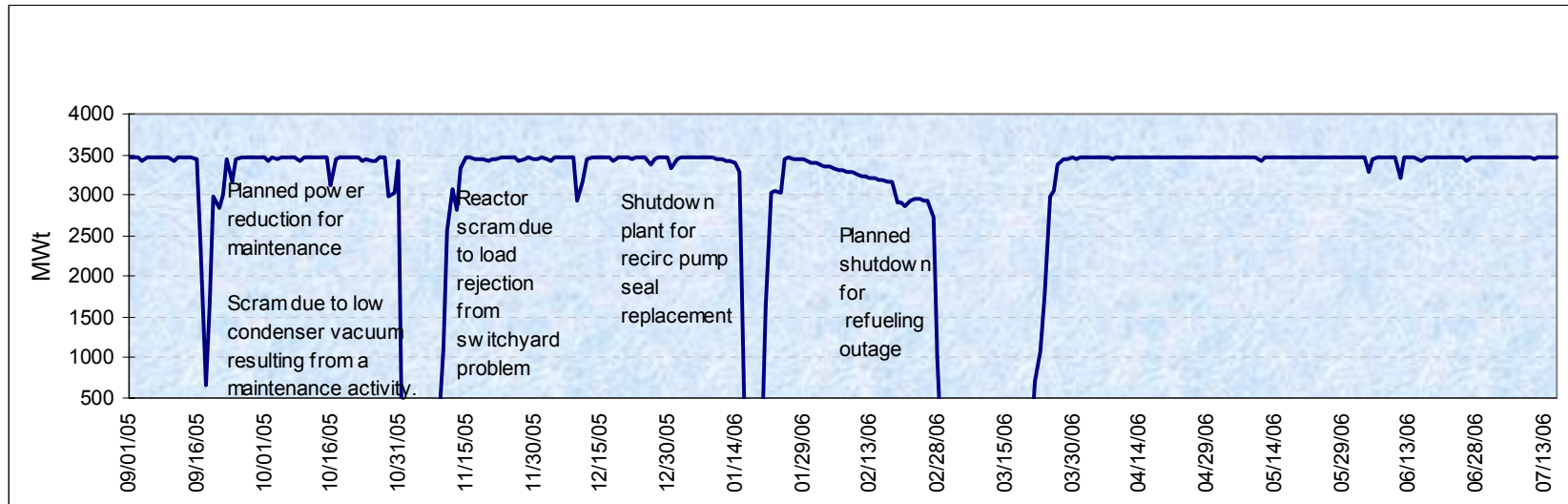
Plant Performance

Power History Curve – Unit 2 Generation
September 2005 through July 2006



Plant Performance

Power History Curve – Unit 3 Generation
September 2005 through July 2006



Unit 3 Cycle 12 Outage Performance



- Duration of 22 days 13 hours
- Outage Performance Milestones
 - 0 Recordable Accidents
 - 0 Lost Time Accidents
 - 0 Human Performance Events

	<u>Planned</u>	<u>Actual</u>
– Preventive Maintenance Work Orders	822	823
– Surveillance Requirements/Instructions	649	689
– Maintenance/Modifications Work Orders	909	1322
– Work Order Backlog	836	833
– Equipment Intolerance Items	All	All

Unit 2 Cycle 14 Outage Plans



- Extended Power Uprate Implementation Outage
 - Considerable modifications
 - Maintaining / improving operational margin
- Condensate System
 - Replace condensate pump impellers and motors
 - Condensate demineralizer 10th vessel addition
 - Replace condensate booster pump and motors
 - Condensate demineralizer control panel digital upgrade
- Feedwater System
 - Replace reactor feedwater pumps
 - Modify feedwater pump turbines
 - Modify feedwater heaters
- Main Steam System
 - Modify high pressure turbine, cross around relief valves, and steam seal piping
 - Modify main steam isolation valves internals and actuators
 - Replace moisture separator internals

Performance Improvements



- The Hardspot
 - Flat / declining performance in some areas
 - Significant challenges
 - Unit 1 restart activities
 - Extended power uprate on Unit 2
- The Performance Improvement Plan
 - Achieve measurable results in 90 days
 - 7 key focus areas

Performance Improvements



- Program Elements
 - Safety/human performance
 - Reactivity management
 - Training
 - Corrective action/self-assessment programs
 - Chemistry
 - Unit 1 restart readiness
 - Equipment reliability
- Management Sponsors
- Plans Developed and Monitored
- Communications with TVA Staff on Program

Performance Improvements



- Improving Results
 - Personnel error rate
 - Days between human performance events
 - Human performance index
 - Management observations of training
 - Problem evaluation report initiation rate
 - Level D problem evaluation reports – low threshold
 - Intolerance to equipment deficiencies index
 - Building inleakage
 - Reactor coolant system chemistry
 - Unit 1 readiness

Performance Improvements



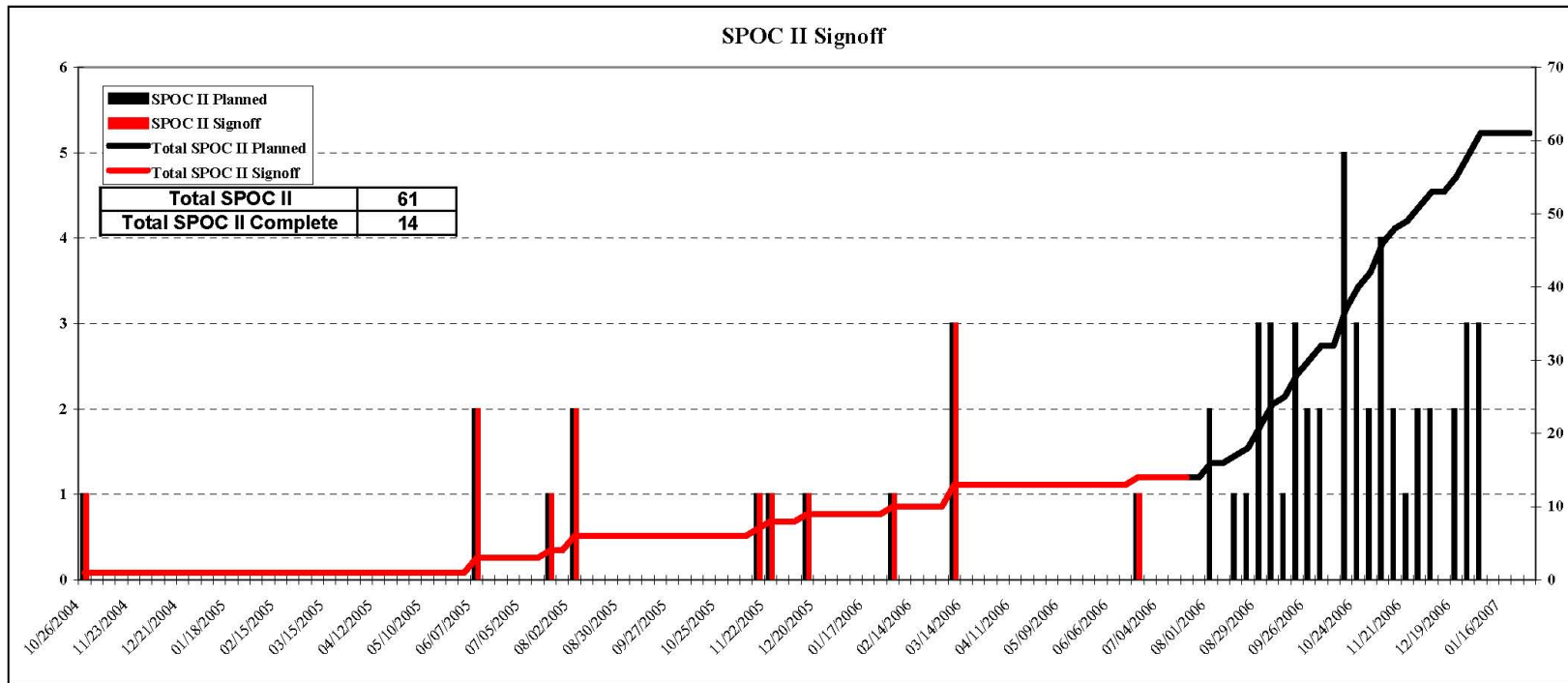
- Phase 2
 - Teamwork
 - Work management
 - Extended Power Uprate
 - ALARA
- Continuing To Work
 - Equipment reliability
 - Reactivity management
 - Unit 1 restart / 3-unit operation



Three Unit Readiness

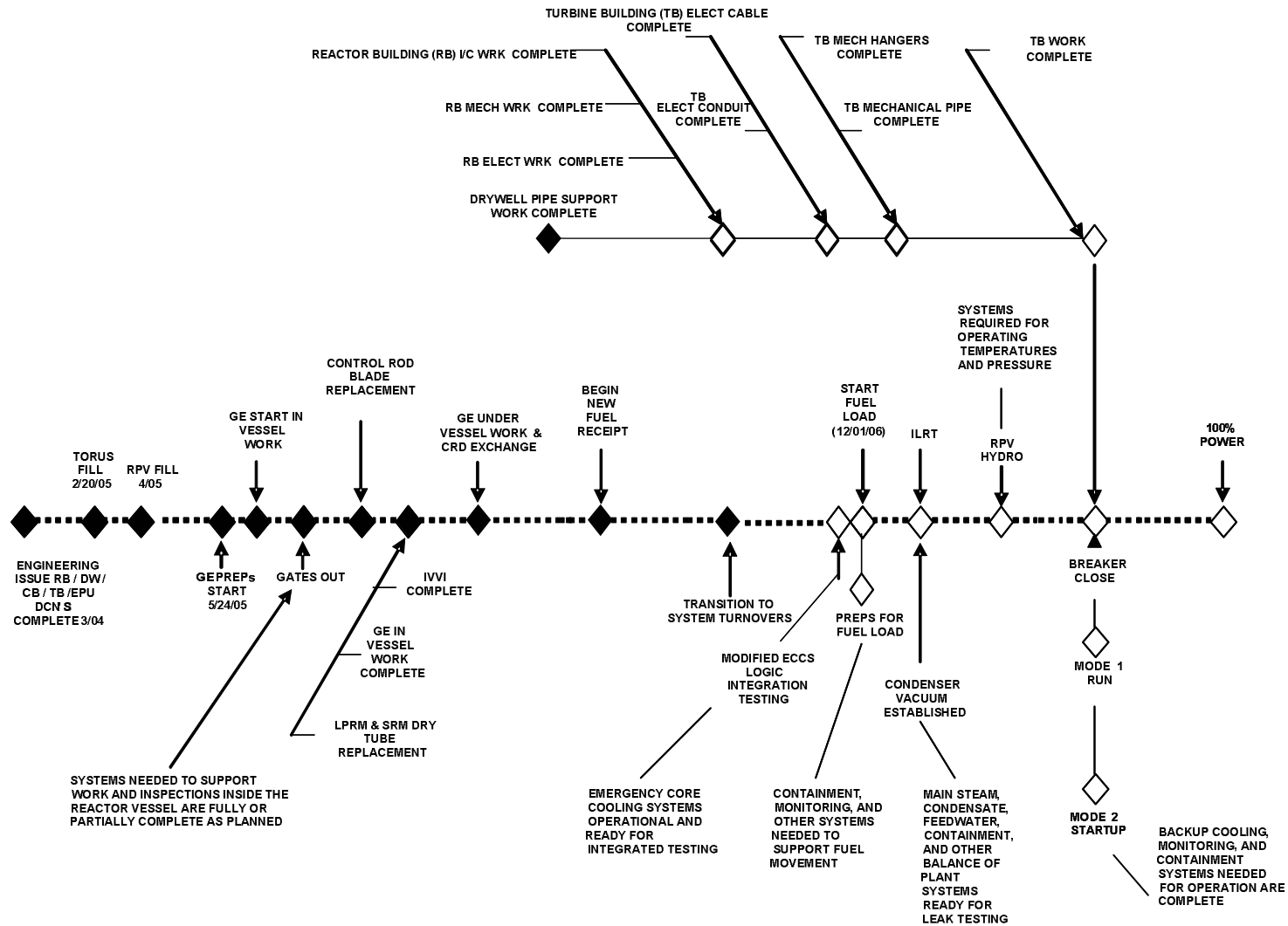
- Unit 1 Recovery Transition from Bulk Work / Construction to System Completion Milestone
- Presently 18 Systems Have Completed System Pre-Operability Checklist Phase I Process
 - Ready for restart testing
 - Manager assigned to each system
 - System pre-operability checklist board meetings
- Presently 14 Systems Have Completed System Pre-Operability Checklist Phase II Process
 - Maintenance / Surveillance Requirements maintained
 - Plant Ownership
- Nuclear Performance Program NRC Inspections Complete for Unit 1
 - 16 of 30 completed
- Integration of Plant Organizations During Recovery Activities
 - Engineering
 - Maintenance
 - Operations
- Department Readiness
 - Self Assessments
 - Initial Assessments complete
 - Eight follow-up assessments planned
 - Staffing for three unit operation

Three Unit Readiness





Three Unit Readiness



Open Discussion

