

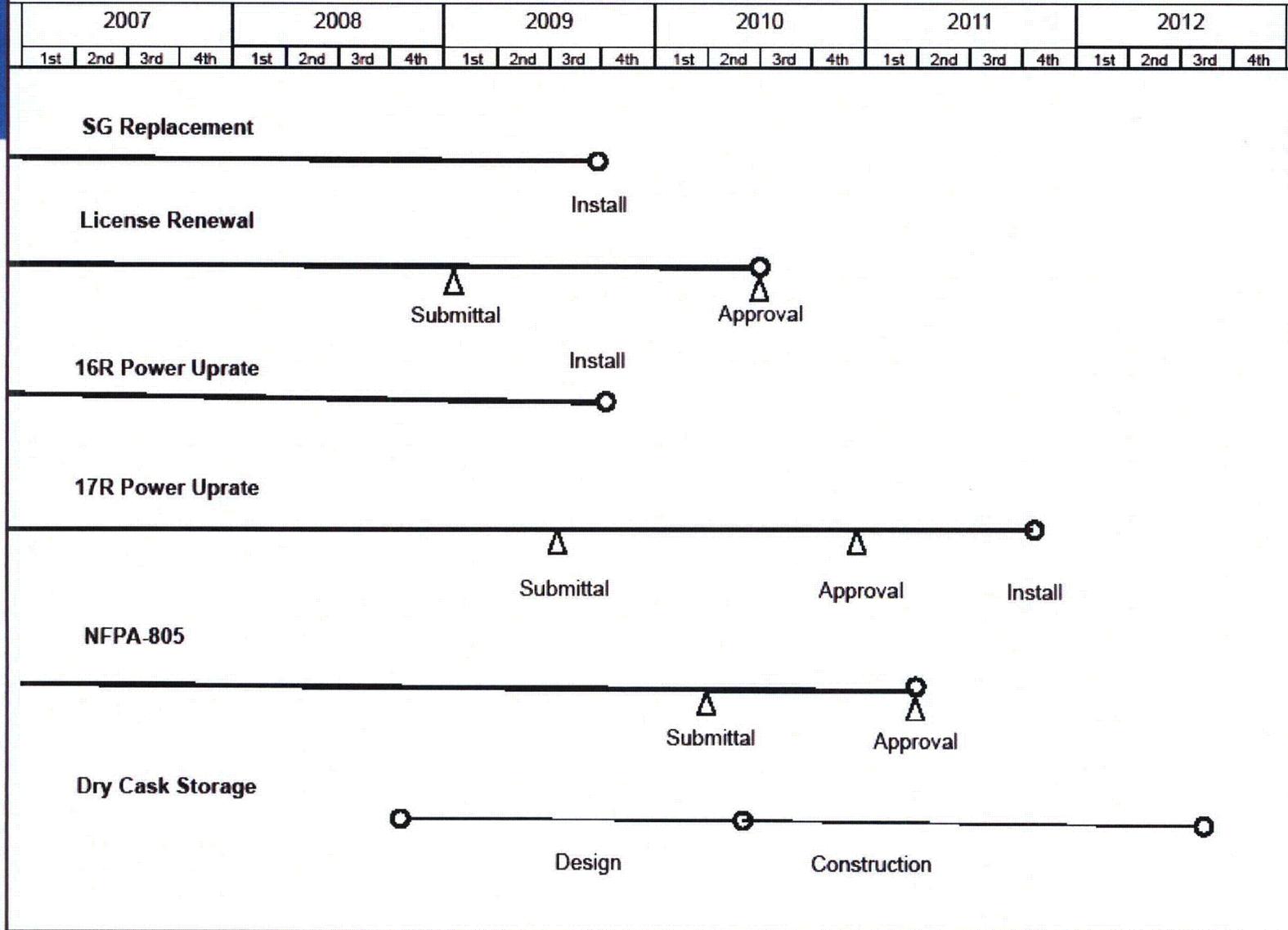
AGENDA

Crystal River 3 Major Projects Status

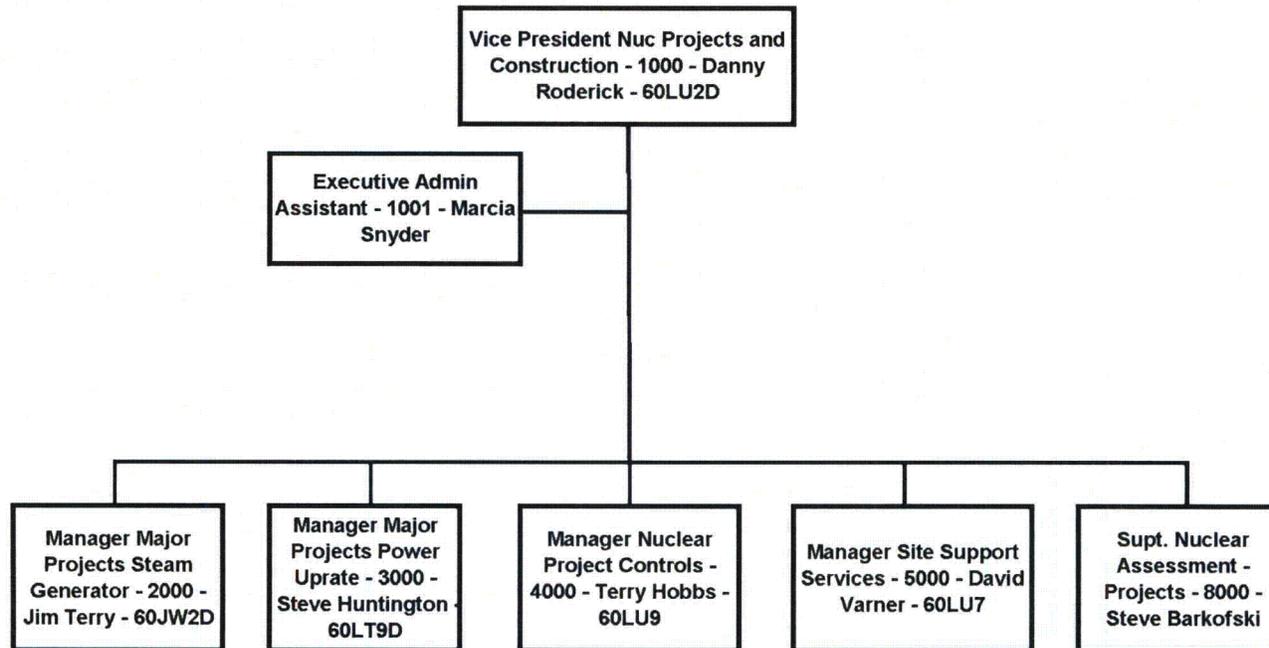
- Introduction Jon Franke
- Nuclear Project Objectives/Organization Steve Huntington
- Power Uprates Ted Williams
- EPU Licensing Ken Wilson
- Conclusion Jon Franke



CR3 SITE PLAN / SCHEDULE



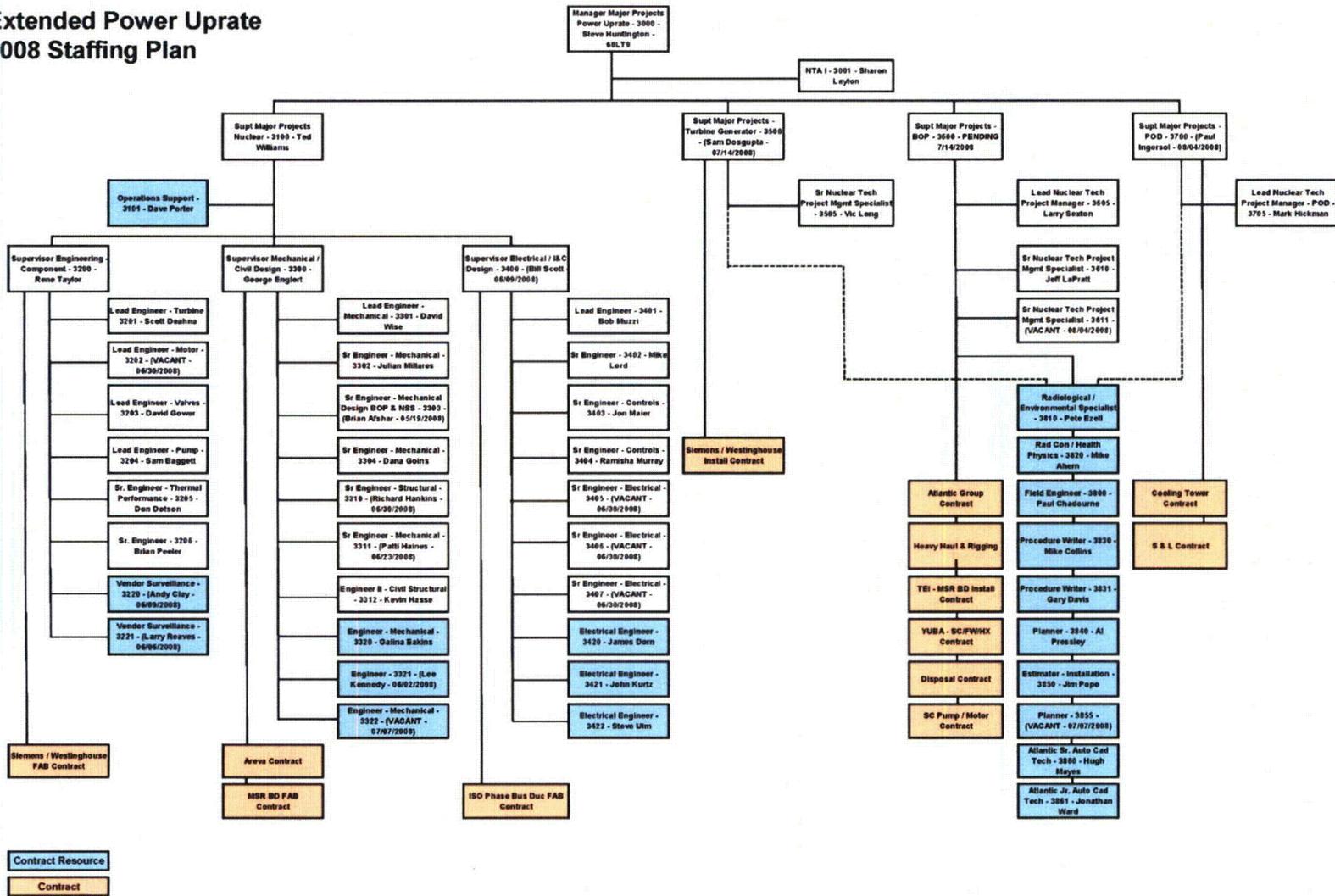
Nuclear Projects and Construction Staffing Plan



Revised:5/15/2008



Extended Power Uprate 2008 Staffing Plan



Revised 5/15/2008



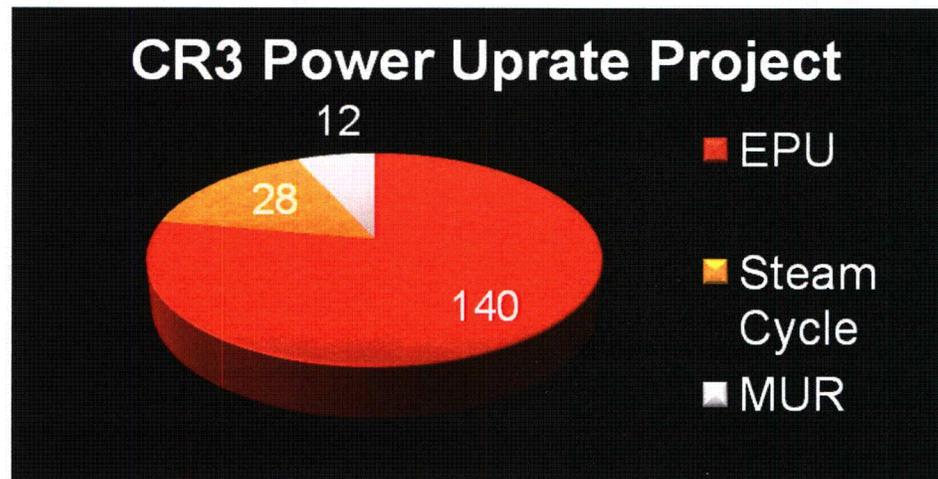
EPU Objectives

- | Return CR3 to Service Well-Prepared for Safe and Efficient, Long-Term Operation
- | Improve Analytical and Design Basis
- | Thorough/Open Communication with Stakeholders
- | Minimize Impacts of Operational Staff/Reduce Operator Burden
- | Integrated Approach to Project Management
 - Rigorous Commercial Risk Management
 - Benchmarking
 - Thorough Planning
 - Meticulous Implementation
 - Intrusive Vendor Oversight

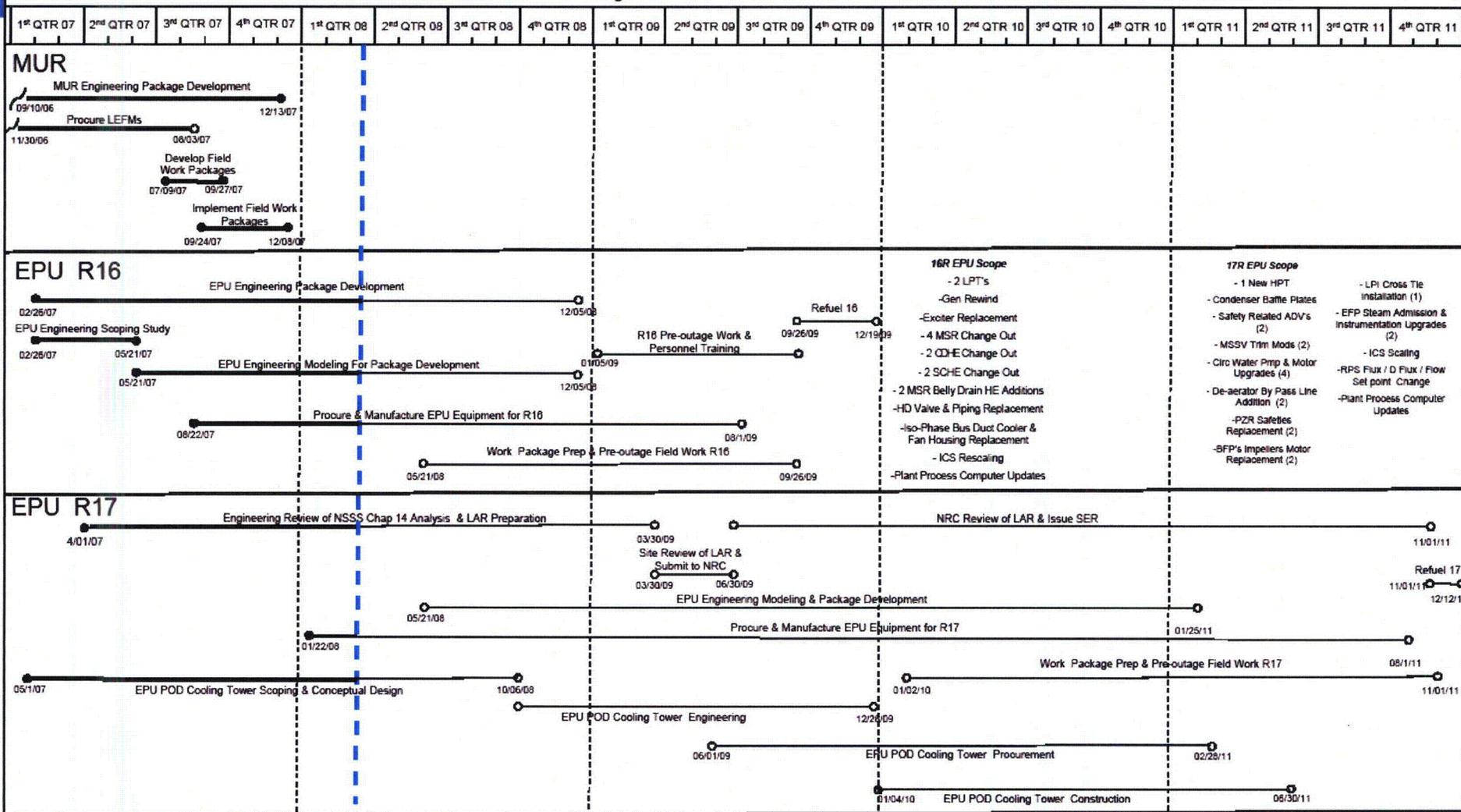


Three Power Level Upgrades

- | Measurement Uncertainty Recapture (MUR)
- | Balance of Plant Efficiency
- | Extended Power Uprate (EPU)



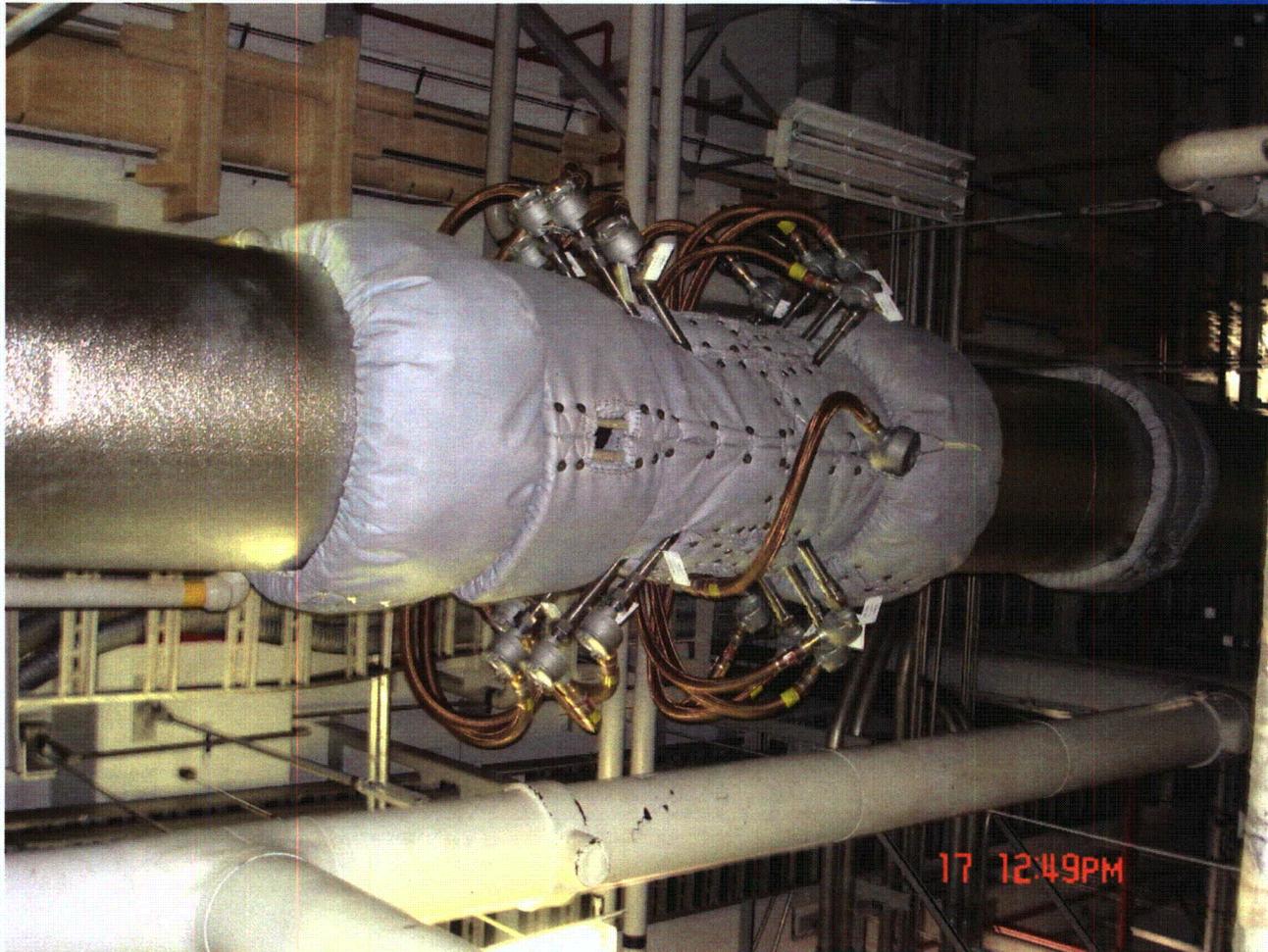
EPU Project Level I Schedule



Measurement Uncertainty Recapture (MUR)

- | Standard Appendix K Uprate
- | 1.6% Increase in Rated Thermal Power
- | New Rated Thermal Power of 2609 MWt
- | Approved
- | Implemented

Leading Edge Flow Meter Installed on FW Piping



2009 BOP Efficiency Improvements

- | Low Pressure Turbines
- | Electrical Generator and Exciter
- | Support Systems
 - Iso-phase Bus Duct Cooler
 - Secondary Cooling
- | Feed-water Heaters (2)
- | Main Steam Re-heaters (4)
- | Main Steam Regenerative Heat Exchanger

No NRC Review or Approval Required



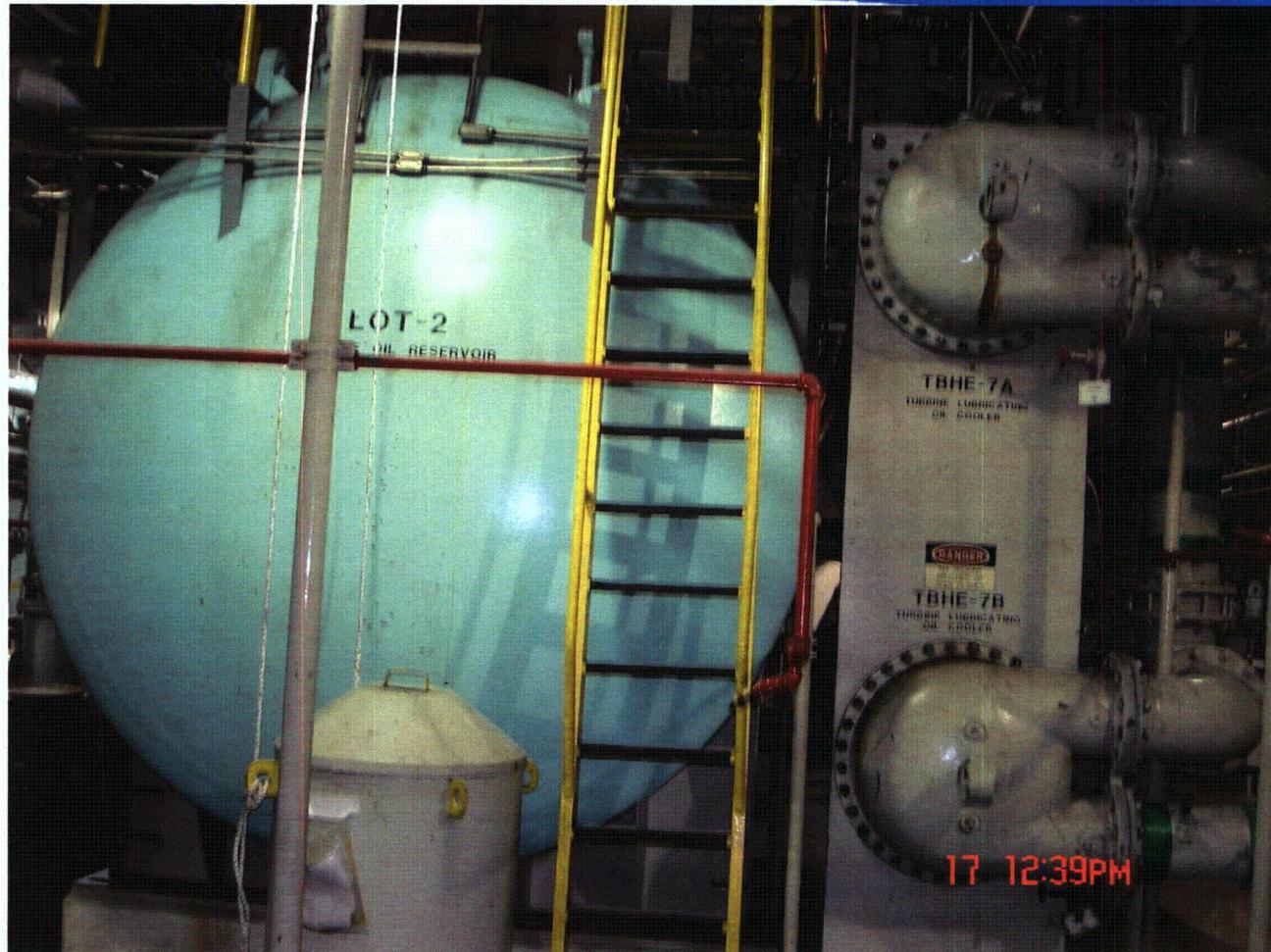
Main Generator, Exciter, and MSR



LP Turbine Rotor Delivery



Lube Oil Cooler and Tank



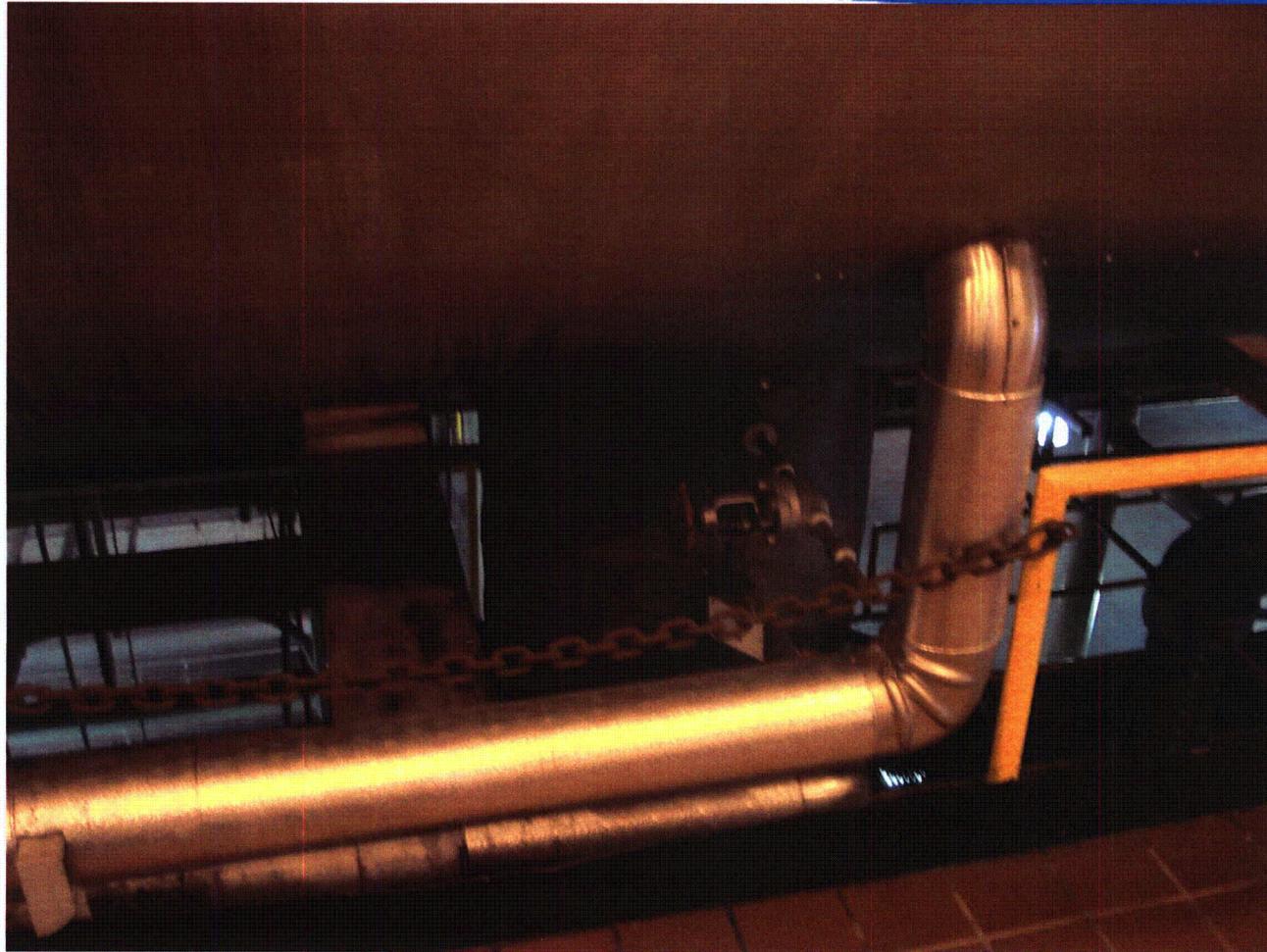
SC Heat Exchanger



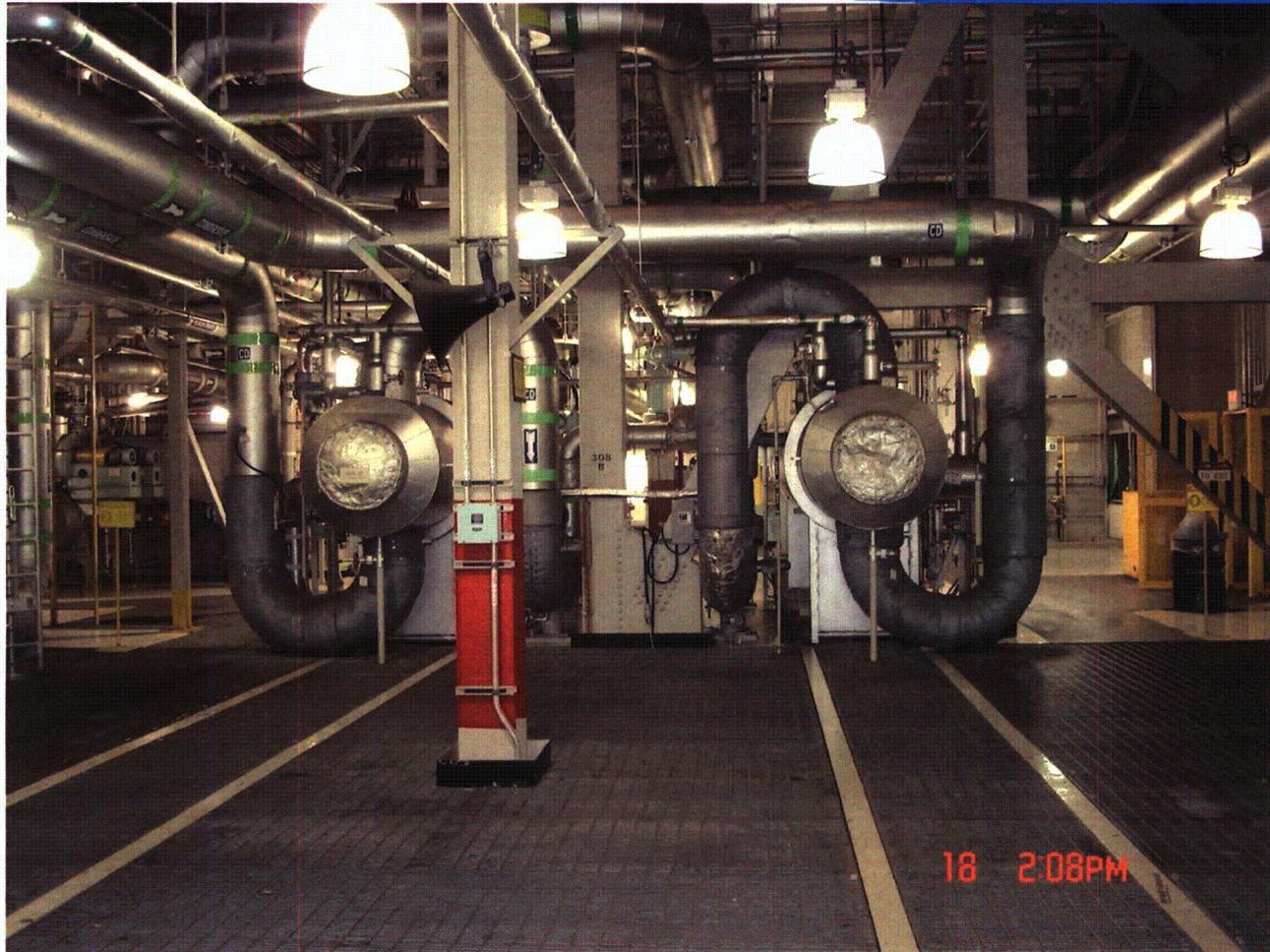
Moisture Separator Reheater



MSR Belly Drain HX Piping



3A and 3B Condensate Heaters



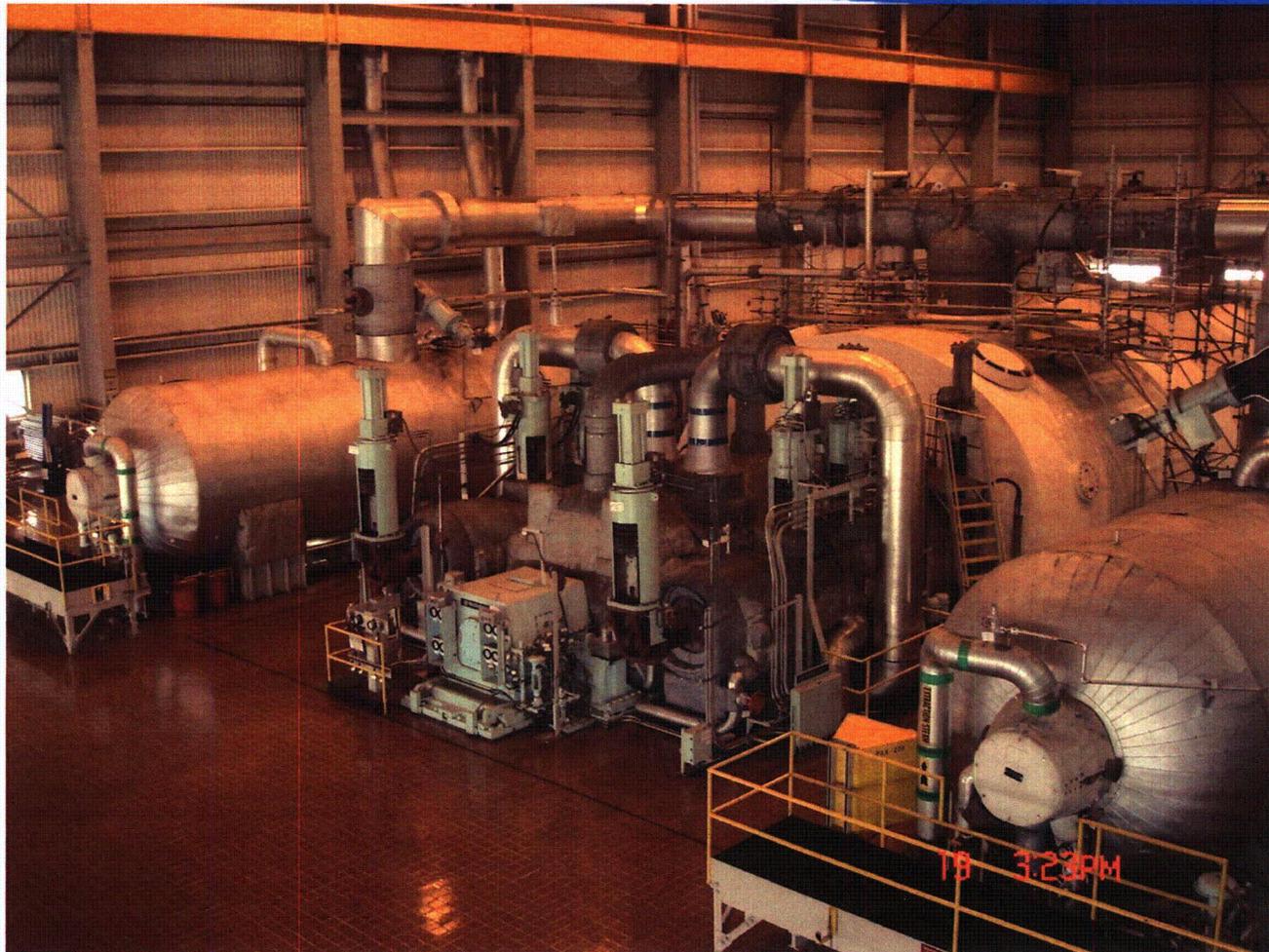
Iso-Phase Bus Duct Cooler



2011 Extended Power Uprate

- | Raising RTP to 3014 MWt
- | Additional Plant Changes
 - High Pressure Turbine
 - Condensate, Circulating Water Pumps and Motors
 - Feedwater Booster Pump
- | Larger Atmospheric Dump Valves
- | Improved Boron Precipitation Flowpaths
- | Supplemental Cooling Towers and Flowpath

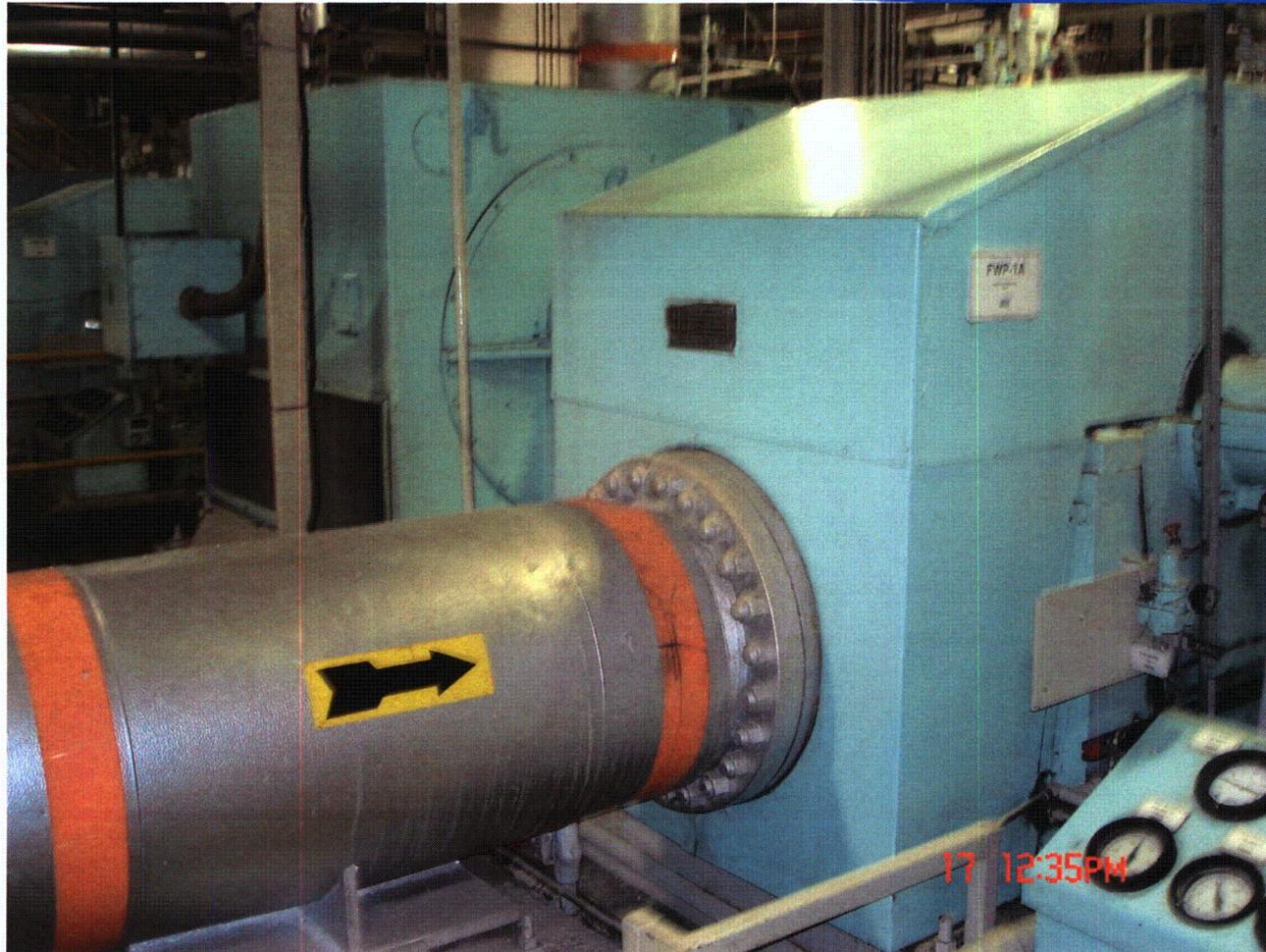
High Pressure Turbine



Main Steam Atmospheric Dump Valve



Feedwater Booster Pump



Proposed Supplemental Cooling Tower Location



Extended Power Uprate Relationship with License Renewal

- | License Renewal Fluence Projections Based on Anticipated EPU Core Design (125%)
- | Thermal Fatigue
 - Minor Changes to Temperature and Pressure
 - License Renewal Application Will Bound EPU Conditions
- | Environmental Qualification Could be Impacted
 - Containment Temperature/Pressure MAY Increase
 - Source Term Increases MAY Impact Component Dose



Extended Power Uprate Licensing

- | Extensively Using Industry Experience
- | AREVA and PE Represented on NEI Task Force
- | Patterning LAR After Most Recent PWR Efforts (Ginna) Including Consideration of RAIs
- | Remaining Consistent with RS-001 and NRC Feedback
- | Necessary Analytical Support Well Underway
- | Transmission Capacity/Stability Studied - No changes needed for EPU
- | Scope/Format of Environmental Report Not Yet Resolved

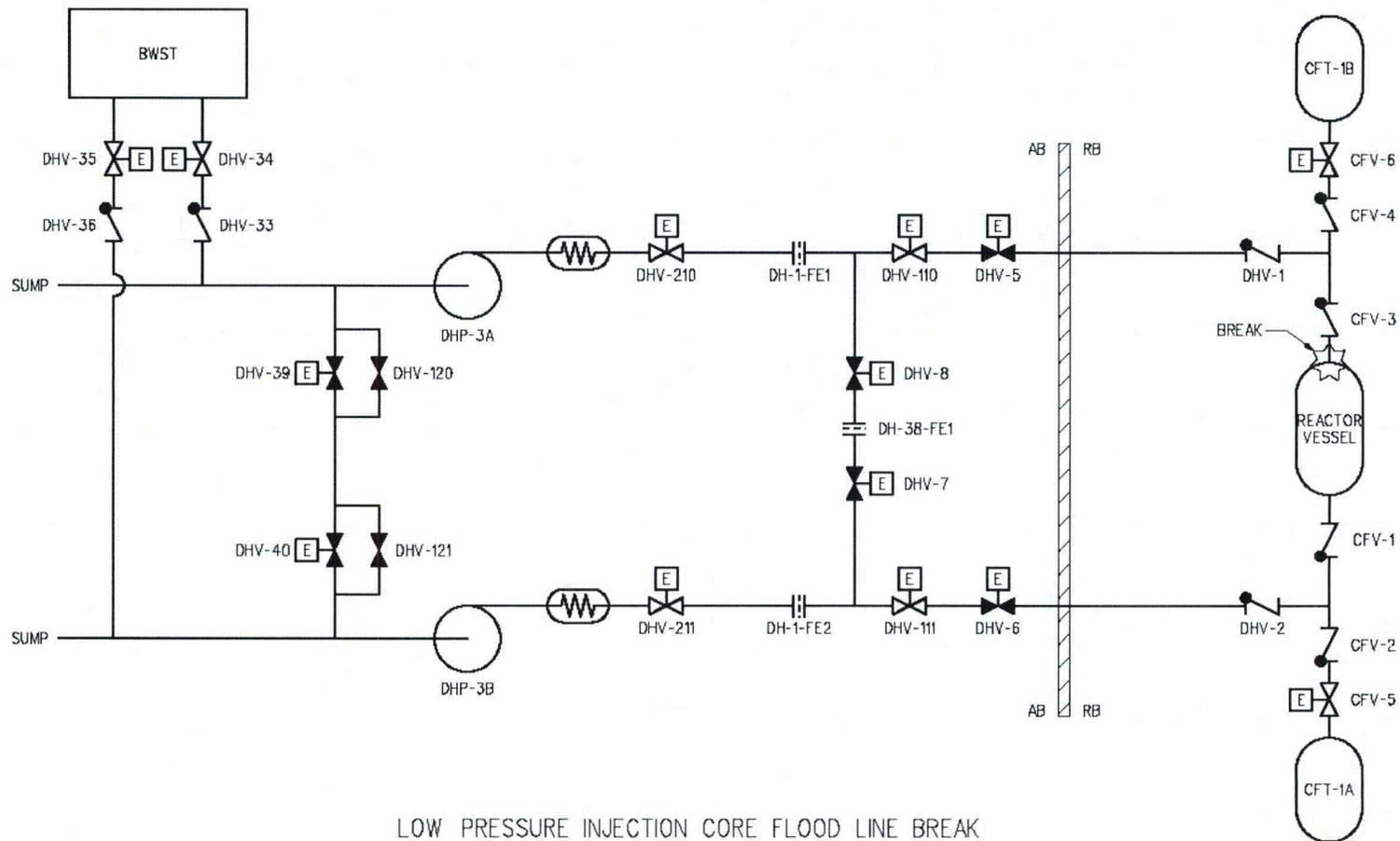
Early EPU Licensing Activities

- | OE Indicates that Activities that can be Addressed Separate From the EPU Submittal Should Be Resolved Early. The Following Subjects Are Being Addressed:
 - Potential Exemption (Core Flood Line Break with Concurrent Bus Failure)
 - SBLOCA Manual Action/Mitigation Strategy
 - Rod Withdrawal (Reactivity Insertion) Methods
 - Boron Precipitation

Core Flood Line Break

- | Event is the Break of the Combined LPI/Core Flood Line Combined with Loss of Opposite Train ES Bus
- | With Current Plant Equipment and Configuration the Results are Inadequate at EPU Power Level
- | It Requires Extensive Plant Modification to Obtain Adequate Results
- | Ongoing Rulemaking Would Not Require Consideration of Such Event(s)
- | PE-F Considering Exemption to Address this Event Until the Rulemaking is Complete
- | Exemption Submittal Scheduled by August, 2008

Core Flood Line Break



LOW PRESSURE INJECTION CORE FLOOD LINE BREAK

Small Break LOCA Mitigation

- | Atmospheric Dump Valves (ADV) Replaced with Larger Safety-Related Valves
- | Currently Approved Manual Action to Select 'Inadequate Subcooling Margin Setpoint' Changes Target SG Level for EFW. We Will Propose to Expand It's Functionality
 - By Connecting ADV Open Circuit to Same Switch the Secondary Will More Rapidly Depressurize
 - Secondary Depressurization Will Result in Increased P/S Heat Transfer Reducing RCS Pressure
 - This Will Increase HPI Flow Which Will Improve SBLOCA Control
- | LAR Scheduled by August, 2008



Rod Ejection (Reactivity Insertion) Accident Methods

- | Current Methods Would Not Produce Acceptable Results
- | New Methods Developed and Being Licensed as Part of AREVA EPR Efforts
- | Method Will Need to be Approved for Operating Plants and Added to CR3 ITS List of COLR Methods
- | AREVA Will Submit Operating Plant Topical After NRO RAI's on EPR Version Identified in Fall 2008
- | PE-F Also Planning to Adopt SRP Acceptance Criteria for RCS Pressure
- | LAR Scheduled by February, 2009

Boron Precipitation

- | CR3 Boron Precipitation Methods Supported by Rigorous Calculations and Specific NRC Approval
- | Two Active Means are Relied Upon
 - Auxiliary Pressurizer Spray
 - Dump-to-Sump
- | Same Methods Will Be Retained With Enhanced 'Capacity' and Improved Controls
- | SER Includes Details on Capacity/Coverage
 - We Will Evaluate Under 10 CFR 50.59
 - Contingent LAR Scheduled for October 2008

Potential EPU Licensing Activities

- | Set-point Methodology (TSTF-493, R3)
- | Evacuation Time Estimate Update
- | Source Term/EAB Boundary
- | X/Q Methodology

Next Steps

- | Maintain Open Dialogue
- | Schedule Regular Meetings
- | July Topics
 - Finalize Environmental Report Plan
 - Technical Discussions:
 - Core Flood Line Break
 - Secondary Depressurization
- | Scheduling Separate (August) Meeting on SG Replacement

Conclusions

- | PE-F Focused to Achieve Required Outcomes
 - w Safe and Reliable Plant Before and After Projects
 - w Appropriate Configuration Management Maintained
 - w Effective Communication With Stakeholders
- | Interact With NRC Staff To Facilitate Approvals

Questions?

| Comments or Questions?

