

UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION III 801 WARRENVILLE ROAD LISLE, ILLINOIS 60532-4351

July 27, 1999

MEMORANDUM TO:

Files

FROM:

Anton Vegel, Chief, Reactor Branch 6, DRP

SUBJECT:

OCTOBER 22, 1998, D. C. COOK RESTART MEETING SLIDES

Based upon review of documents related to NRC oversight activities at D. C. Cook, we noted that the attached slides from the October 22, 1998, D. C. Cook Restart Meeting have not been placed on the docket for public review. We are forwarding a copy to the Public Document Room to correct this oversight.

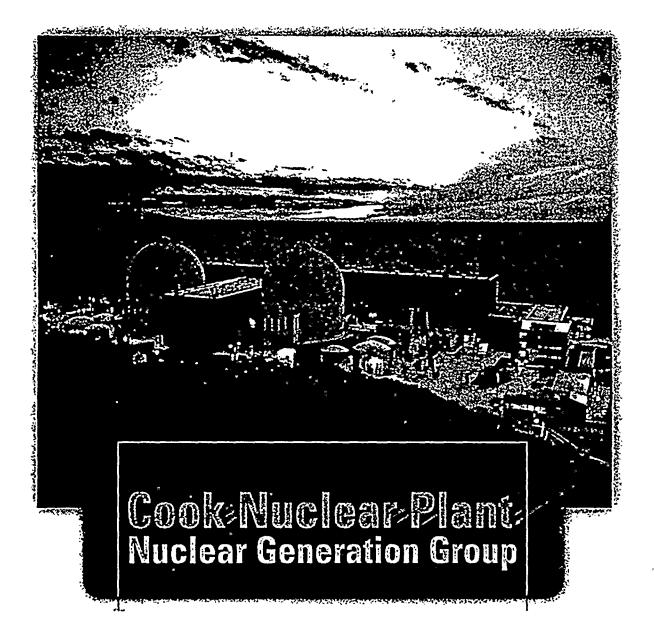
Docket Nos. 50-315; 50-316 License Nos. DPR-58; DPR-74

Attachment:

As.stated

cc w/att:

PUBLIC IE-01



Restart Meeting

October 22, 1998



Presentations

Presentation	<u>Speaker</u>	<u>Page</u>
Opening Remarks	R. Powers	-
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Schedule, Strategies, and Progress

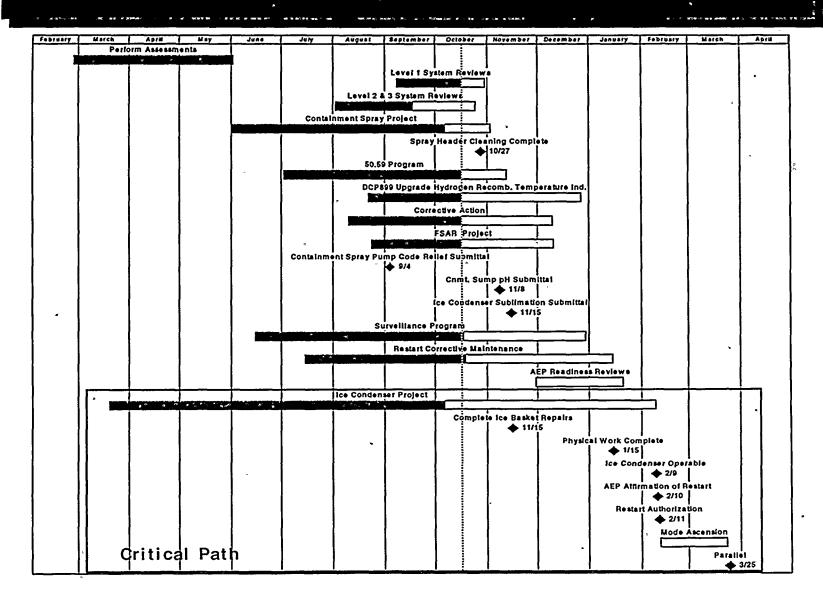
John Sampson Site Vice President



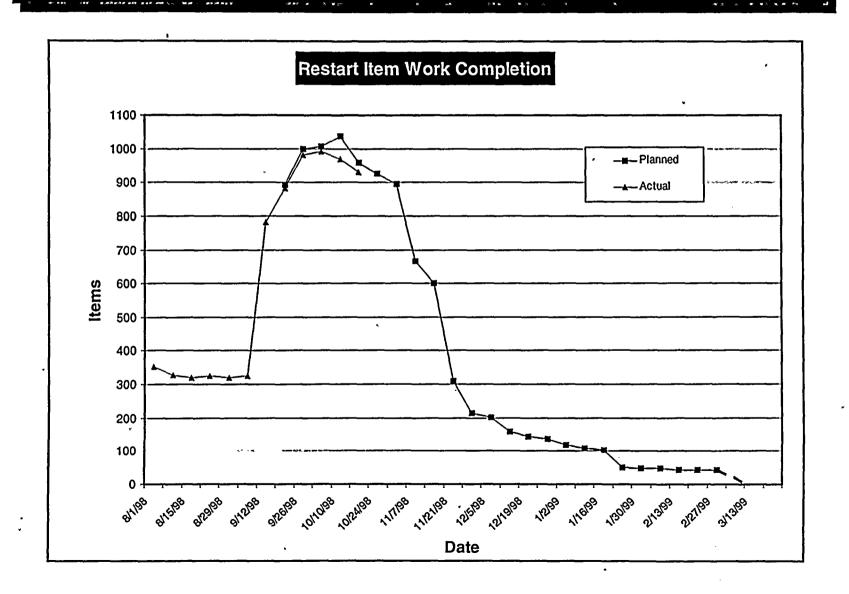
Discussion Topics

- Schedule
- Strategies and readiness milestones
- Progress
- Ice condenser status

Restart Schedule



Total Restart Items



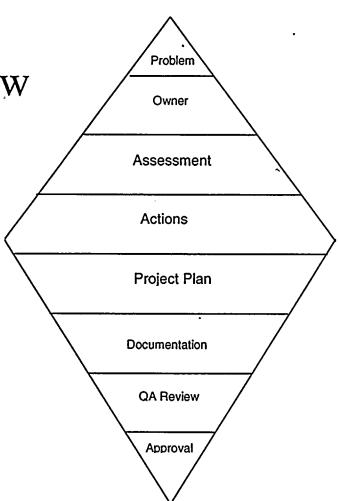
Discussion Topics

- Schedule
- ✓ Strategies and readiness milestones
- Progress
- Ice condenser status

Restart Strategy Diamond

Comprehensive overview

- Issue resolution
 - —objectives
 - —action plans
- Communication
 - -internal
 - -external



Strategy Readiness Milestones

- Readiness milestones
 - -strategy restart work complete
 - -verification complete
 - -closeout packages complete, signed, and approved
 - -SMRT review and approval complete
- Inspection support
 - -AEP inspection response team assigned

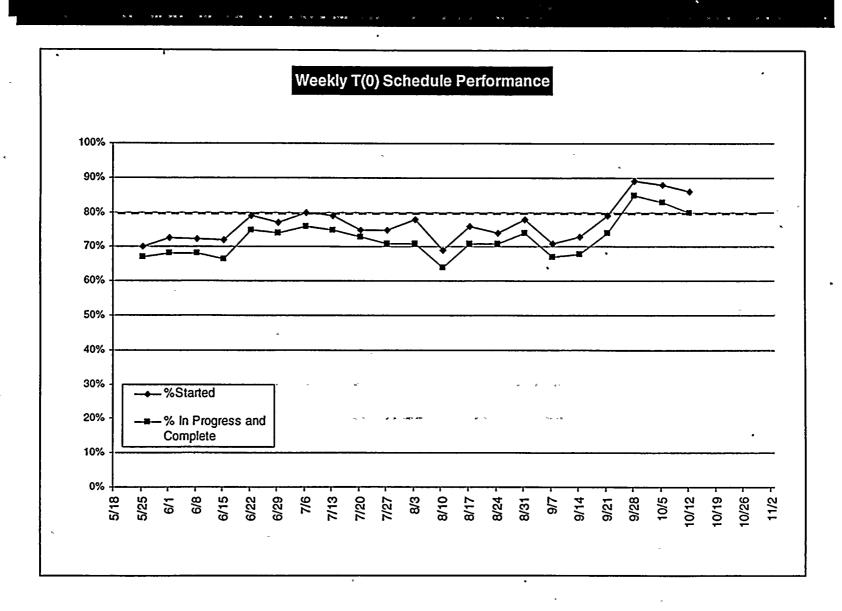
Discussion Topics

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Progress

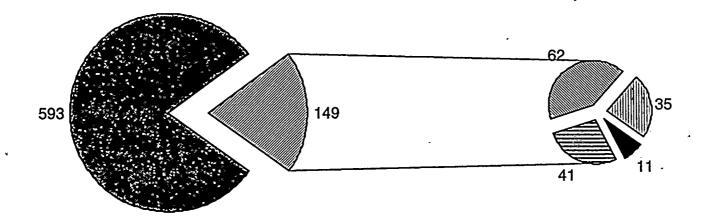
- Strategies
- Work control / corrective maintenance
- Management effectiveness
 - -standards and expectations
 - -performance assurance effectiveness
 - -line management ownership
- Design basis improvements
 - -UFSAR

Schedule Performance



Non-Performance Categories

Breakdown of Non Performance Categories for Week T(0)



Management Effectiveness

- Crossroads workshops
 - -managers and supervisors
 - -reality of current plant status
 - -reinforced need to change behaviors
 - -focus on accountability

Management Effectiveness

- Replace "them" and "they" with "us" and "we"
- Communicate effectively
 - -promptly identify and correct problems
- Plan, plan, plan then execute, check, and adjust
- Do what we say we will do
- Mutual accountability
- Line management owns quality
- Have passion!
- Pass it on

Discussion Topics

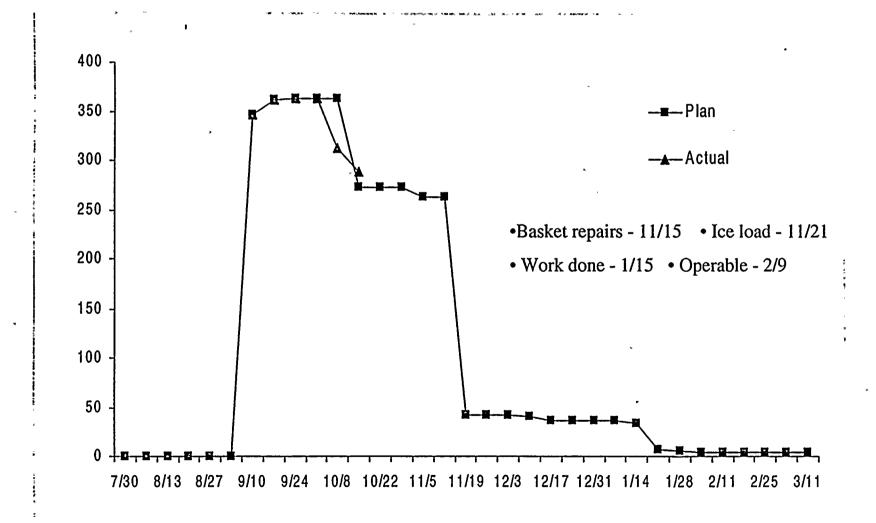
- Schedule
- Strategies and readiness milestones
- Progress
- ✓ Ice condenser status

Ice Condenser Project Update

Pat Russell Ice Condenser Project Manager



Project Schedule / Status



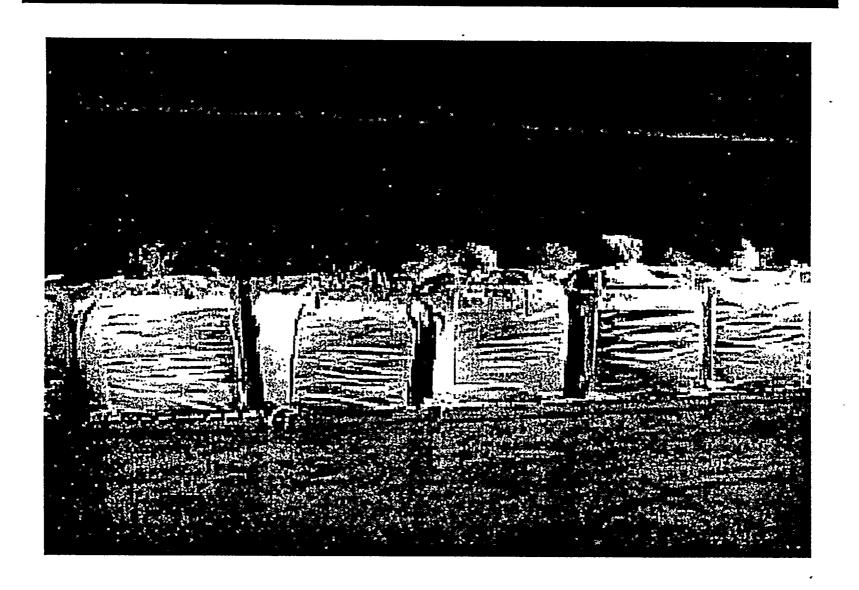
Major Improvements

- Ice
- Ice basket restoration
- Top deck doors
- Lower inlet doors / bumper bags
- Air handling units

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- More than adequate volume available
- Improved FME program
 - -cleanliness
 - -security

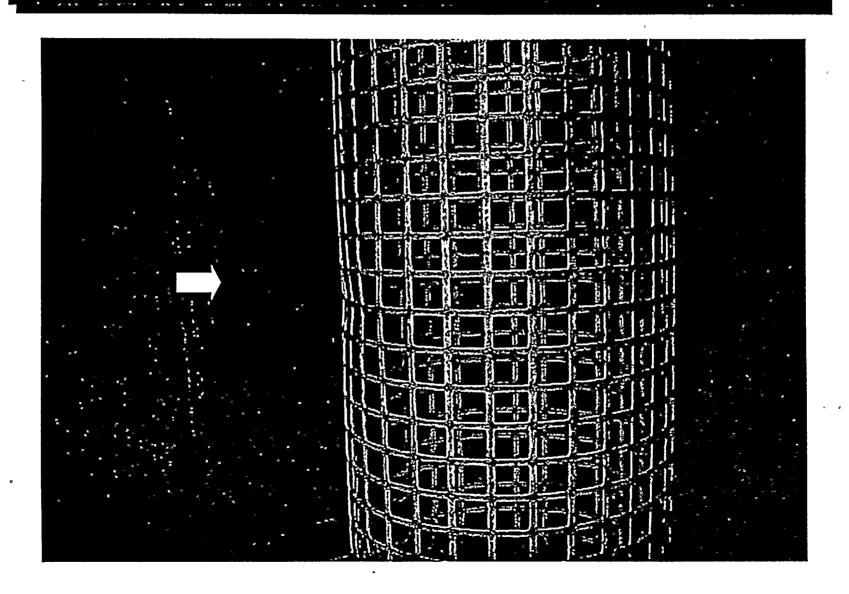
Ice Storage

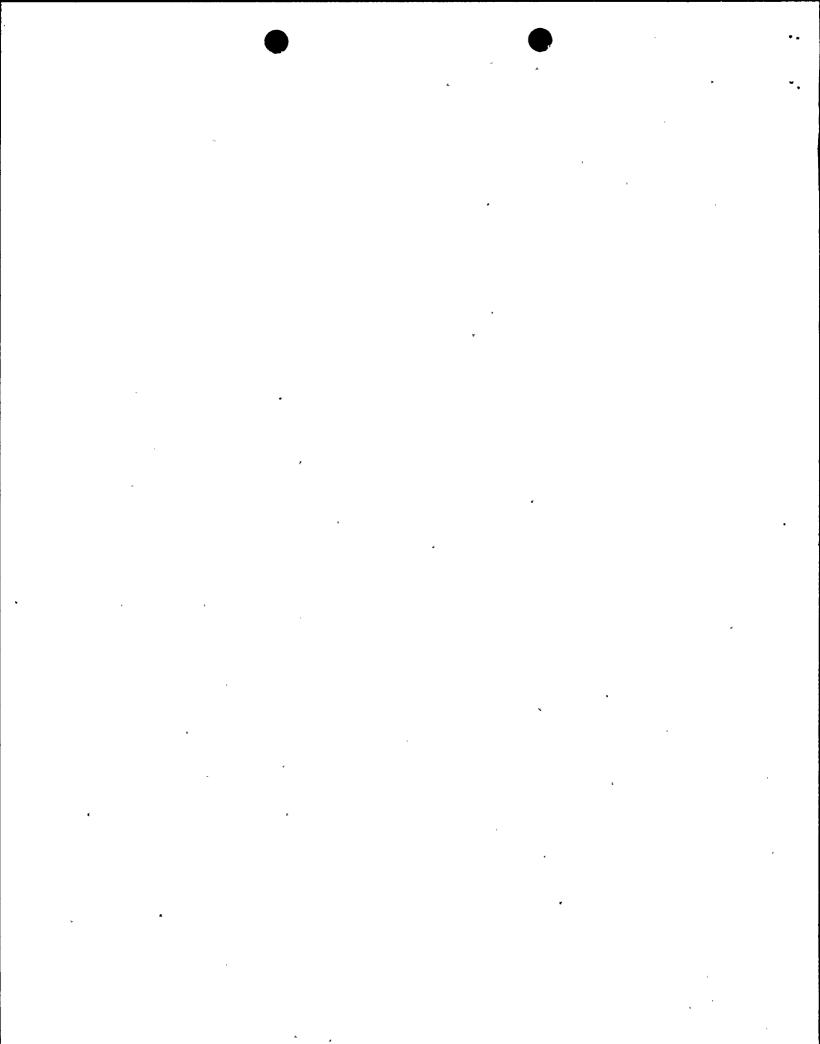


Ice Basket Restoration

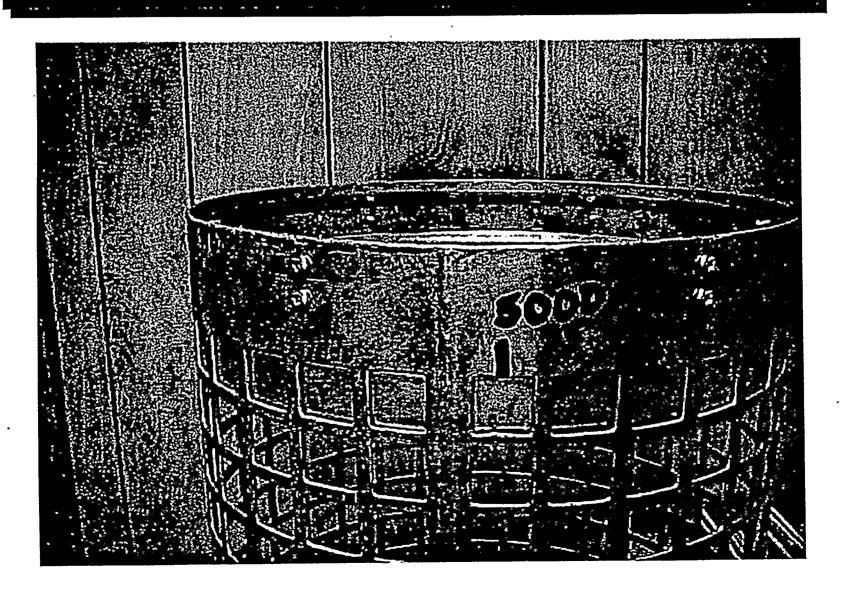
- Damage criteria
- Replacement baskets
 - basket top ring improvements
 - lifting rig improvements
- Training / procedure improvements

Dented Basket

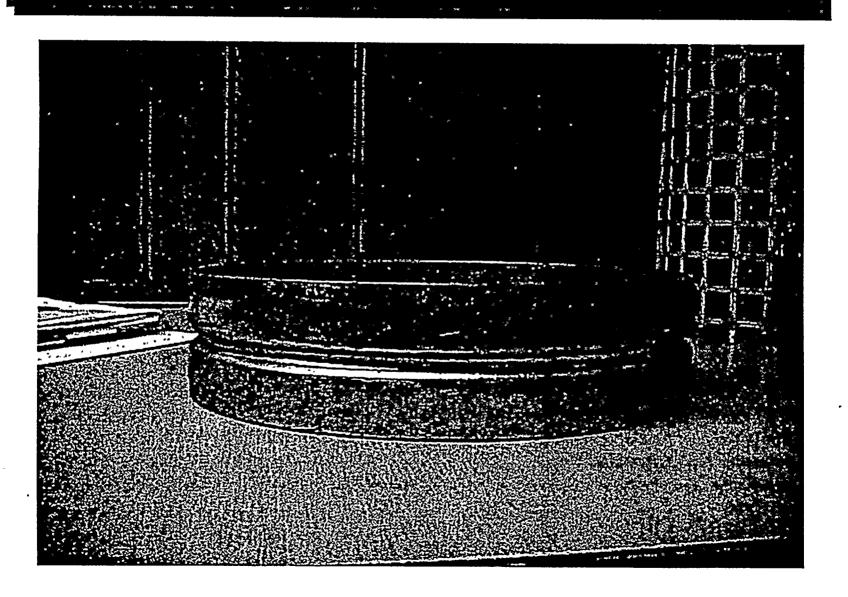




2 Foot Basket Top



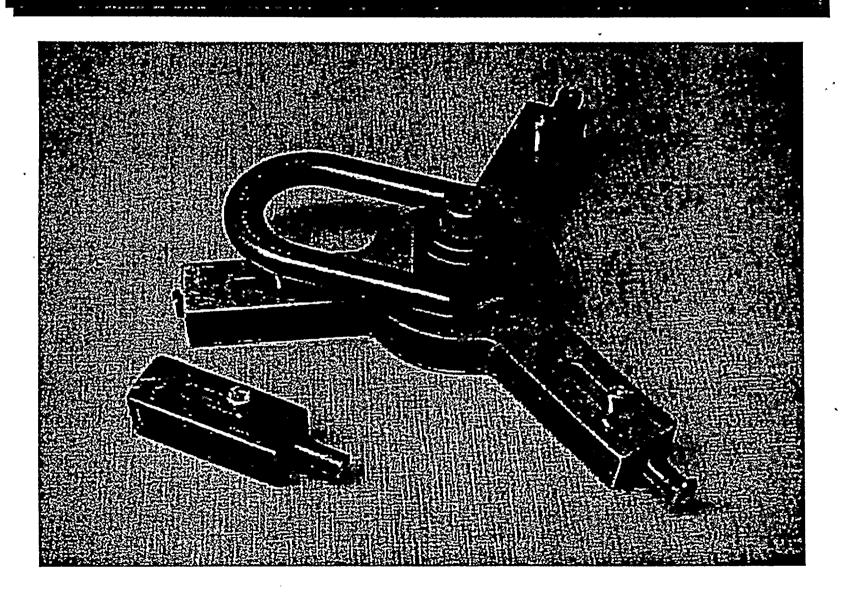
Top Ring

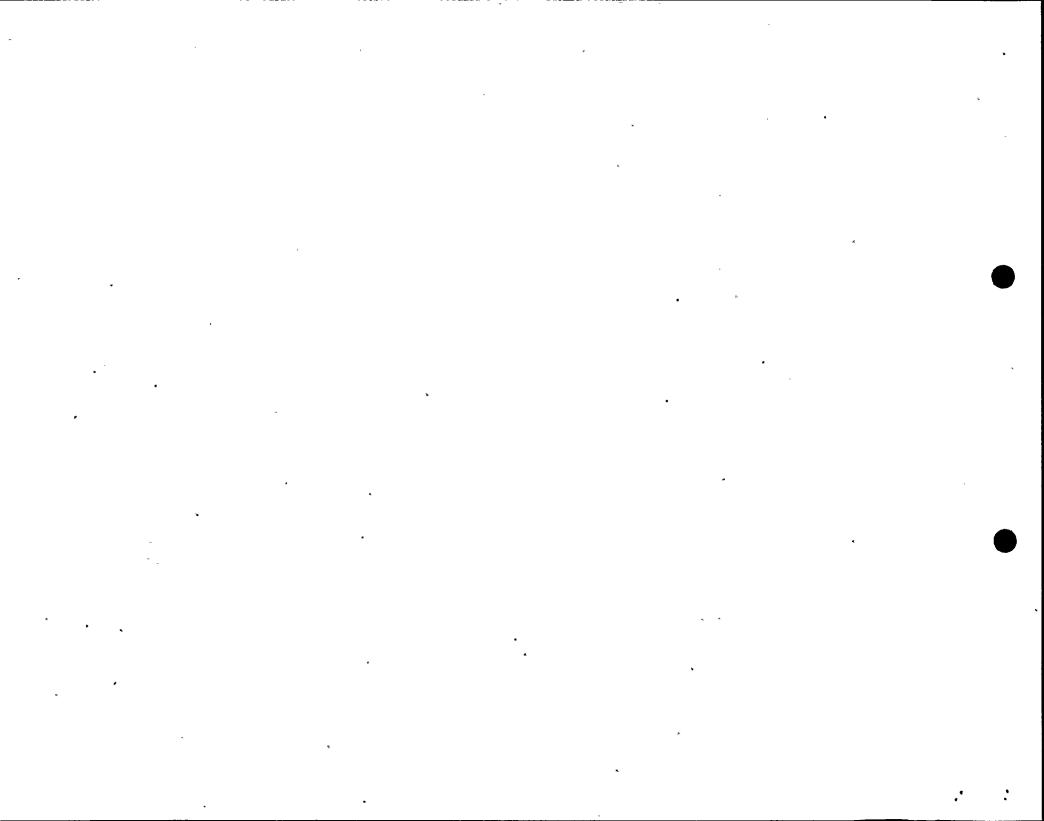


Pulled Ligament

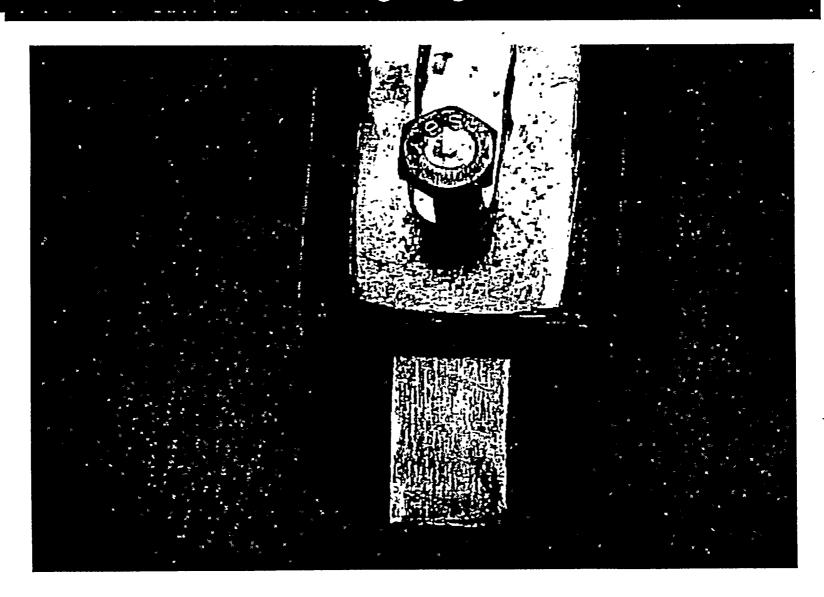


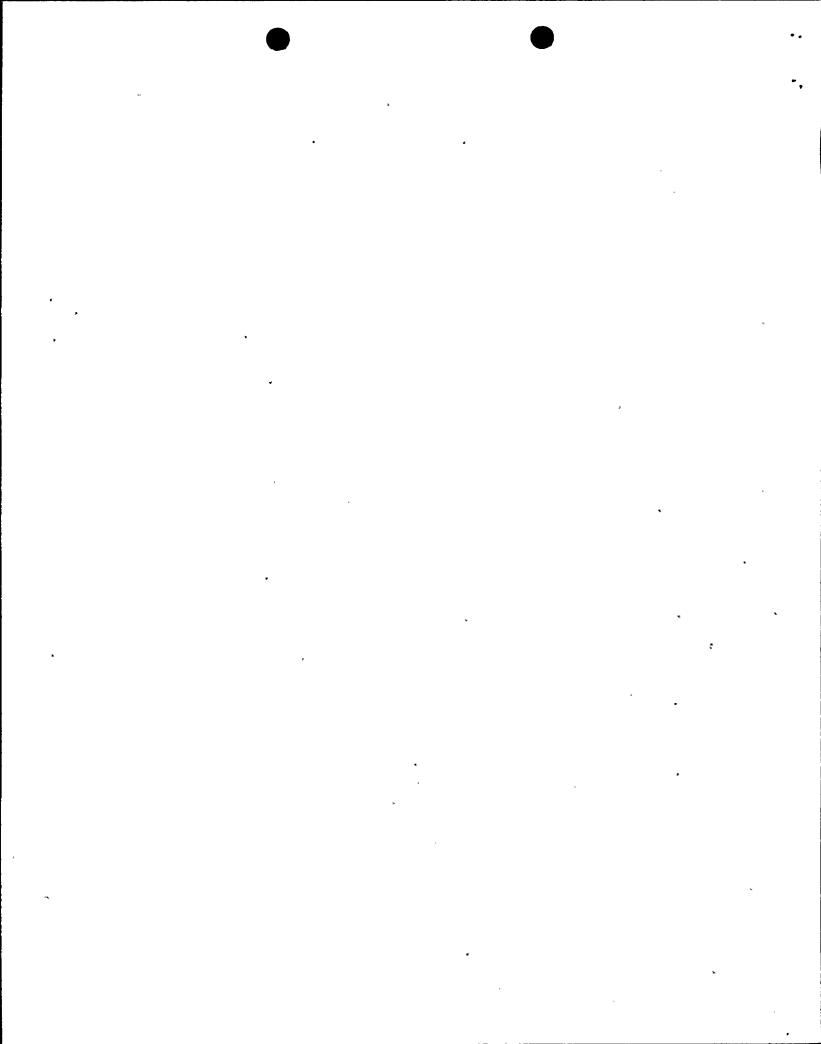
Existing Lifting Rigs





New Flat Face Lifting Rig





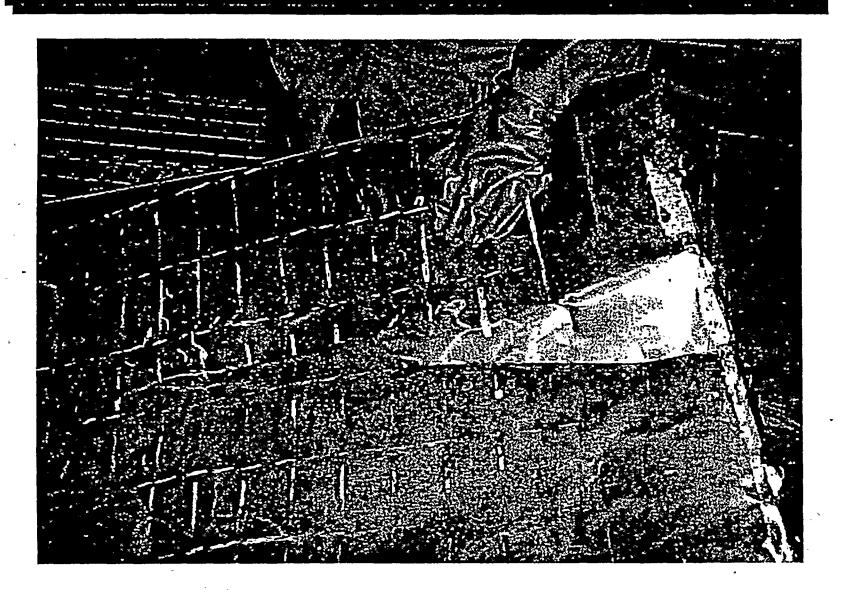
Ice Condenser Training Enhancements

- Formalized training
 - familiarization module
 - skill modules
 - maintenance activities
 - surveillance activities
- Formalized qualification

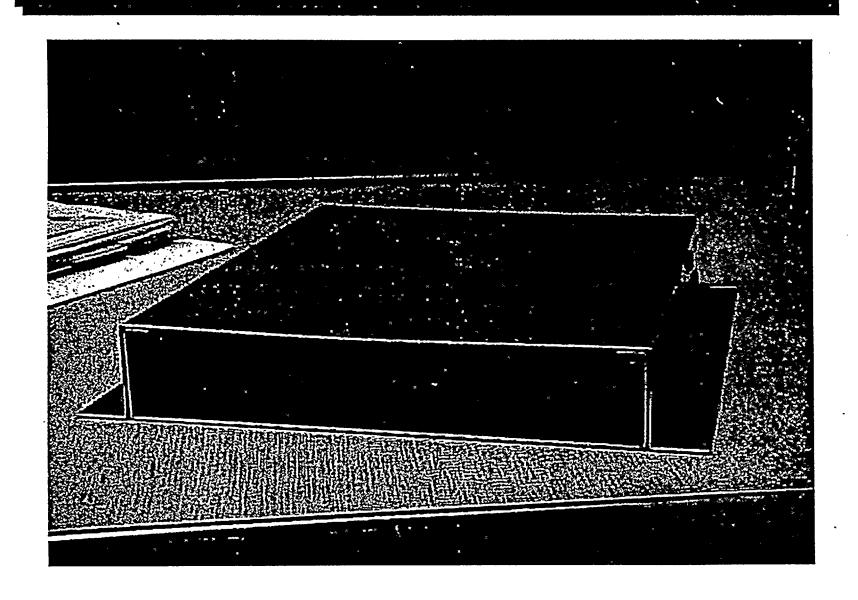
Top Deck Doors

- All new doors
- Rebuild radial beam insulation enclosure
- Defined detrimental damage

Old Top Deck Door



New Radial Beam Enclosure

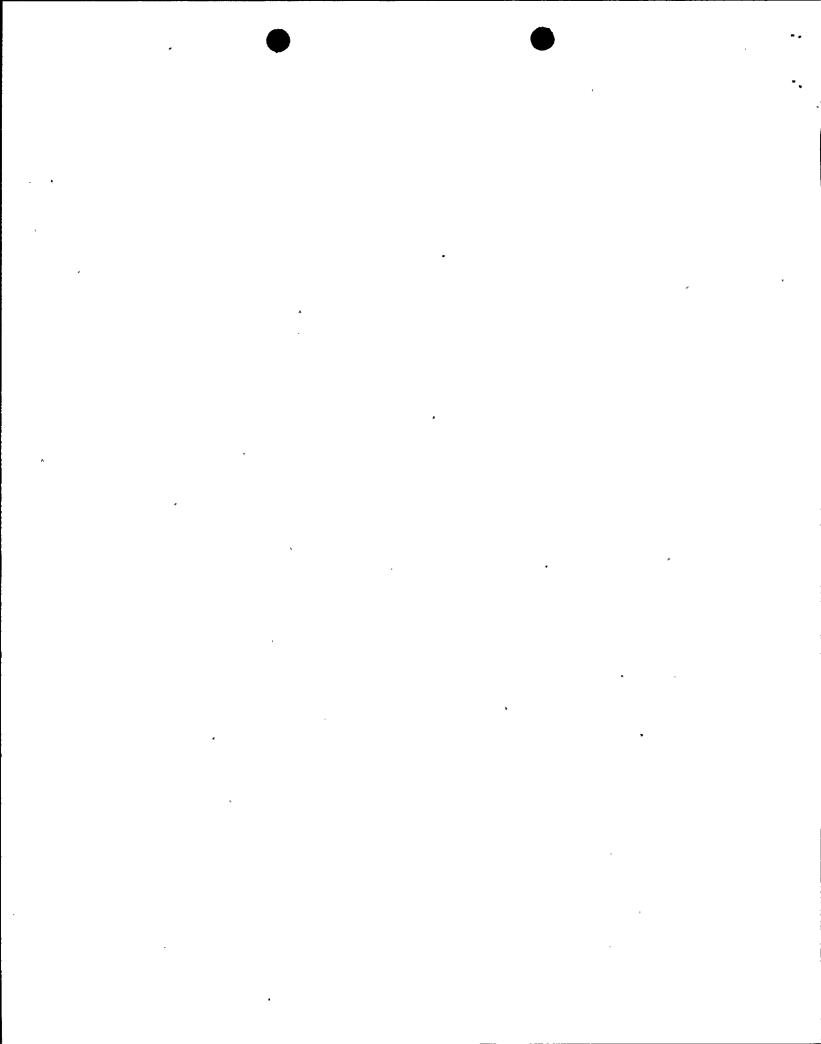


Lower Inlet Doors

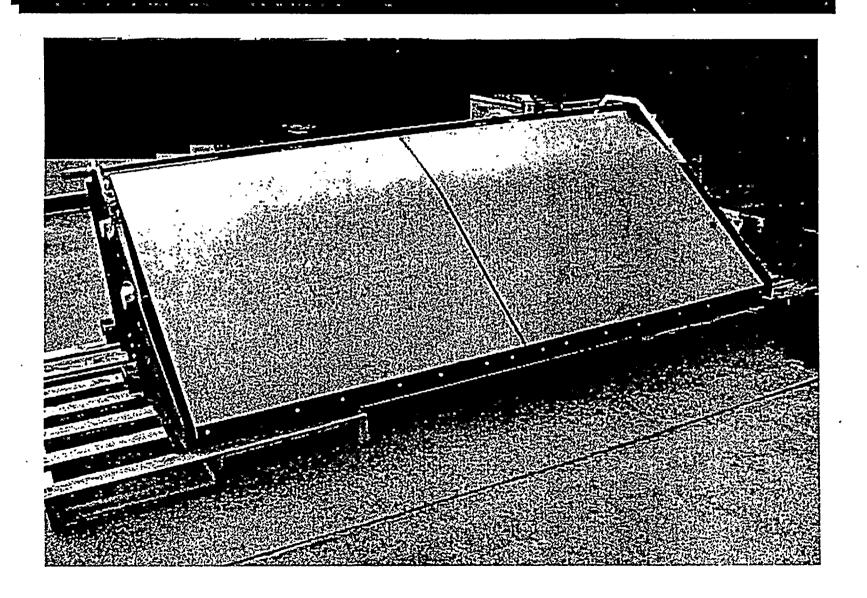
• Update to next generation design

Degraded Bumper Bag





Air Box



Air Handling Units

- Re-establish approved design configuration
- Upgrade materiel condition

Quality Reviews

- Utility peer evaluations (complete)
 - Duke
 - TVA
- Assessments (on-going)
 - -performance assurance
 - -engineering self assessment
 - —third party

World Class Ice Condenser

February 9, 1999

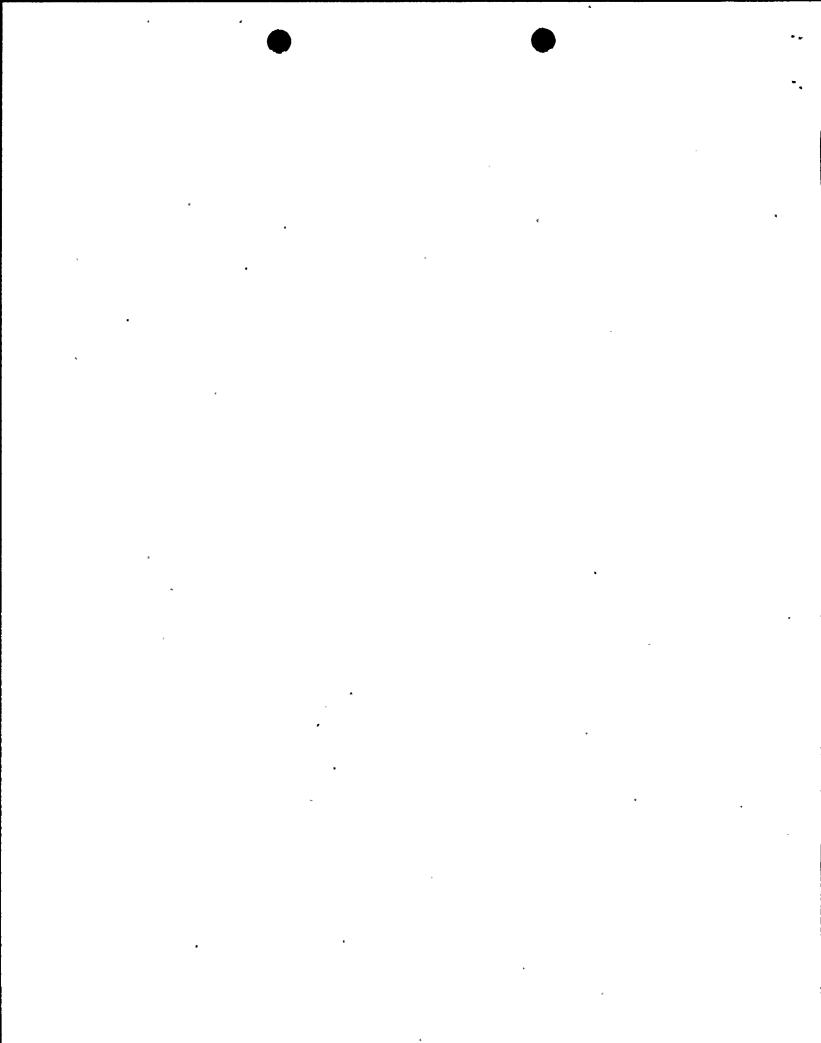
Restart Metrics

Doug Cooper Plant Manager



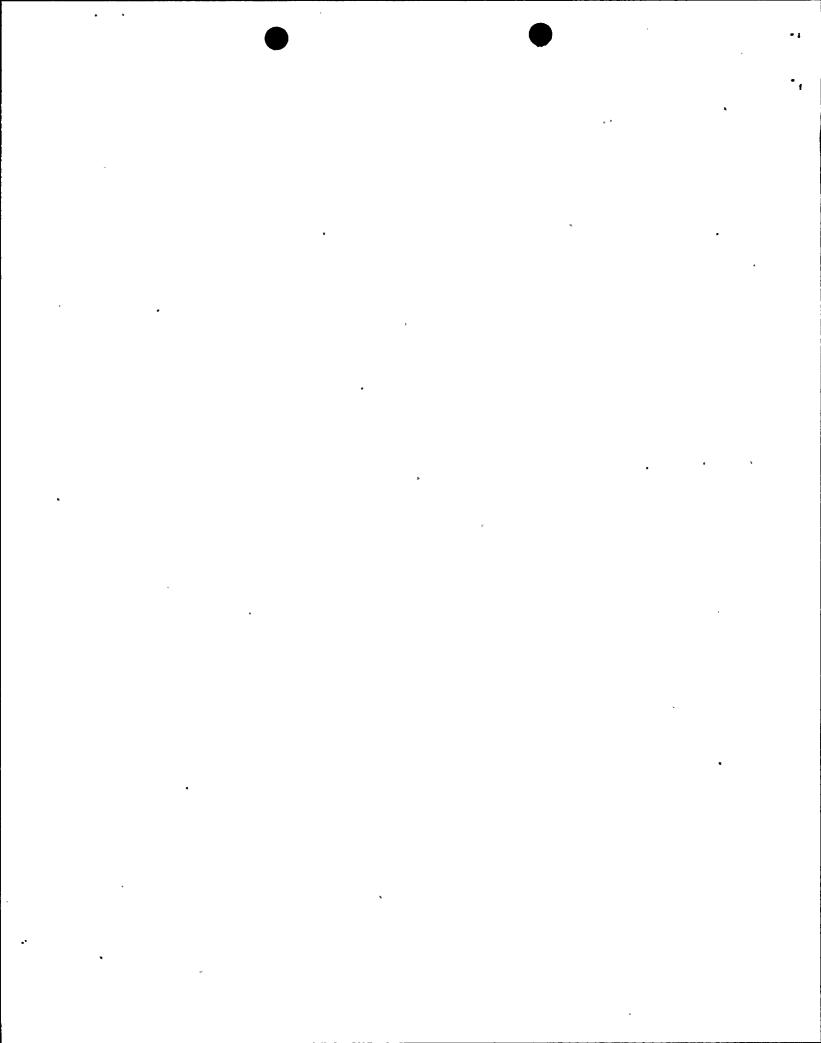
Background

- Part of top level strategy
- Metrics are one input into restart decision
- Selected from functional area measures
 - -schedule
 - —workdown curves
 - —performance indicators
- Goals represent targets
 - -restart
 - —post restart



Readiness Categories

- Organizational
- Operations
- System and containment
- Programmatic
- Regulatory
- Communications



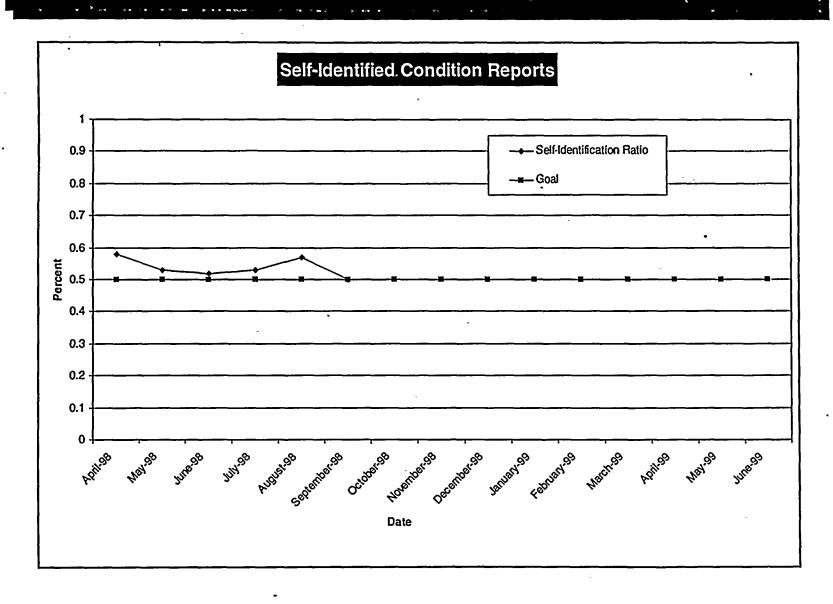
Restart Metrics

METRICS	Goal at Startup	Current Status -
I ORGANIZATIONAL READINESS		
Management/Leadership	Top level strategies implemented	On Track
Self-Identified Condition Reports	50% or greater	Achieved
Root Cause Quality	Increasing	Metric-by-10/15
Corrective Actions Effectiveness	Metric in place	Data Compilation
Restart Item Work Completion	Zero to complete	966 Items
II OPERATIONS READINESS		4
Operator Training -	Training Complete	Training Scheduled
Operations Procedures for Startup and Power Ascension	Zero to change	107 to change
Operator Distractions	100 or less	282 .
Surveillance Procedure Re-Validation	Zero to change	Metric by 10/13
III SYSTEM AND CONTAINMENT READINESS		•
Restart Modification Completion	Zero to Complete	25
Systems Accepted by Operations	All systems accepted	None Accepted
Temporary Modifications .	< 10	25

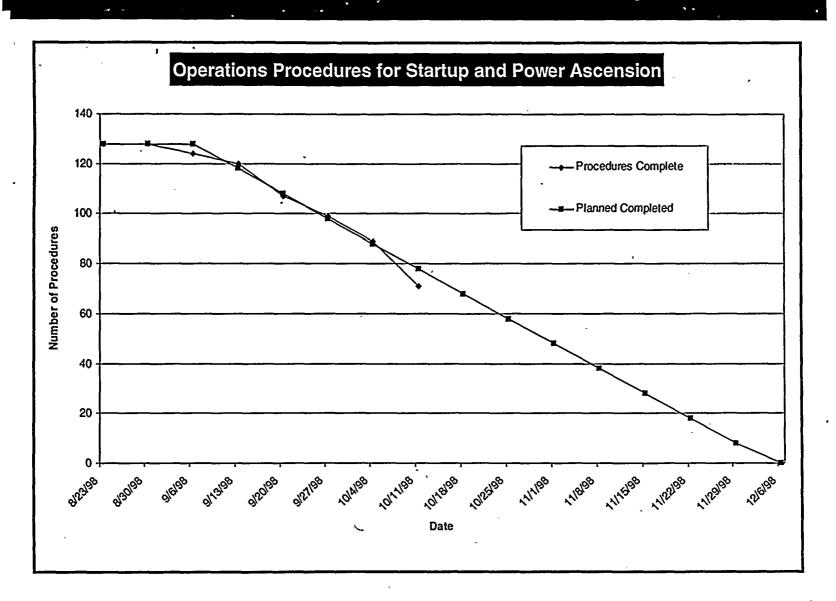
Restart Metrics

METRICS	Goal at Startup	Current Status .	
III SYSTEM AND CONTAINMENT READINESS (Continued)			
Corrective Maintenance Backlog	< 190 Backlog	1412 items to complete	
IV PROGRAMMATIC READINESS	-		
• 50.59 Quality	B Avg. and improving	B Average	
FSAR Re-Validation 50.59s	Zero to complete	70 to complete	
Calculation Quality	90 Quality score	Data compilation in progress	
As-Built Drawing Backlog	Zero to complete	648 to complete	
V REGULATORY READINESS			
Licensing Submittals	Zero overdue	8 to Submit	
License Submittal Quality	Quality > 7	Data compilation in progress	
Closeout packages	Zero to close	Process developed by 10/30	
VI COMMUNICATIONS READINESS		•	
Internal Communications	Surveys completed	Initial Assessment complete	
External Communications	Restart sessions conducted	Session planning in progress	

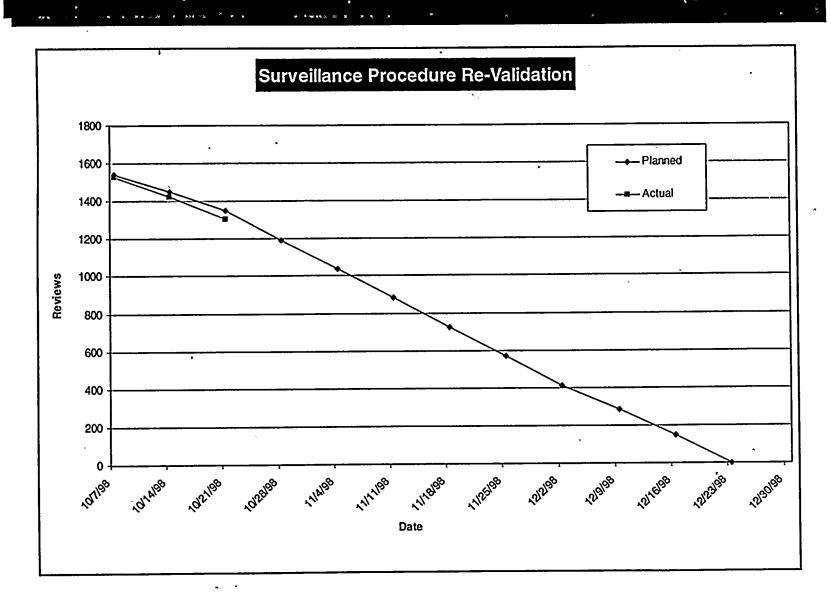
Self Identified Condition Reports



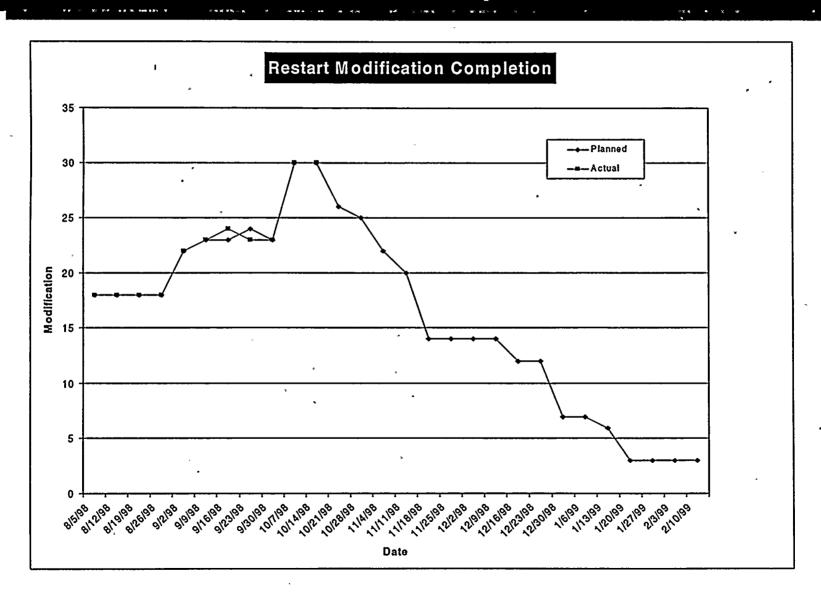
Operations Procedures for Startup



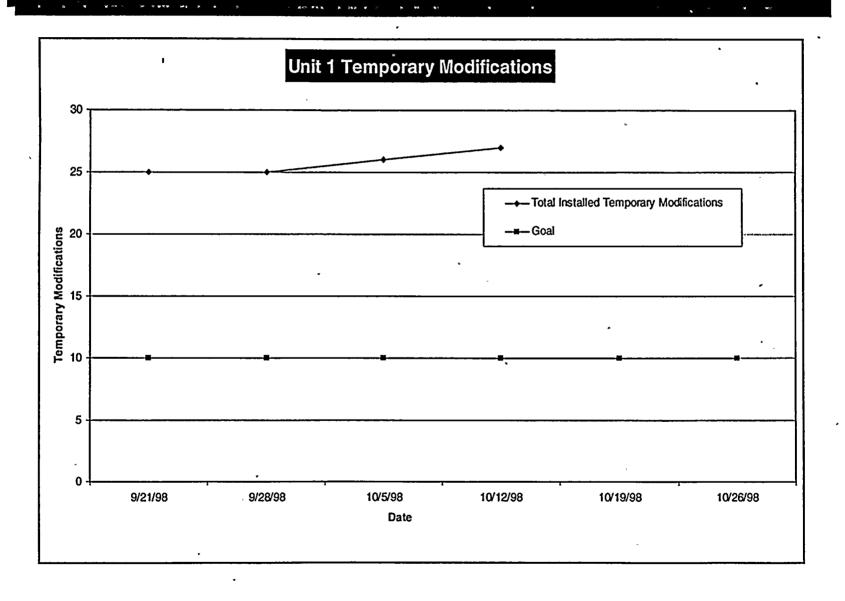
Surveillance Procedure Revalidation



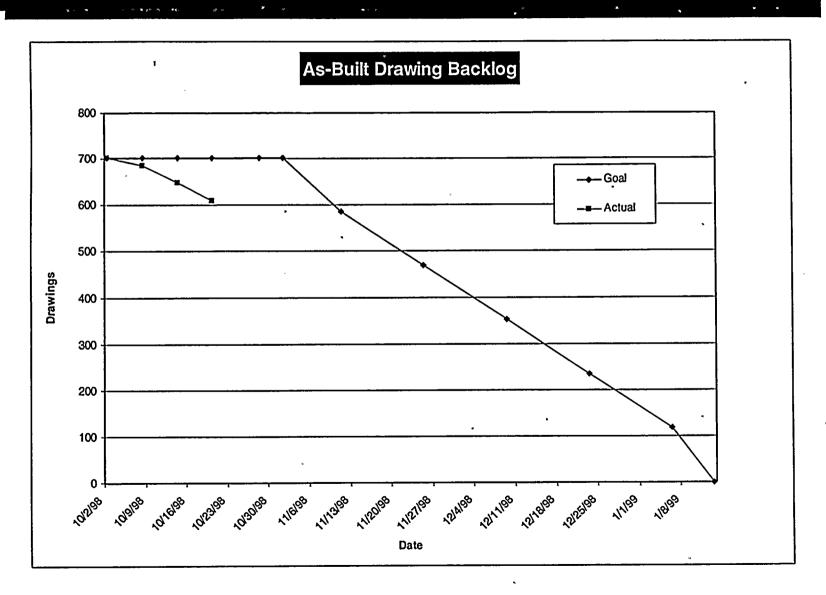
Restart Modification Completion



Temporary Modifications



As-Built Drawing Backlog



Summary

- Current status
 - -improvement
 - condition self identification
 - operator procedure validation
 - restart work completion
 - -challenges
 - restart modifications
 - temporary modifications
 - closeout packages
- Restart metrics
 - -safe startup
 - —continued improvement

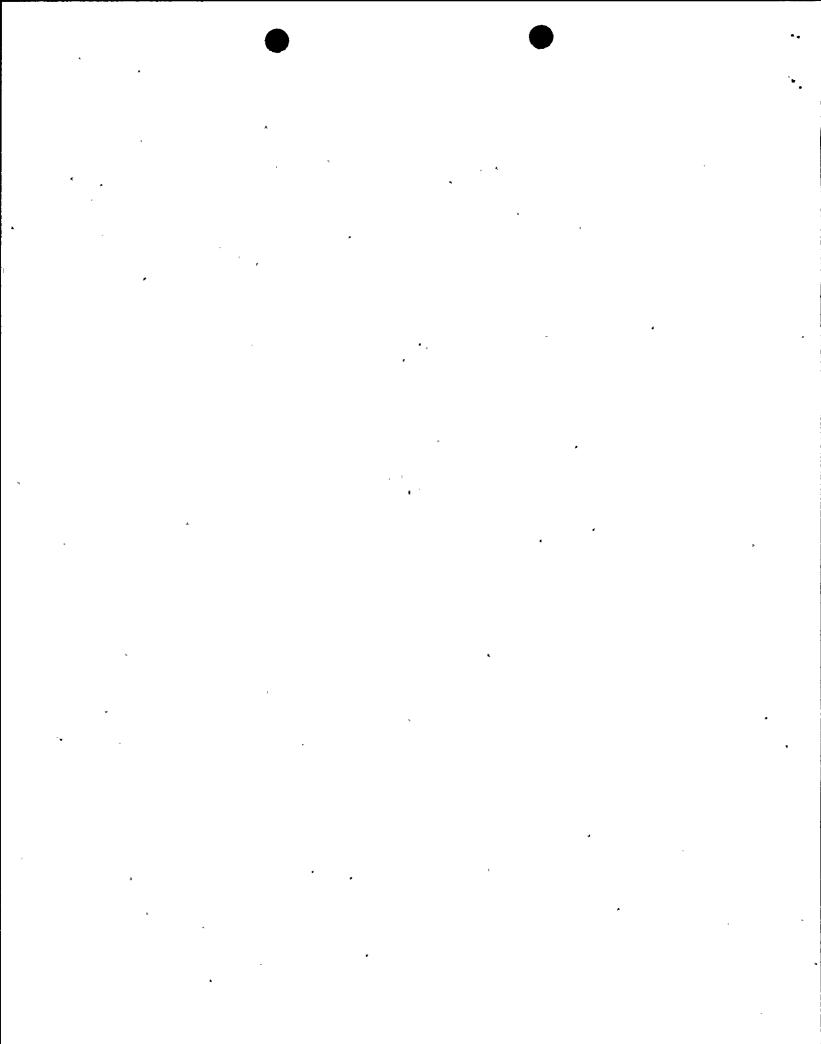
Engineering Progress Update

Rick Eckstein Chief Nuclear Engineer



Discussion Topics

- Generic letter 89-10 program
- Containment spray pump inspection results
- AFW SSFI status
- Engineering improvement initiatives



Generic Letter 89-10 Program

- Results and implications
- Action plan
 - -programmatic help
 - -extent of condition

Containment Spray Pump Update

- Problem
 - —unit 1 impeller vane tip rejectable cracks
- Questions
 - —result of low flow testing?
 - —technical options?

Auxiliary Feedwater SSFI

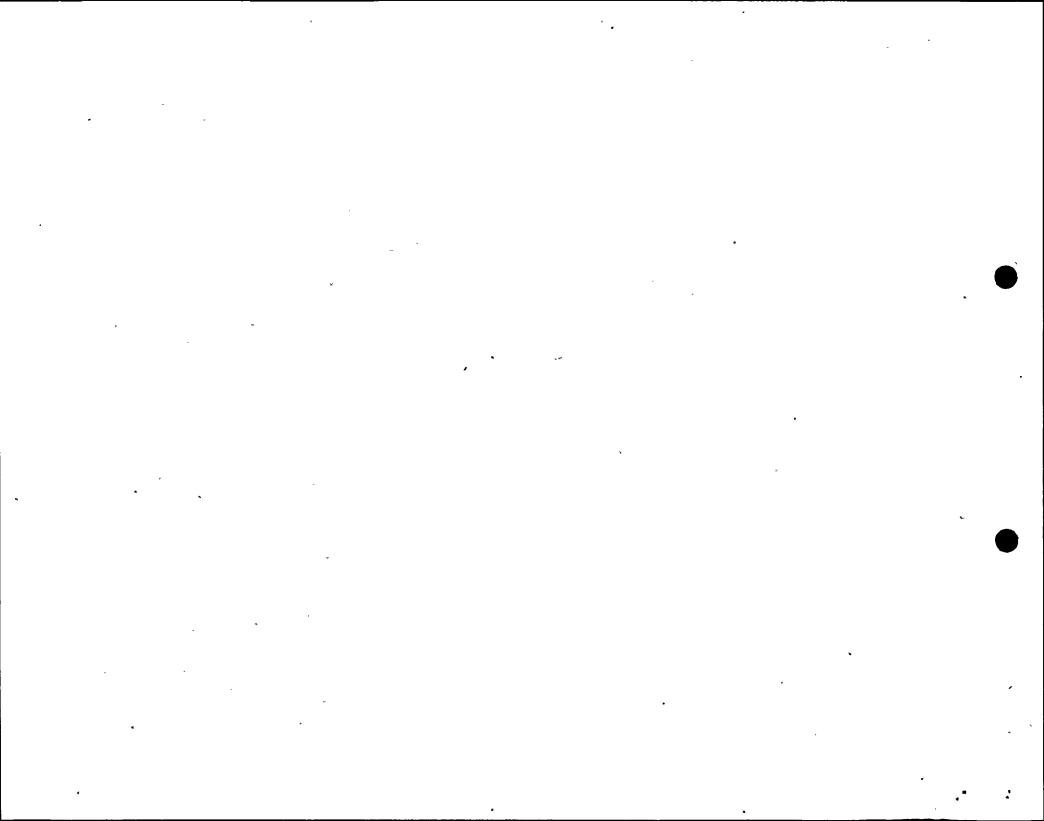
- Measures system review thoroughness
- Concludes 10/23
- Preliminary results

Additional Activity

- Evaluation to provide
 - —assurance that causes of programmatic issues are sufficiently bounded
 - —definition of potential adjustments

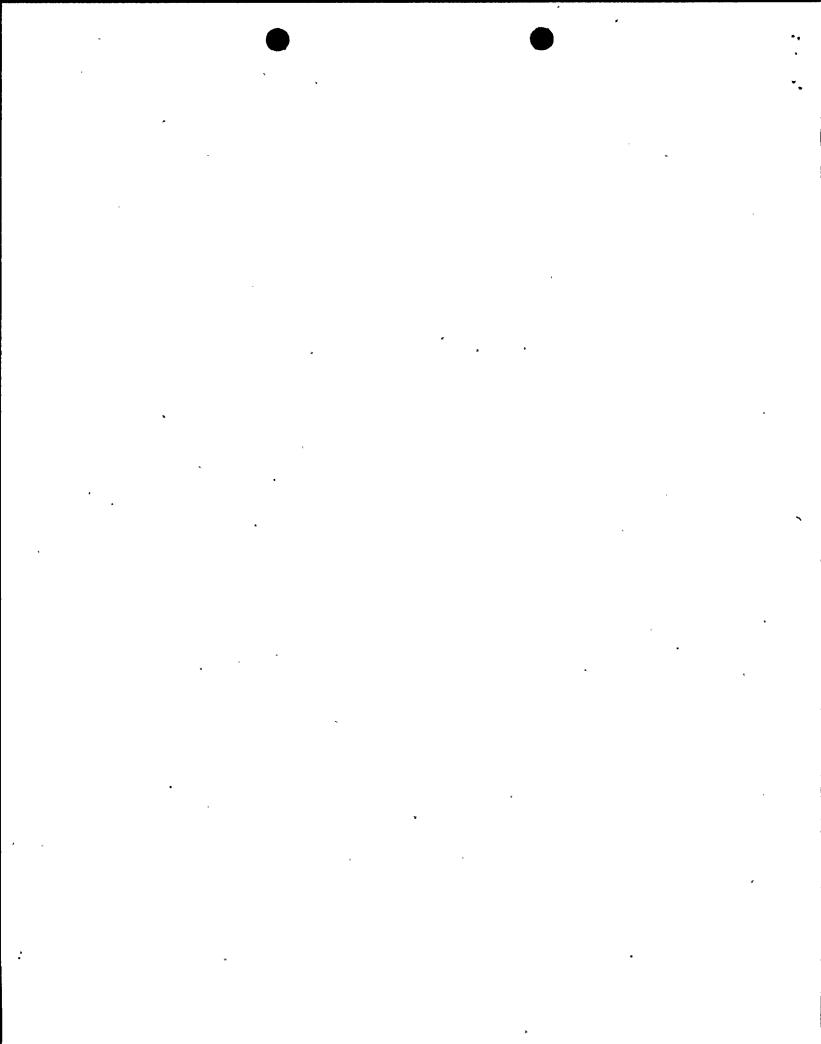
Level 2/3 System Readiness Reviews

- Several meaningful restart issues identified
- Continued evidence of new behaviors
- Further reason to have assurance of the reliability of plant systems



Other Engineering Improvement Initiatives

- Candid self assessment
- Actions
 - —independent review team focus on design engineering
 - key manager devoted to resolving technical and regulatory issues
 - —increased emphasis on line management oversight of important quality activities



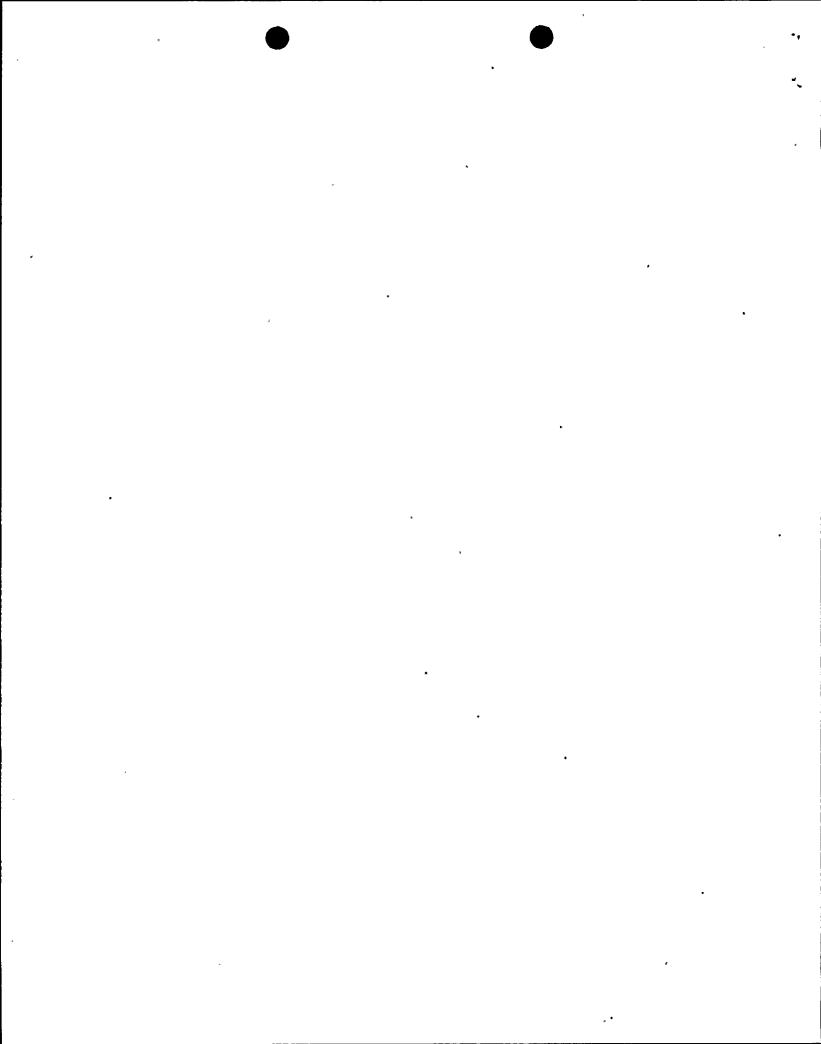
Summary

- Learning from GL 89-10 experience
- Containment spray cracking issue represents significant challenge
- AFW SSFI on track
- Taking small problem indicators seriously
- Strong focus on product quality

Regulatory Activities

Jeb Kingseed Regulatory Affairs Director





Presentation Scope

- ✓ NRC submittals
- UFSAR update

NRC Submittals

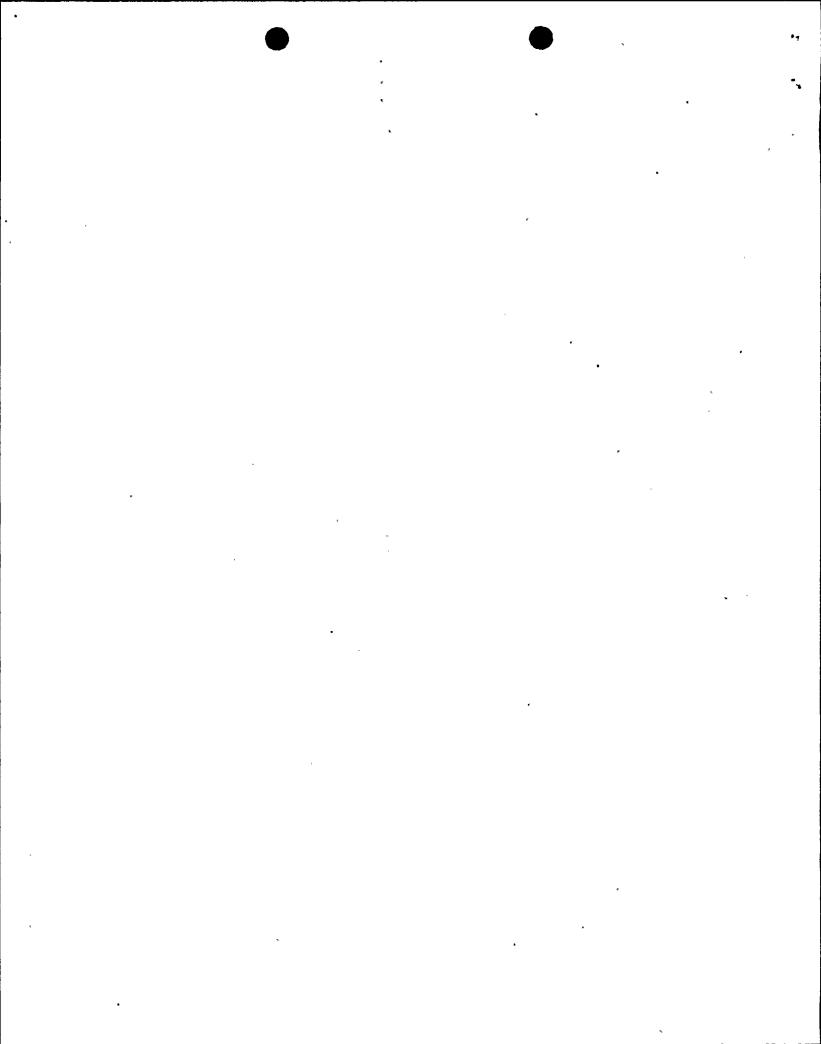
Submittal Topic '	Submittal Date	Restart Requirement (Yes/No)	Required Action	Need Date	Comment .
Boric Acid Concentration Reduction	6/10/98	Yes	T/S Amendment	8/31/98	Approved 8/31/98
Hydrogen Recombiner	3/3/98	Yes	T/S Amendment	N/A	Approved 9/17/98
Containment Spray Pump Code Relief	9/4/98	Yes	Code Relief Approval	ASAP	Long Lead Modification
Ice Condenser Flow Passages (area blockage)	11/15/98 (est)	Yes	T/S Amendment	1/15/99	Generic T/S will be Submitted Later
Sump pH	11/08/98 (est)	Yes	T/S Amendment	1/15/99	GL 91-18 Rev. 1 for Unit 1
Load Shed Cables	8/31/98	Yes	0350 Checklist Item	N/A	LER Retraction

NRC Submittals

Submittal Topic	Submittal Date	Restart Requirement (Yes/No)	Required Action	Need Date	Comment .
RCS Recirculation Flow (Mode 4/5)	10/8/98	Yes	T/S Amendment	11/30/98	Outage Work Related
Ice Condenser Sublimation Rate	11/15/98 (est)	Yes	T/S Amendment	1/15/99	Ice Weight and Surveillance Change
Steam Generator Eddy Current Testing Surveillance Change (unit 1)	8/28/98	No	T/S Amendment	11/15/98	Compliance Ends 4/8/99
RAI	10/30/98 (est)				
Safety Injection Pump Runout Flow	9/14/98	No	T/S Amendment	N/A	Admin. Controls in Place
Hydrogen Subcompartment Analysis USQ (Unit 2, Cycle 12)	11/15/98 (est)	No	License Amendment	N/A	GL 91-18 Rev. 1 to be performed

NRC Submittals

Submittal Topic	Submittal Date	Restart Requirement (Yes/No)	Required Action	Need Date	Comment .
Generic Letter 96-06, Response to RAI	10/28/98 (est)	No	Review/Approve Response	N/A	No Mods Required
Distributed Ignition System	10/28/98 (est)	No	T/S Amendment	N/A .	Admin. Control in place
Main Steam Line Wall Thickness	10/16/98	No	Status Letter	N/A	Weld Repairs
Post-LOCA Offsite Dose USQ	11/15/98 (est)	No	License Amendment	N/A	GL 91-18 Rev. 1 to be performed
Control Room Habitability	11/15/98 (est)	No	Review	N/A	Revised Analysis
Containment Overpressure Post-LOCA	10/08/98	No	T/S Bases Change	N/A	



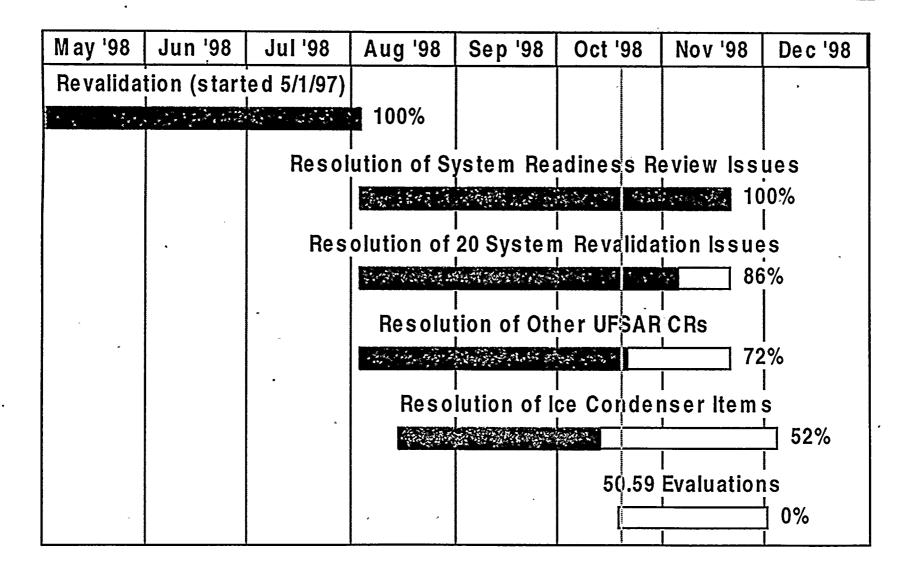
Presentation Scope

- NRC submittals
- ✓ UFSAR update

UFSAR Status

- Commitment
- Status
 - -revalidation
 - —open item resolution
 - —condition reports
 - -50.59 evaluations

UFSAR Schedule



Presentations

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