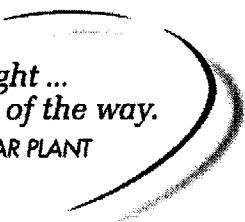


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Every step of the way.*
COOK NUCLEAR PLANT



American Electric Power

Meeting with

Nuclear Regulatory Commission

Restarting D. C. Cook
March 23, 2000



Agenda

- **Introduction**

Bob Powers

- **Restart Performance**

Chris Bakken

- **Transitioning to
Operational Maintenance
Program**

Gary Harland

- **Regulatory Activities**

Robert Godley

- **Closing**

Bob Powers

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Restart Performance

Chris Bakken

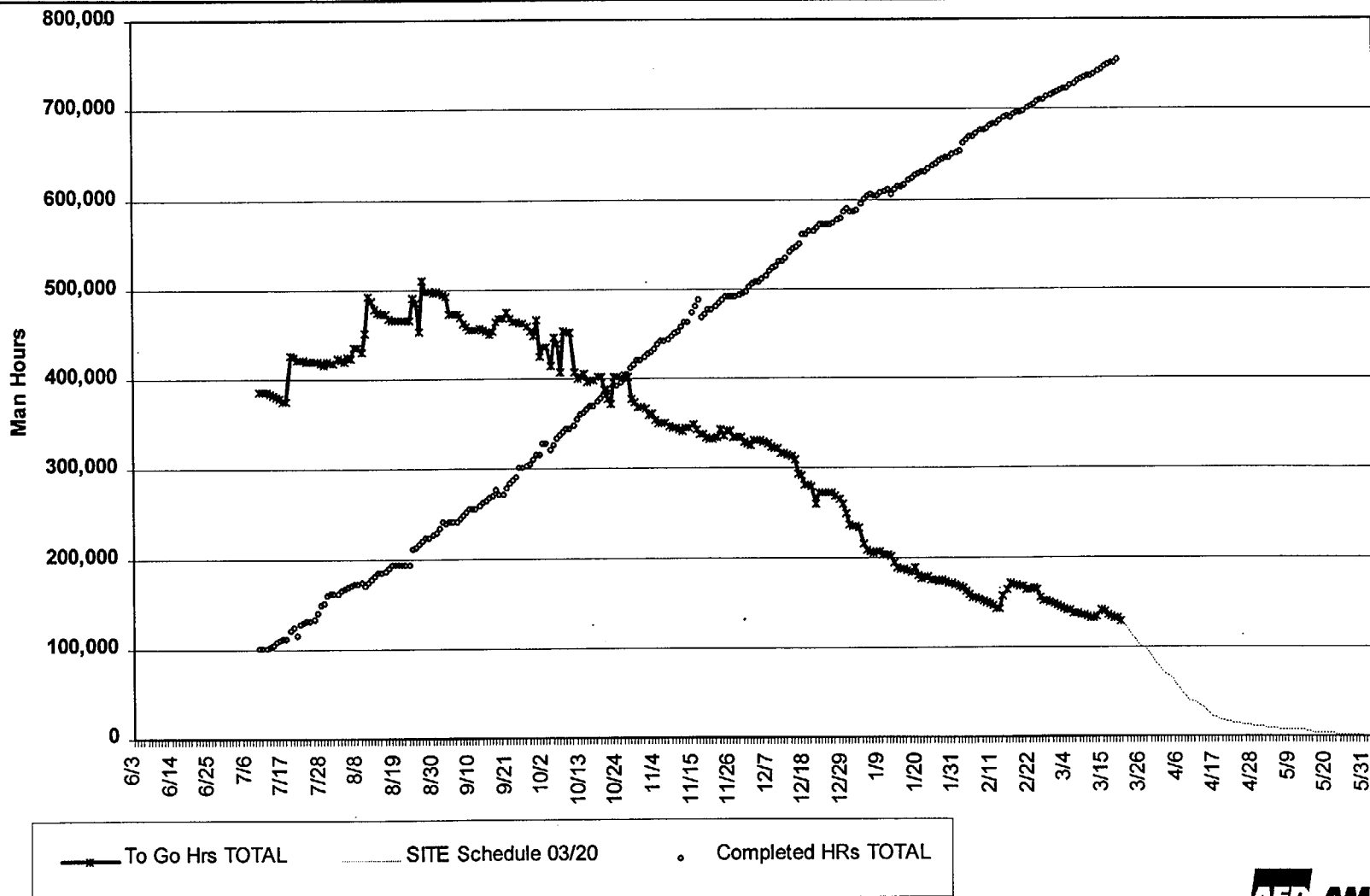
Site Vice President

Slide 3
3/23/00

**AEP AMERICAN[®]
ELECTRIC
POWER**

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COOK NUCLEAR PLANT

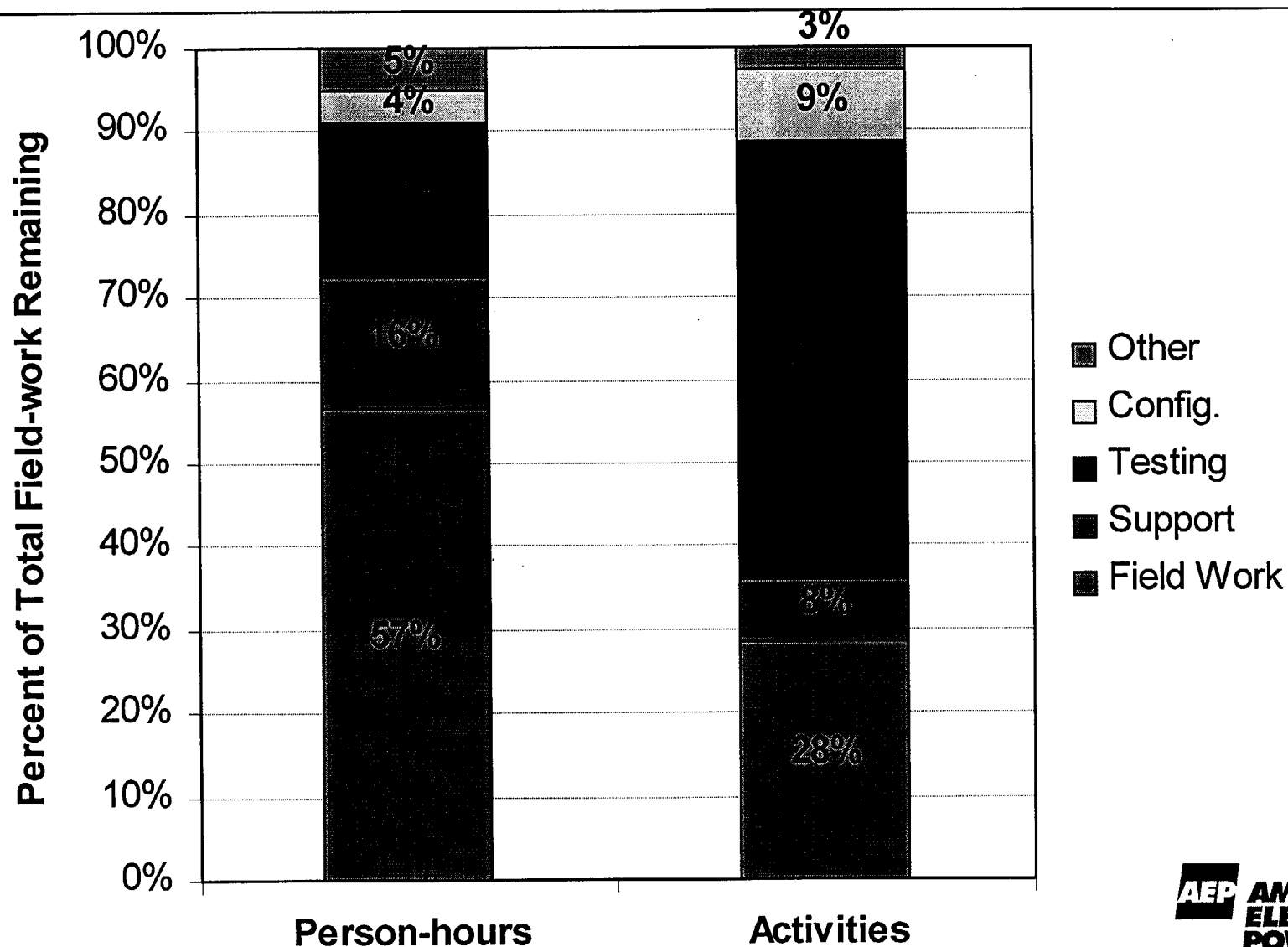
Schedule Progress - Focusing on Remaining Work



Slide 4
3/23/00

AEP AMERICAN[®]
ELECTRIC
POWER

Remaining Work Person-hours vs. Activities



Major Modifications Remaining

- Snow Hood for SWGR HVAC Intakes
- Block Wall Modifications
- Aux. Bldg. HVAC Duct Supports
- Add exhaust fans for 600v & CRID Rooms (HELB)
- Outside Air Damper Replacement and Addition
- Containment HVAC Duct Supports
- Rx Thimble Tube Replacements
- Large Bore Pipe Support Project
- Tornado Missile Protection for EDG Exhaust Air
- Seal TDAFP and MDAFP Rooms from HELB

Top
10 Mods

62%
of Total Field Work

Restart Performance Indicators

Organizational Readiness

- *Functional Area Assessment Reviews Approved - Complete*
- *Restart Training Items - Complete*
- *Self Identified C/Rs - Satisfactory for Restart*
- *Root Cause Quality - Satisfactory for Restart*
- *Restart SIDS Items - Part of Outage Work*

Operations Readiness

- *Surveillance Improvement Project - Complete*
- *Emergency Operating Procedures Project - Complete*
- *Operations Procedures for Restart*
- *Operability Determinations*
- *Operator Workarounds*

Restart Performance Indicators

Systems and Containment Readiness

- *ESRR Reviews Approved - Complete*
 - Restart Mods
 - Temporary Mods
 - Corrective Maintenance
 - Systems to be Accepted by Operations - On-going
- } On-going Outage Work

Programmatic Readiness

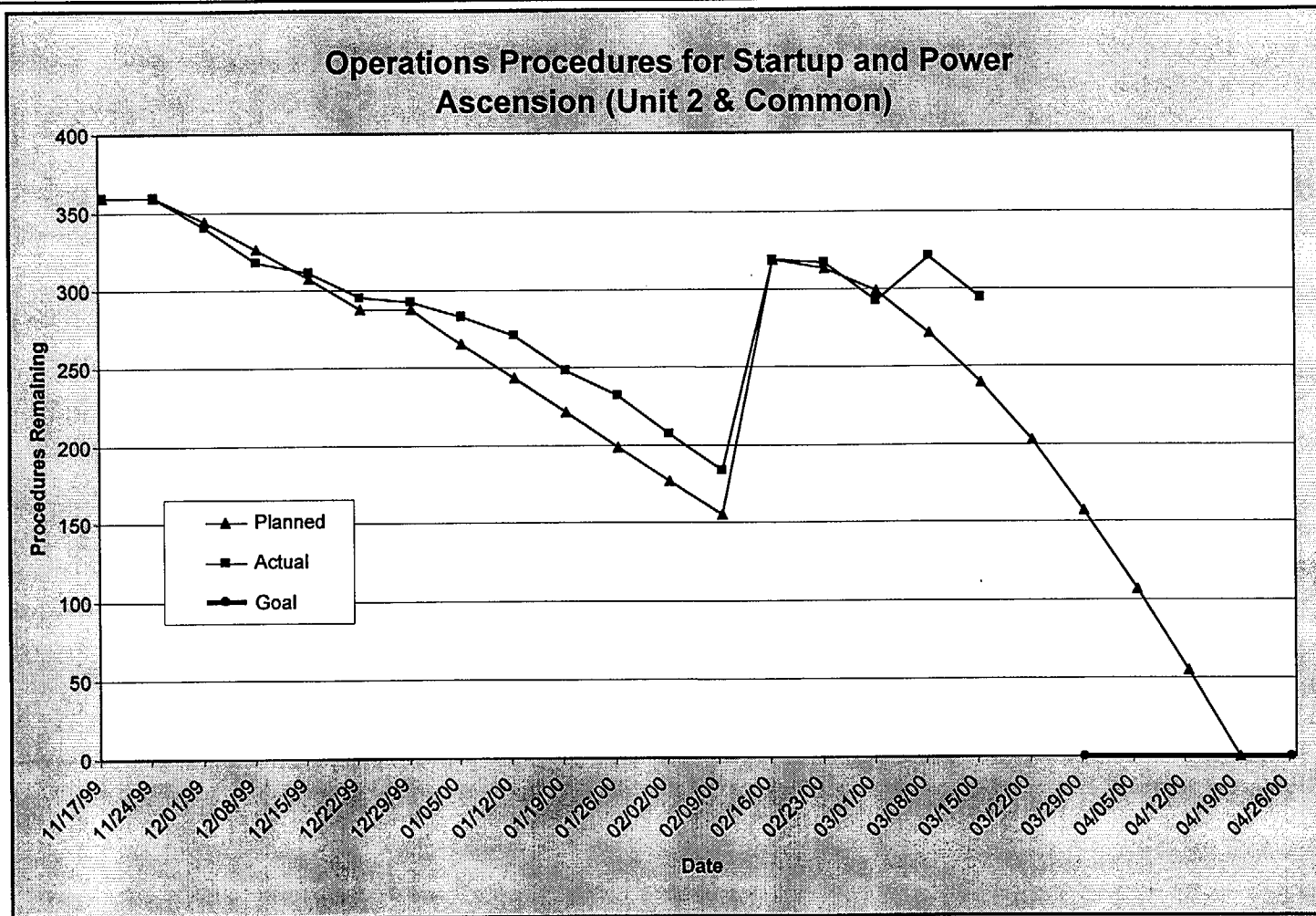
- *Programmatic Readiness Reviews Approved - Complete*
- *50.59 Quality - Satisfactory for Restart*
- *Calculation Quality - Satisfactory for Restart*

Regulatory Readiness

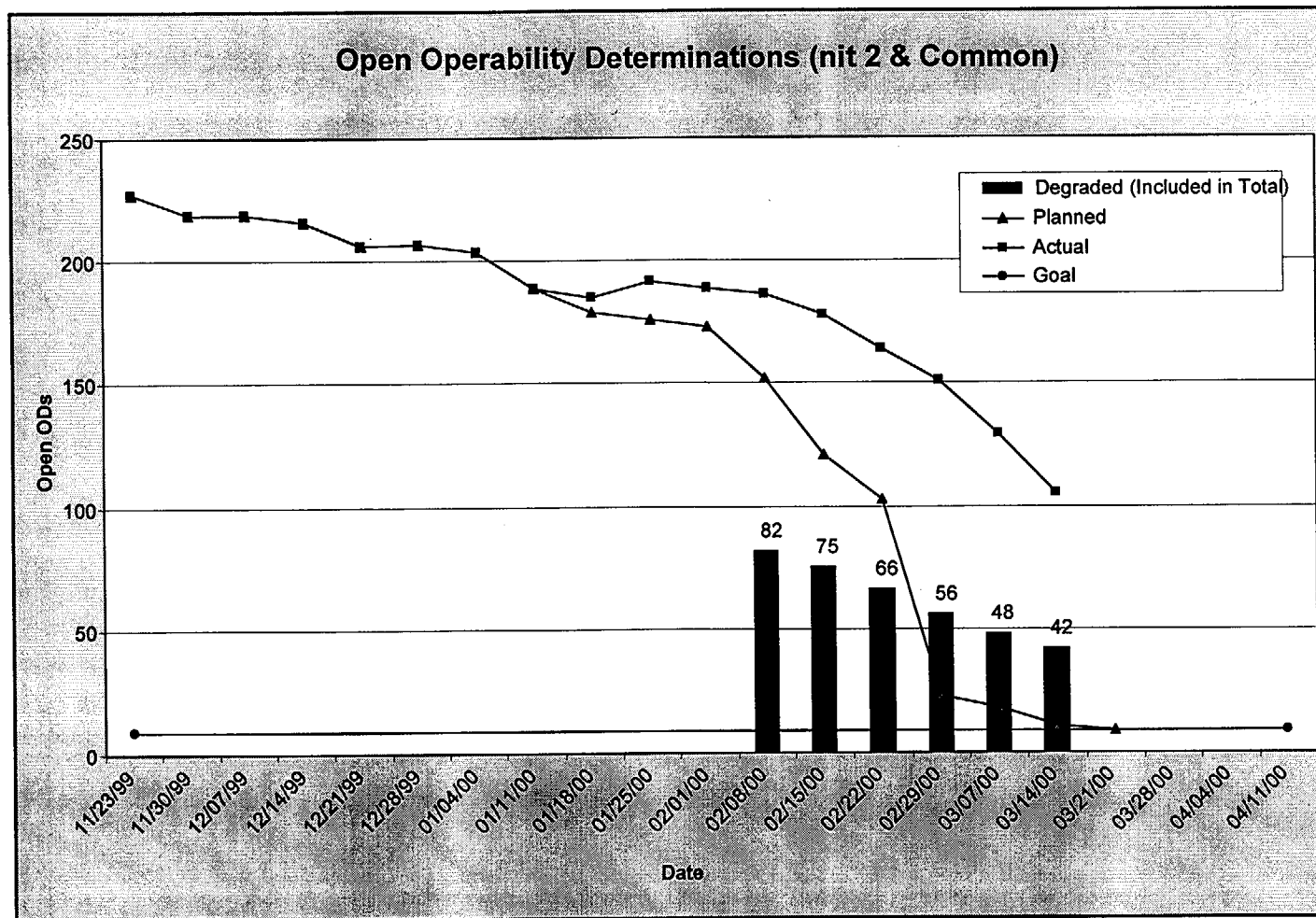
- *License Submittals - Complete*
- *Restart FSAR Change Requests to submit - Biennial Submittal*
- *0350 Item Closure - Ongoing*

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Operations Procedures Program (Unit 2 and Common)



Operability Determinations



Progress Toward Core Re-load

- **All Train Outages Complete**
- **Open Vessel Testing In-progress**
- **27 of 86 Systems Turned Over to Operations**
- **LOP / LOCA Testing**
- **Unit 2 Core Re-load**

Remaining Challenges

- Procedure Preparation
- HVAC Work and Test Plan
- Structural Calculation Schedule
- DCP Closure
- SIDS Closeout
- Corrective Action Reviews and Resulting Actions
- Affirmation Process

Unit 1 Systems Required to Support Unit 2

■ **Multi-disciplined Review Results**

- Appendix 'R' Fire Protection - Mode 4
- Selected Component & Electrical Line-ups

■ **Steps to Assure Availability**

- Procedural Controls
- Pre-mode Change Line-ups
- Availability Accurately Defined
- Equipment Safeguarded and Periodically Checked

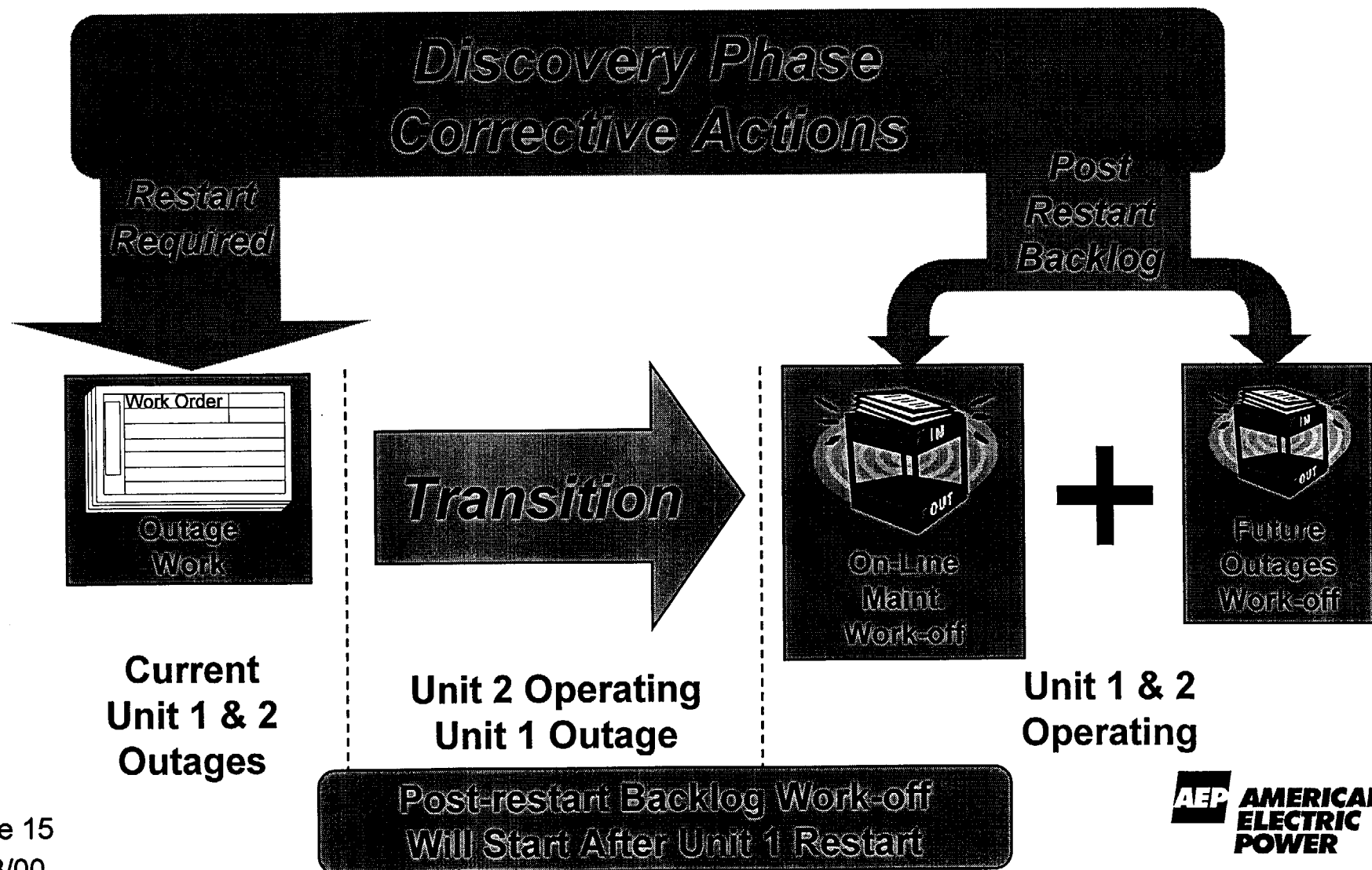
High Confidence of System Availability

Transition to Operational Maintenance

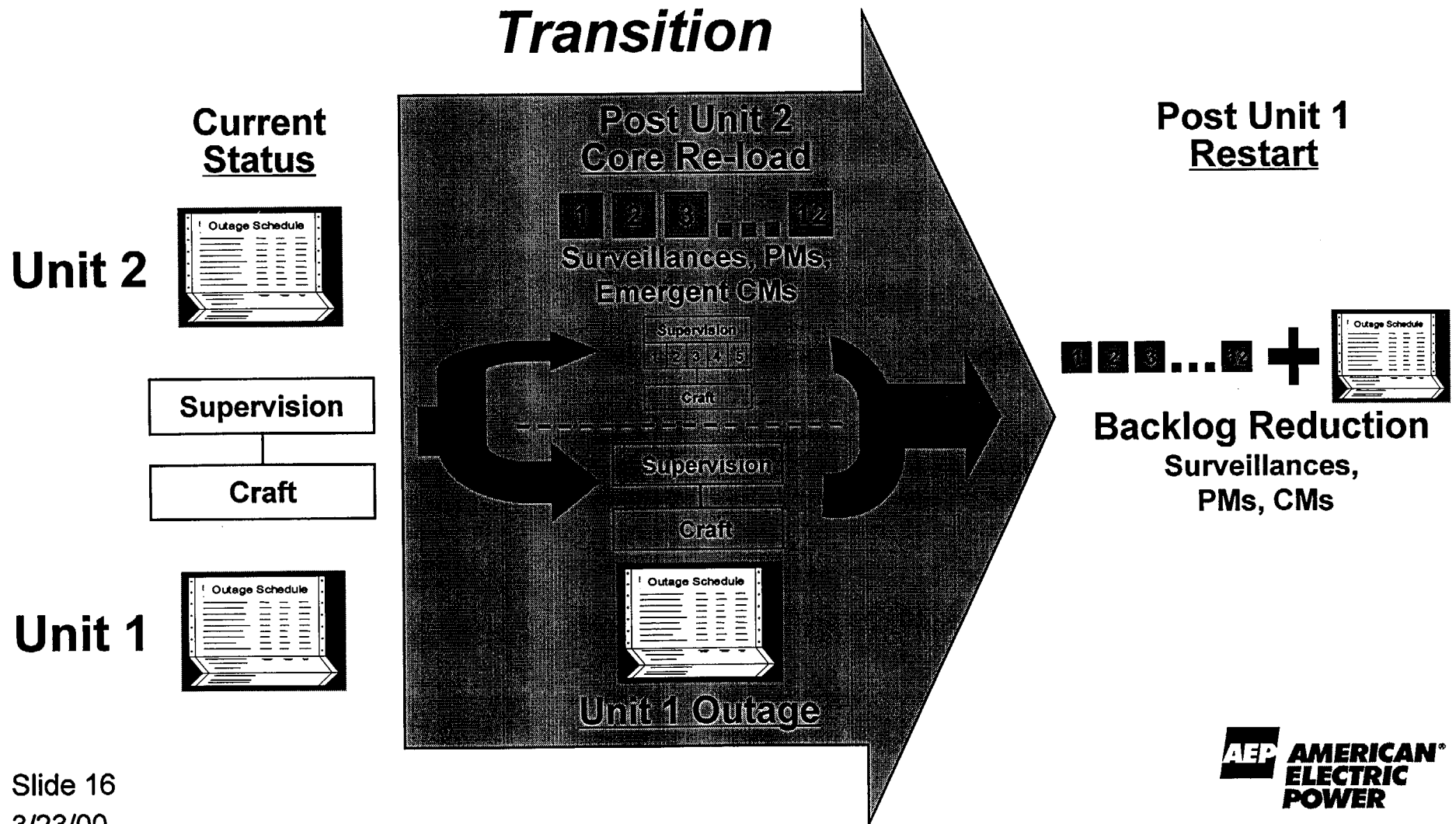
Gary Harland

Director - Work Control

Transition to Operational Work Management



Transition to Operational Work Management



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Regulatory Activities

Robert Godley

Director - Regulatory Affairs

RESTART ACTION PLAN (RAP) PROGRESS AND PERFORMANCE CHART

1100 3/14/00

0350 Item	RAP Development & Approval							U2 RAP Work Activity Progress							U2 RAP Closure Packages							PA	NRC Inspection		
	Accountable Managers	Condition Report (CR)		Restart Action Plan (RAP)			SMART Approval	In Integrated Schedule?		Scheduled Activities % Complete					CPs with Compliance/ CPs Total	Closure Package (CP) % Complete					Assessment Completed	Inspection Date(s)	IR Nos.		
		RCA	CARB	Owner Org	Reg Compl	SRRB		Yes	No	0	25	50	75	100		0	25	50	75	100					
1 A - E	D. Crouch / P. Gember	98-1121 98-0930	7/14/99	10/4/99	10/6/99	10/7/99	11/2/99	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<div>100</div>					44 / 54	<div>82</div>					11/24/99	12/17/99	99033	NRC Inspection Date Range Open & 9 am NRC's 22000 P has P performs same Review (P/R) Report	2007
3 A	S. Farlow / W. Elert	99-0594	9/3/99	10/12/99	10/12/99	10/13/99	10/15/99	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<div>95</div>					30 / 33	<div>91</div>					11/15/99	12/20/99	99023		
4 A & B	R. Godley / K. Steinmetz	98-5339	8/25/99	9/21/99	9/20/99	9/21/99	9/21/99	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<div>99</div>					16 / 16	<div>94</div>					9/2/99	9/13/99	99023	Closed	
6	D. Haier / E. Young J. Allard / P. Schoepf	98-0444 98-0444	9/30/99	9/22/99	9/22/99	9/28/99	11/5/99	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<div>81</div>					36 / 68	<div>59</div>					1/22/99	12/31/99	99026	Closed	
7	K. Riches / J. Pollock / J. Gelston	N/A	N/A	9/24/99	9/24/99	9/24/99	11/15/99	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<div>100</div>					1 / 1	<div>100</div>					11/9/99	11/19/99	99032	Pending NRC Decision	
8	L. Thomsberry/ J. Sankey	98-1118 98-0940	11/11/99	8/27/99	8/28/99	11/16/99	11/24/99	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<div>85</div>					21 / 30	<div>66</div>					11/26/99	12/17/99	99029	Closed	
9	L. Thomsberry/ J. Sankey	98-1118 98-0940	10/14/99	10/13/99	10/13/99	10/14/99	10/27/99	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<div>87</div>					4 / 9	<div>44</div>					11/15/99	12/17/99	99029	Closed	
10	L. Thomsberry/ J. Gebbe	98-1226	10/5/99	8/5/99	8/10/99	10/5/99	11/1/99	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<div>89</div>					4 / 8	<div>50</div>					11/15/99	12/17/99	99029	Closed	
11	L. Thomsberry/ J. Gebbe	97-3429	9/15/99	9/23/99	9/23/99	9/23/99	10/5/99	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<div>100</div>					16 / 16	<div>100</div>					10/1/99	12/17/99	99029	Follow Up TB D	
13 B	S. Lacey / L. Thomsberry	System and Containment Final Readiness Review of 13A						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<div>80</div>					9 / 13	<div>69</div>					See Note	4/10 - 4/20			
14 D	R. Rickman / L. Weber	99-1657	8/11/99	RST-1999-005-OPS	9/10/99	11/4/99															11/22/99	12/31/99	20010		
E	J. Pollock / K. Riches	N/A	N/A	SA-1999-002-NED	11/15/99	12/01/99															11/15/99	12/20/99	20007		
G	G. Harland / D. Crouch	Programmatic Final Readiness Review of 14A						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<div>90</div>					12 / 15	<div>80</div>					See Note	4/10 - 4/20			
15 B	T. Noonan / L. Weber	Functional Area Final Readiness Review of 15A						<input checked="" type="checkbox"/>	<input type="checkbox"/>	<div>90</div>					9 / 12	<div>75</div>					See Note	4/10 - 4/20			
16	J. Kinsey / R. Withrow	99-6150	9/17/99	8/9/99	9/13/99	12/9/99	12/22/99	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<div>56</div>					18 / 36	<div>34</div>					Not Ready	4/10 - 4/14			

■ - Approved/Complete

■ - Approved with Comments

■ - Scheduled Review Date

■ - Tabled / Overdue

GP - Completed as Green Package

< - Complete Before This Date

■ - Closed Pending IR

■ - Inspection in Progress

% of Closure Packages approved by Compliance

37 79

% of Closure Packages received by Compliance

1. Programmatic Breakdown in Surveillance Testing

- A. Inadequate Instructions in Surveillance Tests
- B. Acceptance Criterion Lack Sufficient Margin to Analysis Limit
- C. Failure to Meet Technical Specification Requirements
- D. Preconditioning of Equipment Prior to Surveillance Testing
- E. Failure to Assess and Control the Quality of Contractors

2. Corrective Action Program Breakdown

3. Programmatic Breakdown in the Maint. of the Design Basis

- A. Inadequate Design Control
- B. Failure to Update UFSAR
- C. Failure to Consider Instrument Uncertainties
- D. Consideration of System/Component Failure Modes

4. Safety Evaluations

- 5. Operator Training Issues
- 6. Resolution of Ice Condenser Issues
- 7. Resolution of Non-Safety Related Cables Going to Shunt Trip Coils
- 8. Resolution of Hydrogen Recombiner Operability Issues
- 9. Resolution of Distributed Ignition Technical Specification Issue
- 10. Resolution of Containment Spray System Operability Issues
- 11. Resolution of Hydrogen Mitigation System Operability and Mat'l Condition Issues
- 12. Resolution of Containment Liner Pitting
- 13. Systems and Containment Readiness Assessments
 - A. Problem Discovery
 - G. Final Readiness Review

14. Programmatic Readiness Assessment

- A. Problem Discovery
- B. Contractor Control Program
- C. Preventive Maintenance Program
- D. Emergency Operating Procedures Program
- E. Electrical Protection Coordination Including Fuse/Breaker Control Program
- F. Operability Determination Program
- G. Final Readiness Reviews
- 15. Functional Area Readiness Assessment
 - A. Problem Discovery
 - G. Final Readiness Reviews
- 16. Resolution of Operability of MOVs in the GL 89-10 Program

NOTE - Ready for Restart Affirmations

PA has shifted the focus of its restart oversight strategy from affirmation of RAP process implementation to focus more effectively and efficiently on the quality of specific work products. As such, PA plans to issue final affirmations of readiness for restart only as part of its oversight and affirmation of readiness for Mode changes. The bases for these affirmations will be results of the System Turnover Vertical and Horizontal Inspection Teams which PA recently initiated (plant management was briefed on this strategy before Christmas). As part of its affirmation of readiness for Mode change, PA will include final restart affirmation of each of the 16 NRC 0350 issues (RAPs 1-16), and the major Functional Areas (including Operations, Maintenance, Engineering, Chemistry, Radiation Protection, Plant Protection, Training).

Key License Changes

#	Subject	Unit(s)	Final Inputs to Licensing	Submittal Drafted	PORC Meeting	NSDRC Meeting	NRC Submittal Date	NRC RAI	AEP Response to RAI	NRC Approval/ Concurrence Required By
Licensing Submittals That Require NRC Action Prior to Restart of Unit 2										
7	HELB related AFW Pump Room HVAC Modification Submittal	1&2	Complete	Complete	Complete	Complete	2/18/00	3/14/00	TBD	3/29/00
Issues That Require Action Prior to Restart of Unit 1										
4	Tornado Missile Licensing Bases Change - Use of approved PRA Techniques	1&2	3/24/00	3/24/00	3/30/00	4/4/00	4/6/00	TBD	TBD	TBD
5	Pressurizer Heater Surveillance Change TS 4.4.2	1&2	3/17/00	3/27/00	4/6/00	4/6/00	4/10/00	TBD	TBD	TBD

Implementation of New Oversight Process

- **Applying “Best Efforts” to Participate in New Process**
- **Implementing Aspects of the New Process**
- **Developing Complete Program Following Restart**
- **Remaining Under MC 0350 Process Until Transition Complete**

Closing

Bob Powers

**Senior Vice-President
Nuclear**

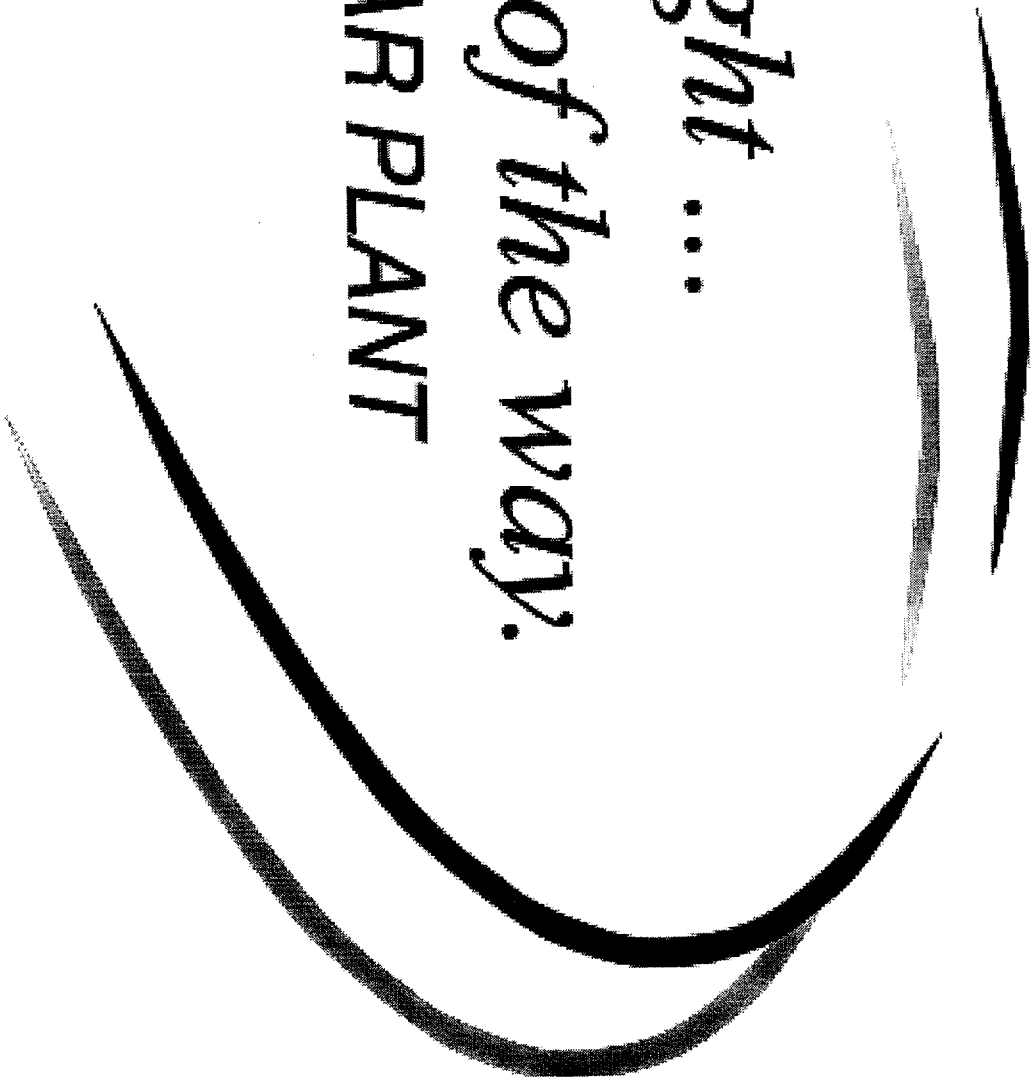
Closing

■ Recent Success

- Ice Condensers
- Motor Operated Valves
- Open Vessel Testing

■ Addressing the Challenges

***We Are Doing What We Said We Would Do -
With Safety & Quality***



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Every step of the way.
COOK NUCLEAR PLANT