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MAR 4 1994

Docket Nos. 50-327, 50-328  
License Nos. DPR-77, DPR-79

Tennessee Valley Authority  
ATTN: Dr. Mark O. Medford  
Vice President, Technical Support  
3B Lookout Place  
1101 Market Street  
Chattanooga, TN 37402-2801

Gentlemen:

SUBJECT: MANAGEMENT MEETING SUMMARY - SEQUOYAH UNITS 1 AND 2

On February 22, 1994, the NRC staff met at the Region II office with representatives of the Tennessee Valley Authority (TVA) management staff to discuss the restart activities of Sequoyah Unit 1. Enclosure 1 is a list of the individuals who attended the meeting and Enclosure 2 is the handout material supplied by TVA.

The topics discussed included Unit 1 status, recent operational issues and corrective actions, Nuclear Assurance reviews, and overall Unit 1 schedule.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10 Code of Federal Regulations, a copy of this letter and its enclosures will be placed in the NRC Public Document Room.

Should you have any questions concerning this letter, please contact us.

Sincerely,

(Original signed by J. Johnson)

Ellis W. Merschoff, Director  
Division of Reactor Projects

- Enclosures:
- 1. List of Attendees
  - 2. Presentation Notes

cc w/encls: (See page 2)

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PDR ADOCK 05000327  
P PDR

DEYS

MAR 4 1994

Tennessee Valley Authority

2

cc w/encls:

Mr. Craven Crowell, Chairman  
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Mr. Robert Fenech, Site Vice  
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Mr. O. J. Zeringue, Senior Vice  
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Mr. Michael H. Mobley, Director  
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bcc w/encls: (See page 3)

MAR 4 1994

Tennessee Valley Authority

3

bcc w/encls:

J. R. Johnson, DRP/RII

G. C. Lainas, NRR

F. J. Hebdon, NRR

P. J. Kellogg, DRP/RII

S. E. Sparks, DRP/RII

D. E. LaBarge, NRR

NRC Document Control Desk

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U.S. Nuclear Regulatory Commission

2600 Igou Ferry Road

Soddy-Daisy, TN 37379

DRP/RII

SES  
SSparks:vyg

02/28/94

DRP/RII

PKellogg

02/28/94

ENCLOSURE 1

LIST OF ATTENDEES

NRC

E. W. Merschhoff, Director, Division of Reactor Projects (DRP), Region II (RII)  
A. F. Gibson, Director, Division of Reactor Safety, RII  
J. R. Johnson, Deputy Director, DRP, RII  
P. J. Kellogg, Section Chief, Branch 4, Section 4A, DRP, RII  
S. E. Sparks, Project Engineer, DRP, RII  
W. E. Holland, Senior Resident Inspector, DRP, RII  
F. J. Hebdon, Director, Project Directorate II-4, Office of Nuclear Reactor  
Regulation (NRR)  
D. E. LaBarge, Project Manager, Project Directorate II-4, NRR  
B. E. Holian, Regional Coordinator, Office of the Executive Director of  
Operations

TVA

O. J. Zeringue, Senior Vice President, Nuclear Operations  
R. A. Fenech, Site Vice President, Sequoyah  
K. P. Powers, Plant Manager, Sequoyah  
J. S. Baumstark, Operations Manager  
N. A. Welch, Operations Superintendent  
R. S. Driscoll, Site Quality Manager  
R. H. Shell, Licensing Manager  
L. T. Hardin, Shift Operating Supervisor  
D. F. Webb, Unit Manager

UNIT 1 RESTART SCHEDULE MEETING  
TENNESSEE VALLEY AUTHORITY  
SEQUOYAH NUCLEAR PLANT

February 22, 1994  
NRC Region II Office

NRC/TVA MEETING  
FEBRUARY 22, 1994

AGENDA

- INTRODUCTION R. A. FENECH
- UNIT 1 RESTART SCOPE AND SCHEDULE K. P. POWERS
- OPERATIONS ISSUES J. S. BAUMSTARK
- NUCLEAR ASSURANCE PERSPECTIVE R. F. DRISCOLL
- SUMMARY R. A. FENECH

## INTRODUCTION

SEQUOYAH

UNIT 1

RESTART SCOPE AND SCHEDULE



## HARDWARE/TESTING

- UNIT 1 REQUIRED RESTART WORK

- Remaining Hardware and Testing Items

Work Orders - 220 Remaining

PMTs - 735 Remaining

Checkoffs - 58 Remaining

Surveillance Tests - 250 Remaining

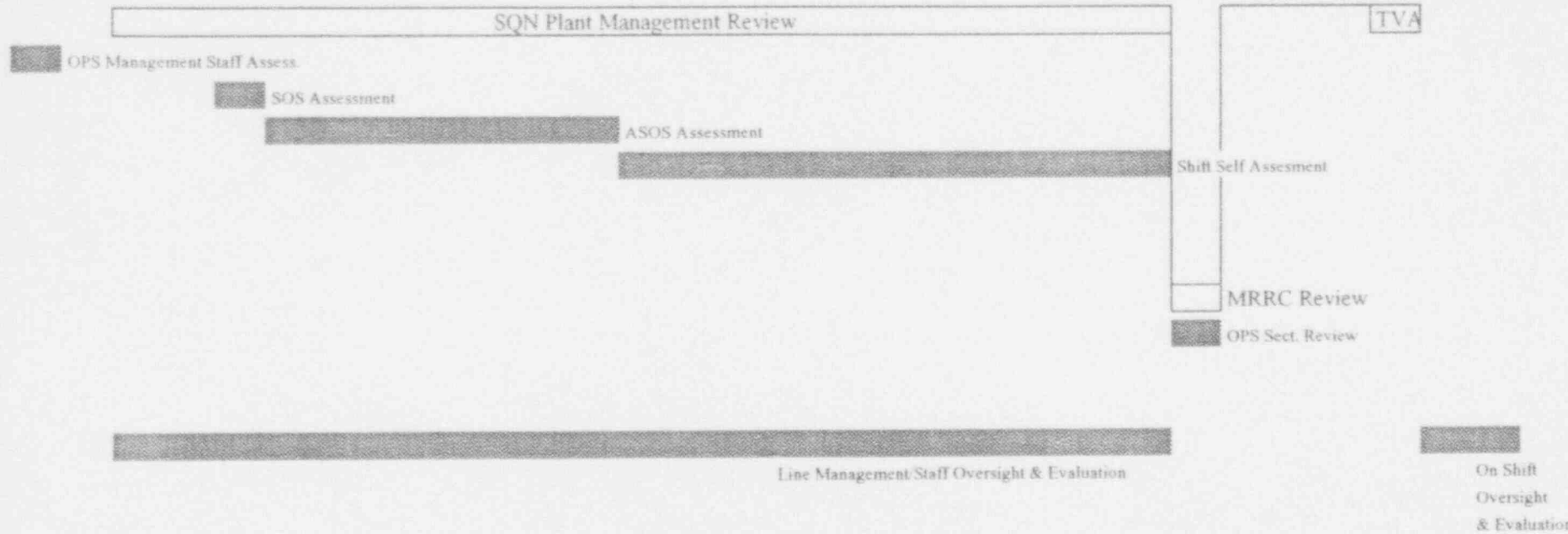
S/G Enclosure Cable/Conduit Work - On Track

## ISSUES REQUIRING ATTENTION BEFORE TWO-UNIT OPERATION

- OPERATIONS ISSUES
  - Configuration Control
  - Operations Supervision
  - Conduct of Operator Rounds
  
- MANAGEMENT ATTENTION ISSUES
  - MCR Instruments
  - Radiation Monitors
  - Out-of-Specification Readings on AUO Rounds
  - MCR Annunciators
  - Chemistry Instrumentation
  - SI/PI Deficiency Dispositions
  
- OTHER ISSUES
  - Operations Concerns List
  - Equipment in Reduced Status
  - Priority 2 Work Requests
  - Plant Deficiencies Noted in the MCR
  - Non-Outage Corrective Maintenance Review
  - Hold Order Review
  
- CORRECTIVE ACTION REVIEWS

# Operations Section Issues

February 94														March 94																
12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	1	2	3	4	5	6	7	8	9	10	11	12	13	14
S	S	M	T	W	TH	F	S	S	M	T	W	TH	F	S	S	M	T	W	TH	F	S	S	M	T	W	TH	F	S	S	M

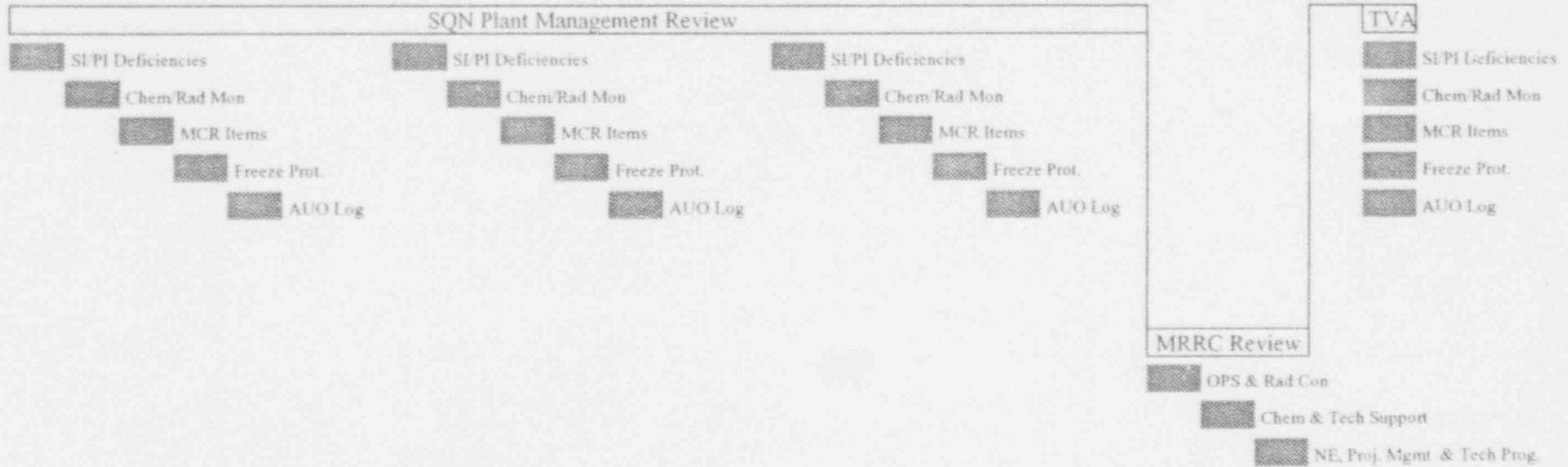


## Operations Section Issues for Two Unit Operation:

- \* Expectations
- \* Configuration Control
- \* Adequacy of Supervision

# Management Attention Issues

February 94														March 94																
12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	1	2	3	4	5	6	7	8	9	10	11	12	13	14
S	S	M	T	W	TH	F	S	S	M	T	W	TH	F	S	S	M	T	W	TH	F	S	S	M	T	W	TH	F	S	S	M

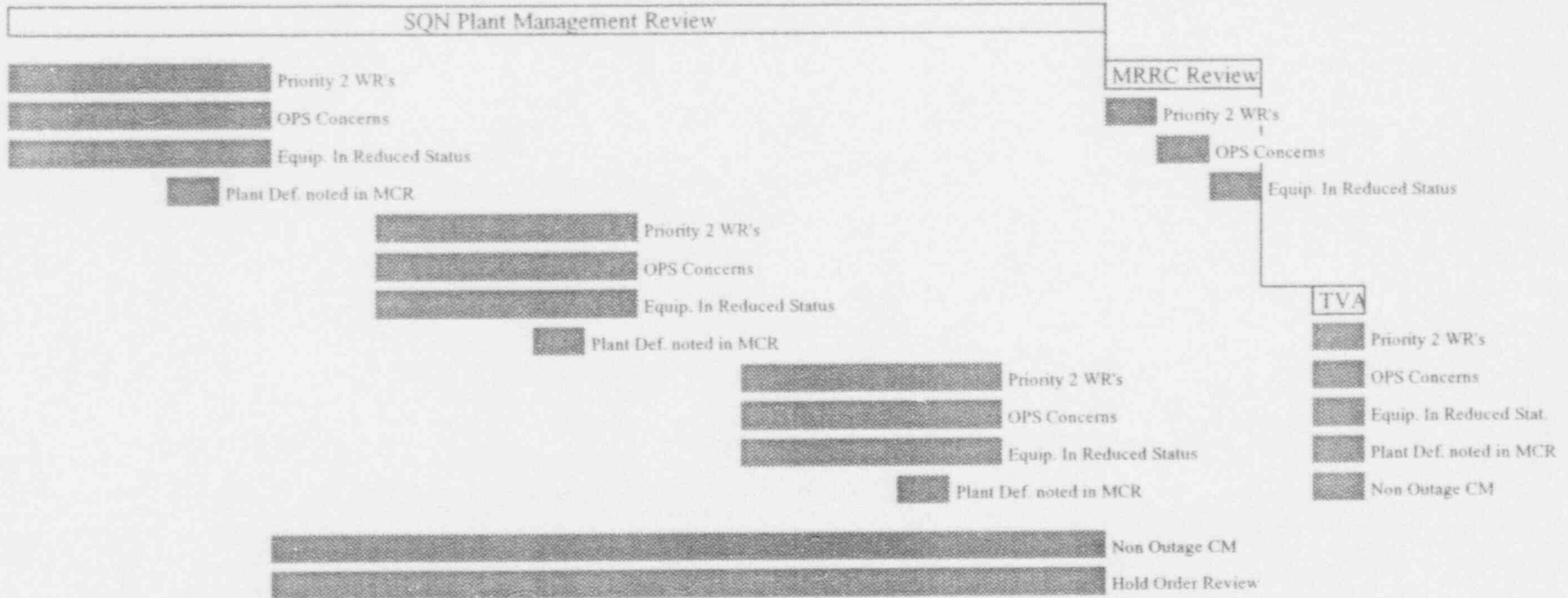


## Management Attention Issues:

- \* SI/PI Deficiencies
- \* Chemistry/Radiation Monitors
- \* Main Control Room Items
- \* Freeze Protection/Boric Acid Deficiencies
- \* AUO Log Out of Specifications

# Other Issues

February 94																March 94														
12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	1	2	3	4	5	6	7	8	9	10	11	12	13	14
S	S	M	T	W	TH	F	S	S	M	T	W	TH	F	S	S	M	T	W	TH	F	S	S	M	T	W	TH	F	S	S	M



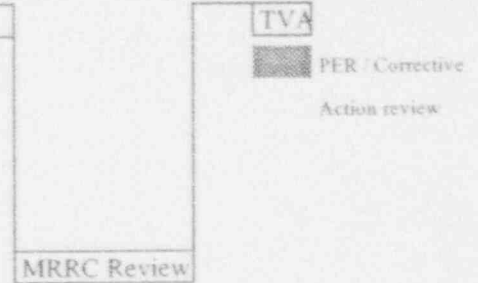
## Other Issues:

- \* Priority 2 WR's
- \* Equipement in Reduced Status
- \* Operations Concerns
- \* Plant Deficiencies noted in MCR
- \* Non Outage Correctine Maintenance
- \* Hold Orders

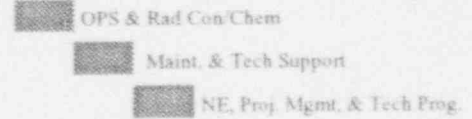
# PER / Corrective Actions

February 94															March 94															
12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	1	2	3	4	5	6	7	8	9	10	11	12	13	14
S	S	M	T	W	TH	F	S	S	M	T	W	TH	F	S	S	M	T	W	TH	F	S	S	M	T	W	TH	F	S	S	M

## SQL Plant Management Review



## MRRC Review



### Review & Action Plans for Sections:

- \* Overdue Actions
- \* Quality of Evaluation
- \* Pre 1993 Actions

## READINESS REVIEWS

### CRITERIA FOR EVALUATING ISSUES

- Understand Details of Each Issue
- Individual and Collective Scope Judged Acceptable for Two-Unit Operation
- Process and Progress Give Us Confidence That We Can Manage the Issues
- Data from Management Direct Observations (see next sheets) Support Readiness for Two-Unit Operation

Our Performance and Progress Against This Criteria Will Be Reviewed and Evaluated by MRRC Reviews on March 7, 8, and 9, and with TVA Senior Management on March 11. These Reviews Will Cover:

- Organization Readiness for Two-Unit Operation
- Backlogs
- Plus the Specific Items Listed on Page 4

NOTE: Nuclear Assurance to Present their Evaluation at each Review

**PLANT MANAGEMENT OVERSIGHT TEAM ASSESSMENT CHECKLIST**  
**ASSESSMENT HOLD POINT**

<u>OPERATIONS</u>	Satisfactory <sup>1</sup> Yes/No	Initials	Date
• COMMAND AND CONTROL			
• COMMUNICATIONS			
- FORMALITY			
- EFFECTIVENESS			
• COGNIZANCE OF PLANT STATUS			
• RESPONSE TO ANNUNCIATORS/ALARMS			
• LOGKEEPING & TURNOVER			
• CONDUCT OF ROUNDS			
• PROCEDURAL ADHERENCE			
• MONITORING OF EQUIPMENT PERFORMANCE			
<u>SITE PERSONNEL/PROCESSES</u>			
• CONTROL OF WORK			
- COORDINATION & COMMUNICATION			
- PLANNING AND SCHEDULING			
- CONDUCT OF WORK			
• PROCEDURE ADHERENCE			
• ORGANIZATION COMMUNICATION AND COOPERATION			
• PROCEDURE AND WORK DOCUMENT ADEQUACY			
• S.T.A.R. UTILIZATION			
• OPERATIONS SUPPORT			

<sup>1</sup> For any "NO", provide additional detail under "issues" Att. 11-4 sheet 2 of 2.



PLANT MANAGEMENT OVERSIGHT TEAM ASSESSMENT CHECKLIST  
ASSESSMENT HOLD POINT

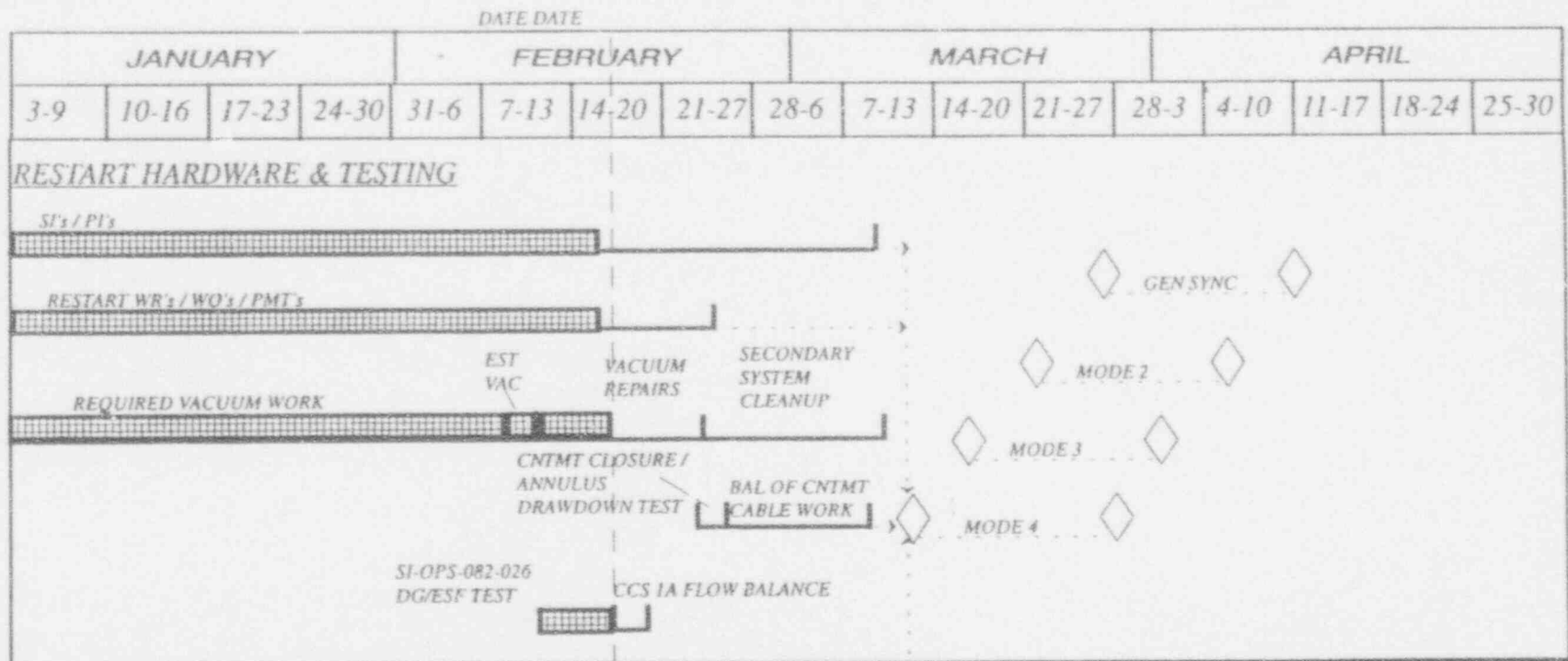
SUMMARY OF OVERSIGHT ACTIVITY CONDUCTED (Support documentation may be attached as needed): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
ISSUES: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
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\_\_\_\_\_  
\_\_\_\_\_  
CONCLUSION: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
TEAM MEMBERS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

**ASSESSMENT HOLD POINT  
APPROVAL CHECKLIST**

ITEM		POSITION	SIGNATURE	DATE
A.	PLANT EQUIPMENT			
A.1	OUTAGE SCOPE COMPLETE/SCHEDULE ATTACHED	OUTAGE MANAGER		
A.2	NEW WRs REVIEWED	WCG SRO		
A.3	SYSTEM READINESS AFFIRMED	TECHNICAL SUPPORT MANAGER		
A.4	SYSTEM PERFORMANCE ACCEPTABLE	TECHNICAL SUPPORT/OPS MANAGER		
A.5	SYSTEM ALIGNMENTS COMPLETE	OPERATIONS SUPERINTENDENT		
A.6	GO REQUIREMENTS SATISFIED	OPERATIONS SUPERINTENDENT		
A.7	HOUSEKEEPING & MATERIEL CONDITION ACCEPTABLE	PLANT MANAGER		
A.8	CHEMISTRY PARAMETERS ACCEPTABLE	RADCON & CHEMISTRY MANAGER		
B.	DEPARTMENT READINESS			
B.1	DEPARTMENT READINESS AFFIRMED	SITE VICE PRESIDENT		
B.2	PLANT MANAGEMENT OVERSIGHT REVIEWED <sup>(1)</sup>	PLANT MANAGER		
B.3	NA OVERSIGHT REVIEWED	SITE QUALITY MANAGER		
C.	OVERALL READINESS			
C.1	MRRC APPROVAL	MRRC CHAIRMAN		
C.2	PORC APPROVAL	PORC CHAIRMAN		
C.3	SR. TVA MANAGEMENT REVIEW	SITE VICE PRESIDENT		
C.4	NRC REVIEW & NOTIFICATION	SITE VICE PRESIDENT		
C.5	SITE VICE PRESIDENT APPROVAL	SITE VICE PRESIDENT		
C.6	PLANT MANAGER APPROVAL	PLANT MANAGER		

(1) Review plant management oversight team assessment checklist (Att. 12-4).

# UNIT 1 SCHEDULE OVERVIEW



## MANAGEMENT ISSUES

### OPERATIONS DEPT ISSUES

- EQUIPMENT STATUS CONTROL
  - CONTROL OF WORK
- OPS READINESS

### MANAGEMENT ATTENTION ITEMS MTGS

- GENERAL BACKLOG REDUCTION
- RAD/CHEM BACKLOG REDUCTION
- CNTRL ROOM ANNUN / INST OUT-OF-SERVICE BACKLOG REDUCTION
- NON-OUTAGE EQPT OUT-OF-SERVICE BACKLOG REDUCTION

### CORRECTIVE ACTION REVIEWS

- PER's
- IT's
- UNIT 2 LESSONS LEARNED

MRRC REVIEWS

MILESTONE	DATE RANGE
VACUUM	2/10 TO 2/12
MODE 4	3/12 TO 3/28
MODE 3	3/16 TO 4/01
MODE 2	3/21 TO 4/06
GEN SYNC	3/26 TO 4/11

## OPERATIONS ISSUES

## OPERATIONS IMPROVEMENT PLAN

- REVIEW OF RECENT OPERATIONS EVENTS

- 02/02/94 - Misposition RCW Pump Handswitch
- 01/29/94 - Terry AFW Pump in Manual
- 01/29/94 - Deadheading of 1A Hotwell Pump
- 01/20/94 - FLAS-5 Fuses Installed Incorrectly
- 01/10/94 - Inadvertent ECCS Accumulator Discharge
- 12/21/93 - Loss of RCS Inventory
- 11/14/93 - Use of Information-Only Clearance
- 10/27/93 - ERCW Pump Spring Charging Switch Left Off
- 10/14/93 - Motor-Driven AFW Pump Left in Pull-to-Lock
- 08/28/93 - Auxiliary Boiler 'B' Overpressurized

- AREAS NEEDING INCREASED ATTENTION

- Operations Management and Supervision
- Equipment Status Control
- Personnel Performance/Expectations
- Equipment Deficiency Backlogs
- Process Improvement
- Procedure Improvement
- Training and Qualification
- Scheduling, Utilization of Personnel and Teamwork
- Investigations and Corrective Actions
- Verification of Activities

## OPERATIONS ACTIONS BEFORE UNIT 1 RESTART

### • IMPROVE PERSONNEL PERFORMANCE/EXPECTATIONS

- Review Barrier Analysis with Personnel and Where They Fit in Order to Prevent Events
- Refine Specific Expectations for Operations Management/Supervision
- Refine Specific Expectations for Operators
- Refine Specific Expectations for Operations Activities

### • IMPROVED EQUIPMENT STATUS CONTROL

- Review Equipment Status Control Processes with Operations Personnel
- Refine Summary Status Logs for Each Operations Position
- Improve Shift Logs and Roll Up to SRO Every Shift
- Develop Status Boards for Unit 1, Unit 2, and Common
- Incorporate Configuration Control Sheets in All Procedures or Work Packages that Remove Equipment from Normal Status
- Enforce Use of Status Control Methods and Review Every Shift as Part of Turnover Process

### • IMPROVED SUPERVISION OF ACTIVITIES

- Enhance Shift Organization (Including OPS, Maintenance, Rad Con, Chemistry, and Others)
- Enforce Expectations and Review on a Daily Basis
- Review Each Person's Performance on a Monthly Basis
- Continue Management Reviews On Shift During Unit Restart Sequence

## OPERATIONS RESTART CRITERIA

- RESTART ACTIONS ARE COMPLETE
- BY DIRECT MANAGEMENT OBSERVATIONS, VALIDATE:
  - Operations Personnel Are Aware of Expectations
  - Expectations and Procedures Are Being Implemented
  - Status Control Methods Are Being Implemented
- NO SIGNIFICANT OPERATIONS EVENTS

NUCLEAR ASSURANCE

PERSPECTIVE



# SEQUOYAH NUCLEAR PLANT

## UNIT 1 RESTART READINESS ASSESSMENT

- NUCLEAR ASSURANCE OVERSITE -

I. BALANCE OF PLANT	12/13	12/20	12/27	1/3	1/10	1/17	1/24	1/31	2/7	2/14
I.A.1 - UPGRADE WORK PRACTICES	G	G	G	G	G	G	G	G	Y	Y
I.A.2 - CONTROL OF WORK	Y	Y	G	G	G	G	G	G	G	G
I.A.3 - ASSESSMENT & PRIORITIZING OF WORK	G	G	G	G	G	G	G	G	G	G
II. OPERATIONS DEPARTMENT										
II.B.1 - CONFIGURATION CONTROL	G	G	G	G	G	G	Y	Y	Y	G
II.B.2 - STRENGTHEN OPERATIONS MANAGEMENT	G	G	G	G	G	G	G	G	G	G
II.B.3 - CONDUCT OF OPERATIONS	G	G	G	G	G	G	G	G	G	G
III. BACKLOGS										
III.C.1 - BACKLOGS/WORK PRIORITIZATION	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
IV. PERSONNEL ORGANIZATION & CULTURE										
IV.D.1 - CULTURE AND OWNERSHIP	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

**G** ACCEPTABLE RESULTS

**Y** IMPROVEMENT NEEDED FOLLOW-UP PLANNED

**R** UNACCEPTABLE RESULTS

**B** INSUFFICIENT INFORMATION OR NOT EVALUATED

## SUMMARY