

December 16, 1999

Tennessee Valley Authority  
ATTN: Mr. J. A. Scalice  
Chief Nuclear Officer and  
Executive Vice President  
6A Lookout Place  
1101 Market Street  
Chattanooga, TN 37402-2801

SUBJECT: MEETING SUMMARY - WATTS BAR NUCLEAR PLANT

Dear Mr. Scalice:

This refers to the open meeting that was conducted at your request at NRC Region II Office on December 10, 1999, for you to discuss recent Watts Bar Nuclear Plant performance and on-going site activities. A list of attendees and a copy of your presentation handout are enclosed.

It is our opinion that this meeting was beneficial in that it provided present performance of plant indicators, outage preparations for Unit 1 Cycle 3, and the revised reactor oversight process preparations that are being planned.

In accordance with Section 2.790(a) 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 meeting, please contact us.

Sincerely,

(Original signed by Paul E. Fredrickson)

Paul E. Fredrickson, Chief  
Reactor Projects Branch 6  
Division of Reactor Projects

Docket Nos. 50-390, 50-391  
License No. NPF-90 and Construction  
Permit No. CPPR-92

Enclosures: 1. List of Attendees  
2. Licensee Presentation Handouts

PORA DOCK

IE 45

cc w/encls:

Karl W. Singer, Senior Vice President  
Nuclear Operations  
Tennessee Valley Authority  
6A Lookout Place  
1101 Market Street  
Chattanooga, TN 37402-2801

Jack A. Bailey, Vice President  
Engineering and Technical Services  
Tennessee Valley Authority  
6A Lookout Place  
1101 Market Street  
Chattanooga, TN 37402-2801

Richard T. Purcell, Site Vice President  
Watts Bar Nuclear Plant  
Tennessee Valley Authority  
P. O. Box 2000  
Spring City, TN 37381

General Counsel  
Tennessee Valley Authority  
ET 10H  
400 West Summit Hill Drive  
Knoxville, TN 37902

N. C. Kazanas, General Manager  
Nuclear Assurance  
Tennessee Valley Authority  
5M Lookout Place  
1101 Market Street  
Chattanooga, TN 37402-2801

Mark J. Burzynski, Manager  
Nuclear Licensing  
Tennessee Valley Authority  
4X Blue Ridge  
1101 Market Street  
Chattanooga, TN 37402-2801

Paul L. Pace, Manager  
Licensing and Industry Affairs  
Watts Bar Nuclear Plant  
Tennessee Valley Authority  
P. O. Box 2000  
Spring City, TN 37381

William R. Lagergren, Plant Manager  
Watts Bar Nuclear Plant  
Tennessee Valley Authority  
P. O. Box 2000  
Spring City, TN 37381

County Executive  
Rhea County Courthouse  
375 Church Street, Suite 215  
Dayton, TN 37321-1300

County Executive  
Meigs County Courthouse  
Decatur, TN 37322

Michael H. Mobley, Director  
Division of Radiological Health  
TN Dept. of Environment & Conservation  
3rd Floor, LNC Annex  
401 Church Street  
Nashville, TN 37243-1532

Distribution w/encls:

- L. R. Plisco, RII
- A. P. Hodgdon, OGC
- B. J. Keeling, GPA/CA
- S. R. Peterson, OEDO
- H. N. Berkow, NRR
- R. E. Martin, NRR
- C. F. Smith, RII
- D. W. Jones, RII
- D. H. Thompson, RII
- L. S. Mellen, RII
- PUBLIC

NRC Resident Inspector  
 U.S. Nuclear Regulatory Commission  
 1260 Nuclear Plant Road  
 Spring City, TN 37381

OFFICE	RII:DRP								
SIGNATURE	<i>Pat</i>								
NAME	PTaylor alt								
DATE	12/14/99	12/ /99	12/ /99	12/ /99	12/ /99	12/ /99	12/ /99	12/ /99	12/ /99
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

OFFICIAL RECORD COPY

DOCUMENT NAME: G:\WB\MEETINGS\MTG-SUMMARY DEC-10.WP

## LIST OF ATTENDEES

### Name

### Title

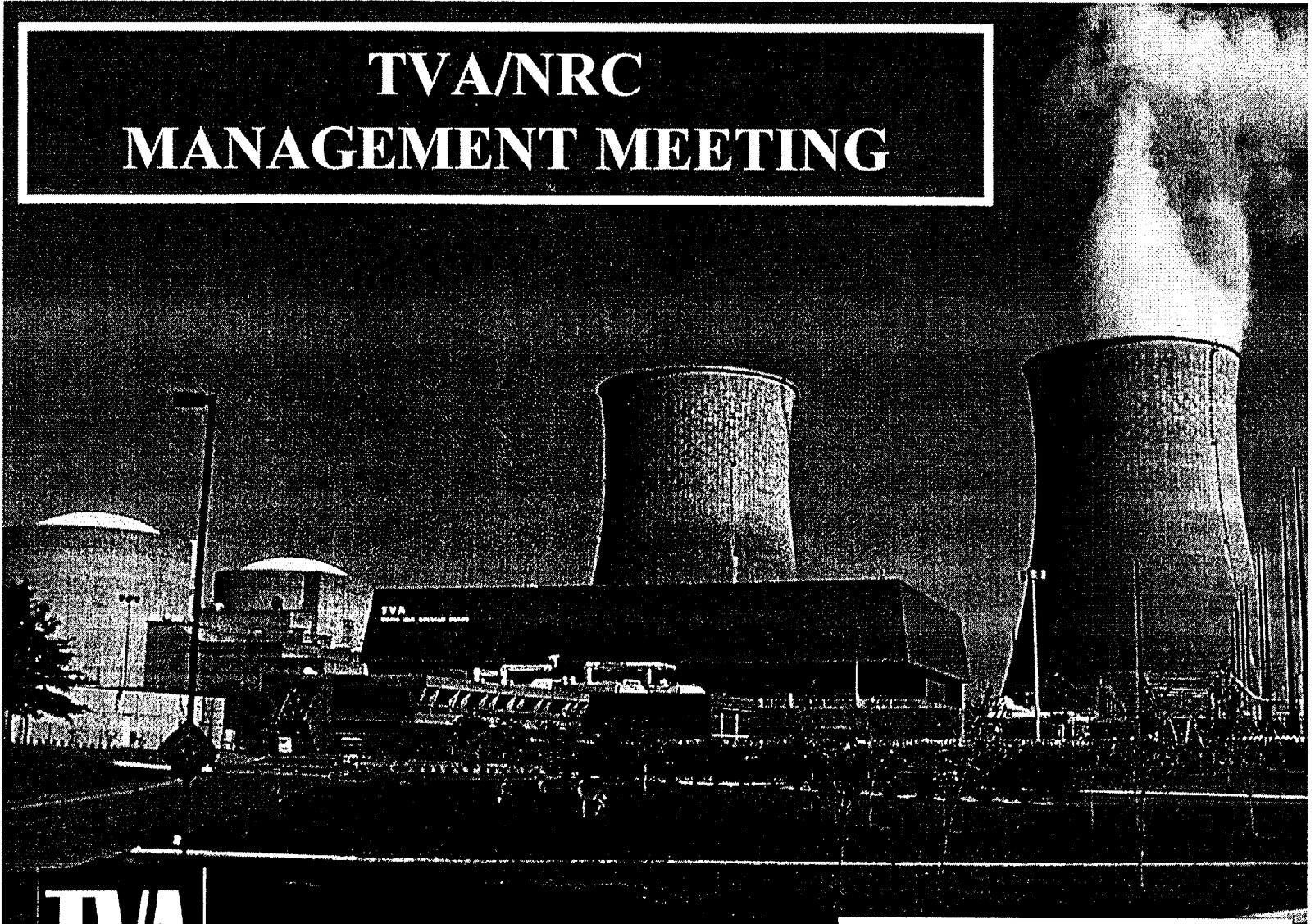
#### NRC Staff

L. Reyes	Regional Administrator, Region II (RII)
B. Mallett	Director, Division of Reactor Safety, RII
L. Plisco	Director, Division of Reactor Projects (DRP), RII
P. Fredrickson	Branch Chief, Branch 6, DRP, RII
D. Rich	Resident Inspector, Watts Bar, DRP, RII

#### TVA Watts Bar Staff

R. Purcell	Site Vice President
B. Lagergren	Plant Manager
J. West	Manager, Engineering and Materials
P. Pace	Manager, Site Licensing

# TVA/NRC MANAGEMENT MEETING



**TVA**

DECEMBER 10, 1999  
NRC REGION II - ATLANTA

# AGENDA

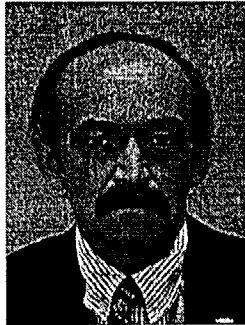
- INTRODUCTION R. T. PURCELL
  - WANO EVALUATION
  - MANAGEMENT CHANGES
- PLANT PERFORMANCE W. R. LAGERGREN
- PERFORMANCE INDICATORS
  - CORNERSTONES J. A. WEST
  - CROSSCUTTING ISSUES W. R. LAGERGREN
- U1C3 OUTAGE W. R. LAGERGREN
- RROP PREPARATION P. L. PACE
- CONCLUSIONS R. T. PURCELL

# WANO EVALUATION

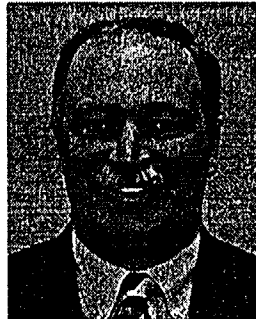
Operations	<p>S: Strong team work exists among on-shift operating crews.</p> <p>AFI: Some procedures contain imprecise, missing or confusing direction</p>	Operating Experience	S: Many methods, including several that are innovative, are used to make operating experience information available to personnel.
Chemistry:	AFI: Station standards for storage and labeling of chemicals are inconsistently followed.	Training and Qualification	S: A variety of training settings and enhanced instructional techniques are effectively used to improve training delivery and student participation.
Radiological Protection:	<p>S: "Job recipes" have been developed for repetitive tasks in the RCA</p> <p>S: Strong individual and organizational ownership of dose performance.</p> <p>AFI: Source check frequencies for portable dose rate meters reduced without technical justification.</p>	Organizational Effectiveness	<p>S: Challenges in maintaining a qualified workforce are being proactively addressed through projected attrition analyses.</p> <p>AFI: Worker acceptance of hazardous conditions, implementation of inappropriate safety practices and weakness in correction by coworkers increase the potential for personnel injury.</p>
Equipment Performance	<p>S: Innovation, team work, and management support resulted in improved condenser performance</p> <p>S: Effective selection and monitoring of lubricants have improved equipment reliability.</p>	Human Performance	<p>S: The Excellence in Performance Program provides operations personnel and other groups a continuous learning environment and also provides important indicators of human performance.</p> <p>AFI: Errors have occurred because workers have not consistently used common error-prevention techniques such as self-checking, critical questioning, and working at an appropriate pace to safely and effectively complete assigned tasks.</p>
Maintenance	AFI: Nonplant worker performance shortfalls exist, some of which have resulted in plant transients and a personnel injury	SOERs	20 reviewed, 16 satisfactory implemented, 4 awaiting implementation
Work Management:	S: High Impact teams have developed and implemented new technologies and methods resulting in improved performance		
Engineering Support:	<p>S: A comprehensive self-assessment process is used to improve engineering programs.</p> <p>S: Work management process for system engineers helps balance short term support with long term system health.</p>		



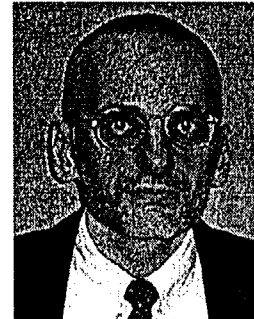
# MANAGEMENT CHANGES



**JEFF A. WEST**  
ENGINEERING  
AND SUPPORT  
MANAGER



**LARRY S.  
BRYANT**  
ASSISTANT  
PLANT  
MANAGER



**JOHN F.  
TORTORA**  
SCHEDULING  
MANAGER



**TOM D.  
WALLACE**  
OUTAGE AND  
SCHEDULING  
MANAGER



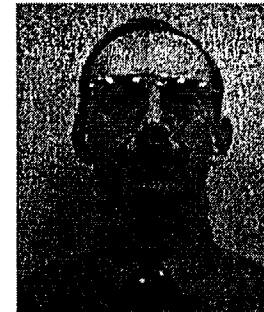
**JOHN B. RODEN**  
OPERATIONS  
SUPERINTENDENT



**BOYD PATTERSON**  
MECHANICAL  
MAINTENANCE MANAGER  
INPO REVERSE LOAN

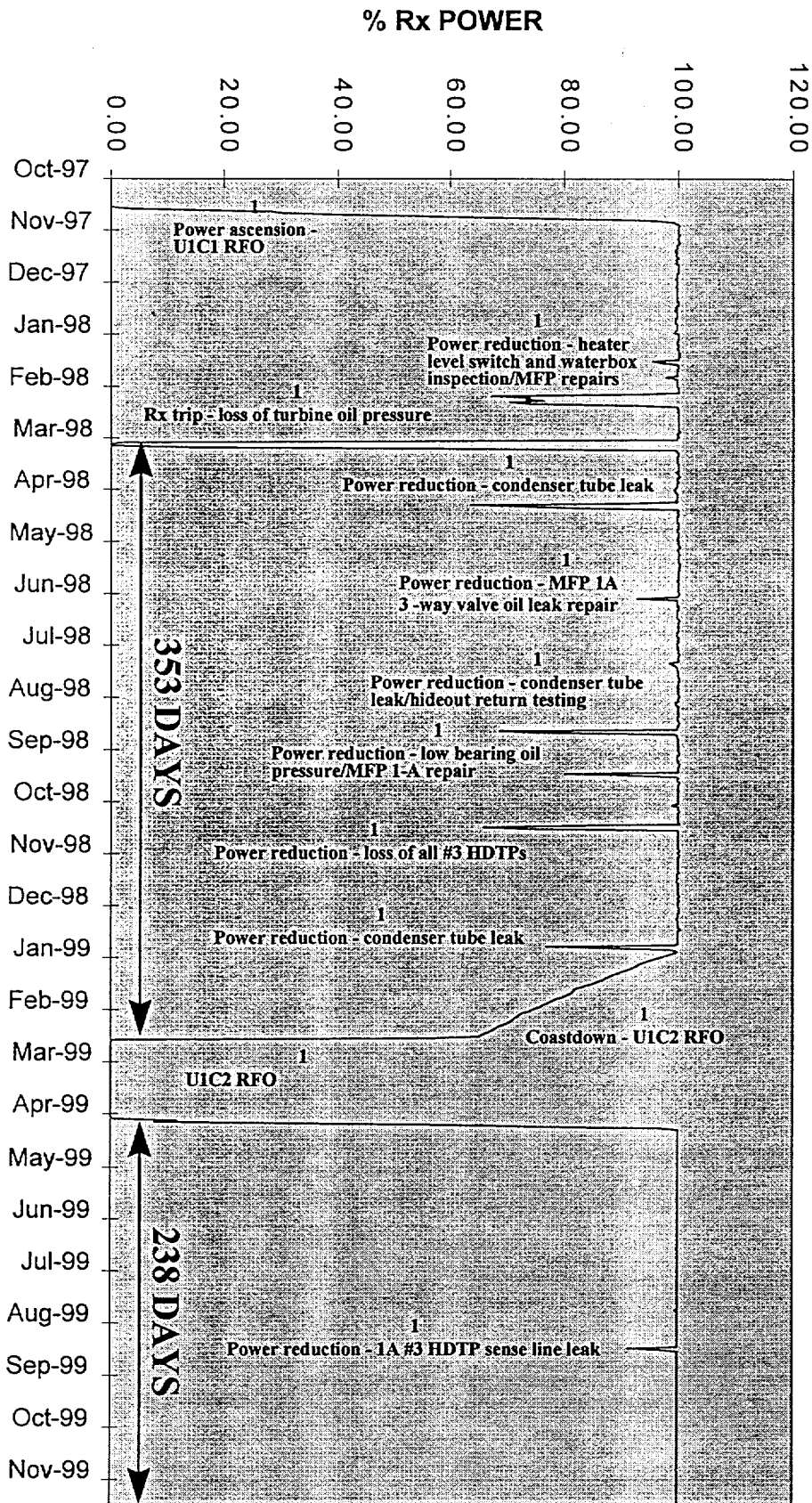


**MIKE E. KING**  
CHEMISTRY  
SUPERINTENDENT

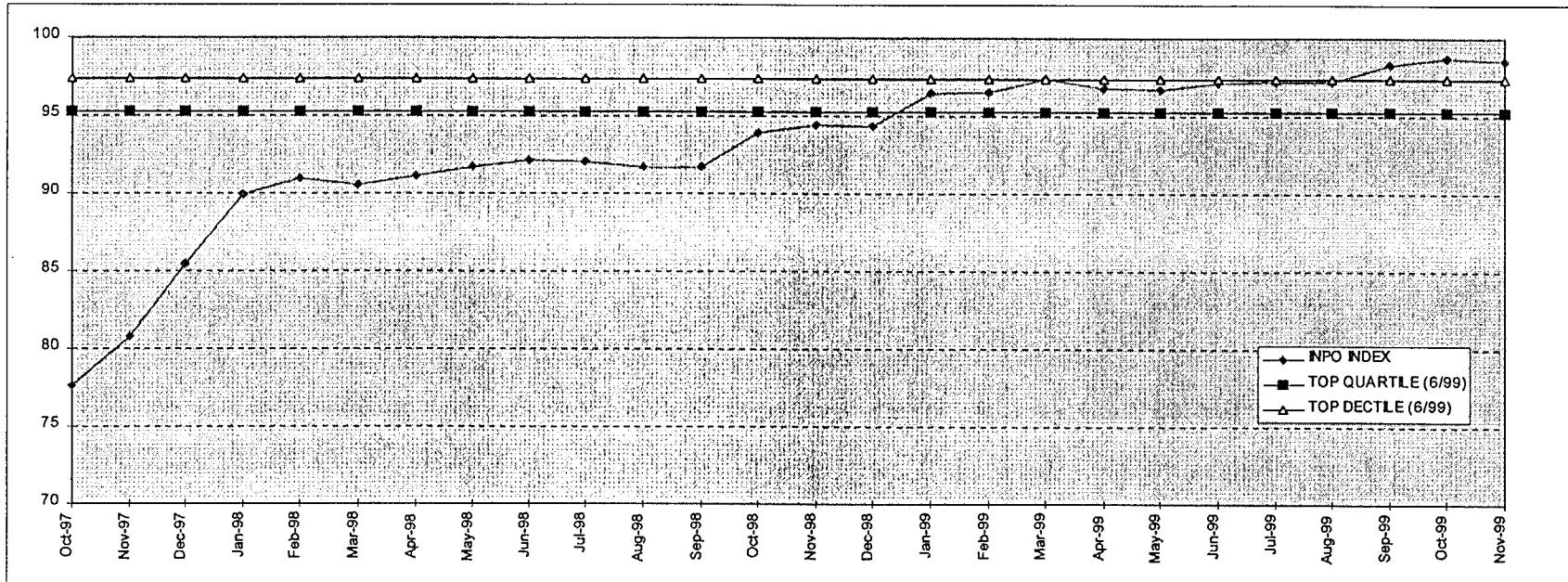


**ED R. ROBINSON**  
ENVIRONMENTAL  
SUPERINTENDENT



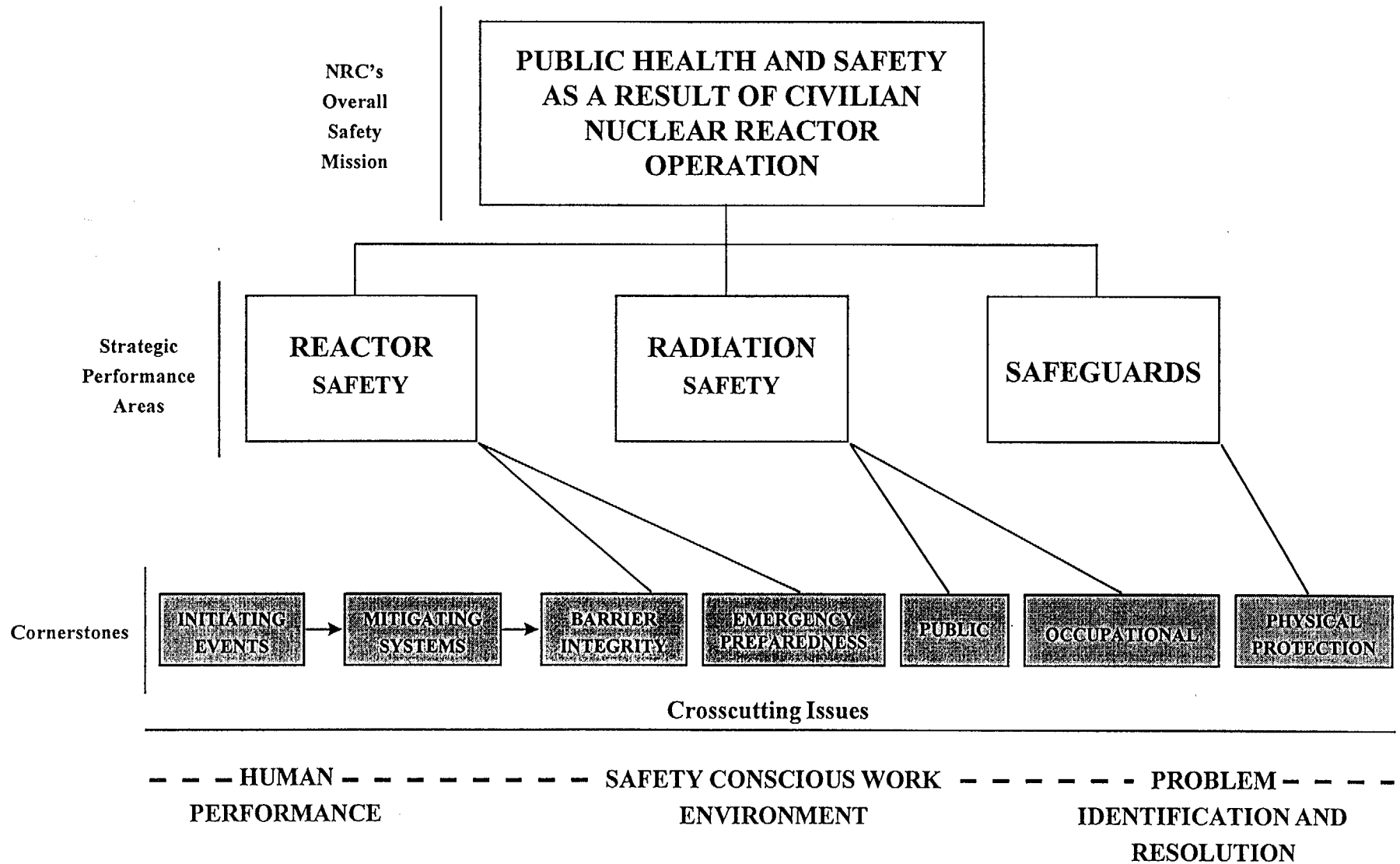


# INPO PERFORMANCE INDEX



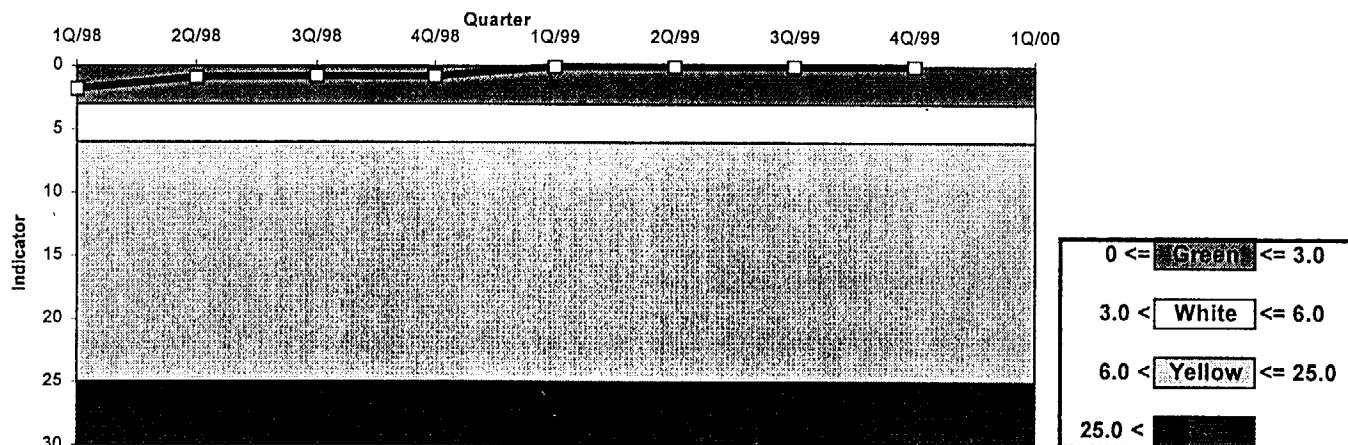
	My-99	Jun-99	Jul-99	Aug-99	Sep-99	Oct-99	Nov-99
Unit Capability Factor	84.8300	85.2200	85.3200	85.3200	88.0670	91.8400	91.8400
Unplanned Capability loss Factor	1.50	1.12	1.03	1.03	1.04	1.03	1.03
Unplanned Automatic Scrams	0.47	0.05	0.47	0.47	0.47	0.47	0.47
High Pressure Injection	0.0043	0.0047	0.0045	0.0047	0.0047	0.0046	0.0048
Auxiliary Feedwater	0.0027	0.0027	0.0028	0.0028	0.0035	0.0026	0.0026
Emergency AC System Availability	0.0073	0.0075	0.0068	0.0050	0.0057	0.0042	0.0042
Thermal Performance	99.86	99.87	99.87	99.86	99.65	99.83	99.81
Fuel Reliability	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06
Chemistry Index	1.10	1.10	1.10	1.07	1.07	1.07	1.07
Collective Radiation Exposure	103.96	103.65	101.86	101.47	63.44	50.72	50.50
Industrial Safety Accident Rate	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INPO Index	96.67	97.08	97.23	97.21	98.23	98.67	98.60

# NRC PERFORMANCE INDICATORS

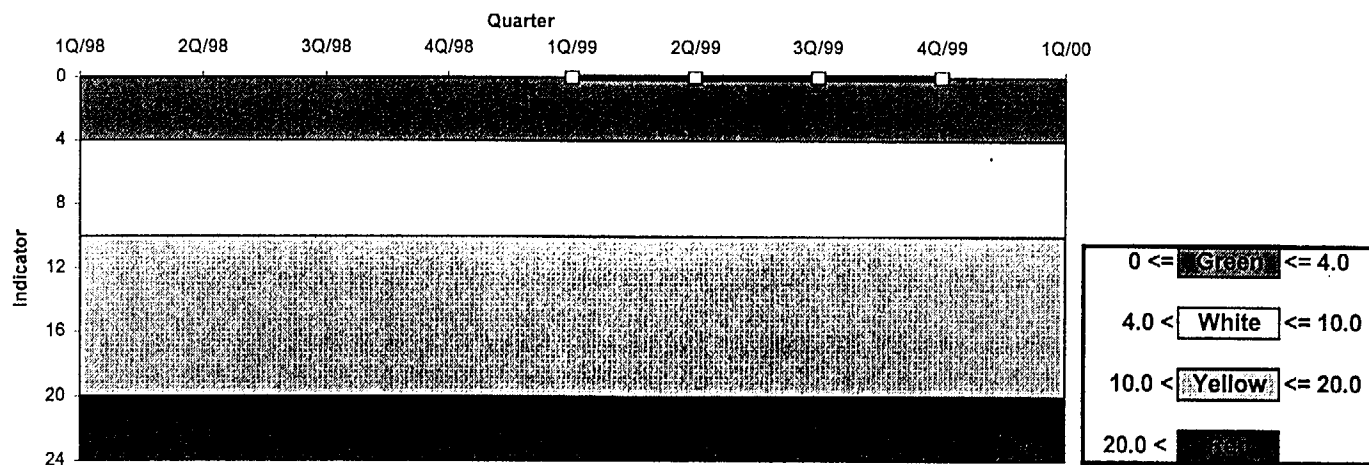


# PERFORMANCE INDICATORS INITIATING EVENTS CORNERSTONE

Unplanned Scrams per 7,000 Critical Hours (4 quarter rolling sum)

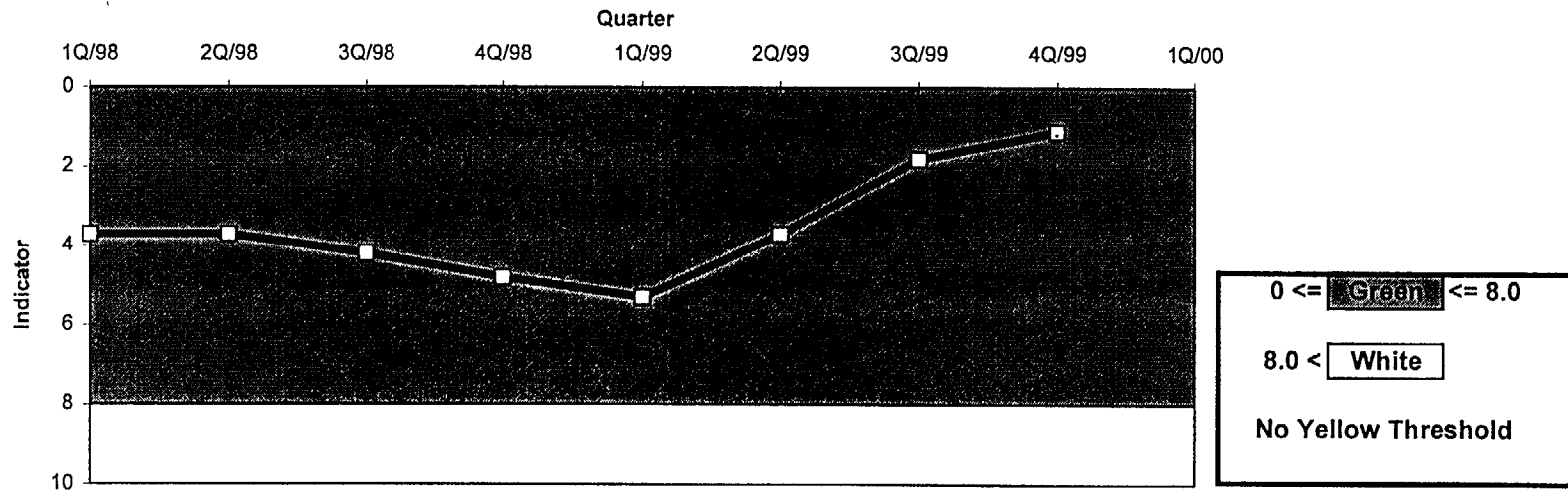


Scrams with a Loss of Normal Heat Removal (12 quarter rolling sum)



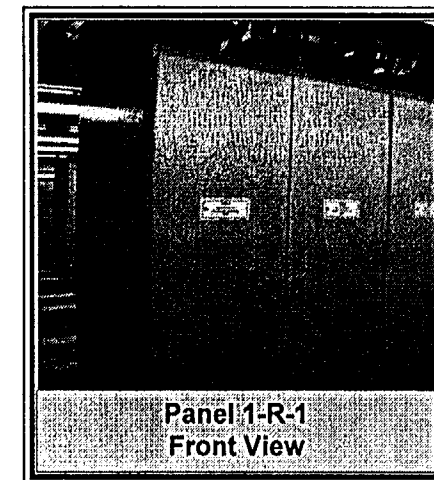
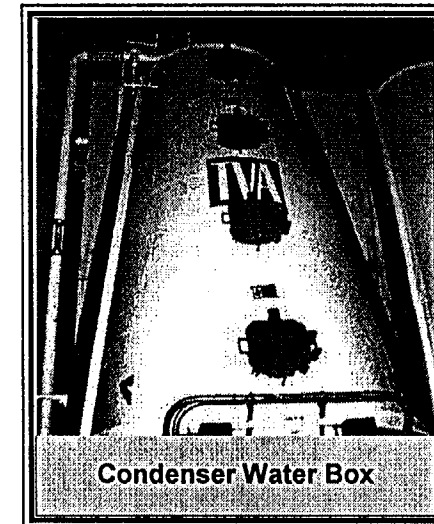
# PERFORMANCE INDICATORS INITIATING EVENTS CORNERSTONE

Unplanned Power Changes per 7000 Critical Hours (4 quarter rolling sum)



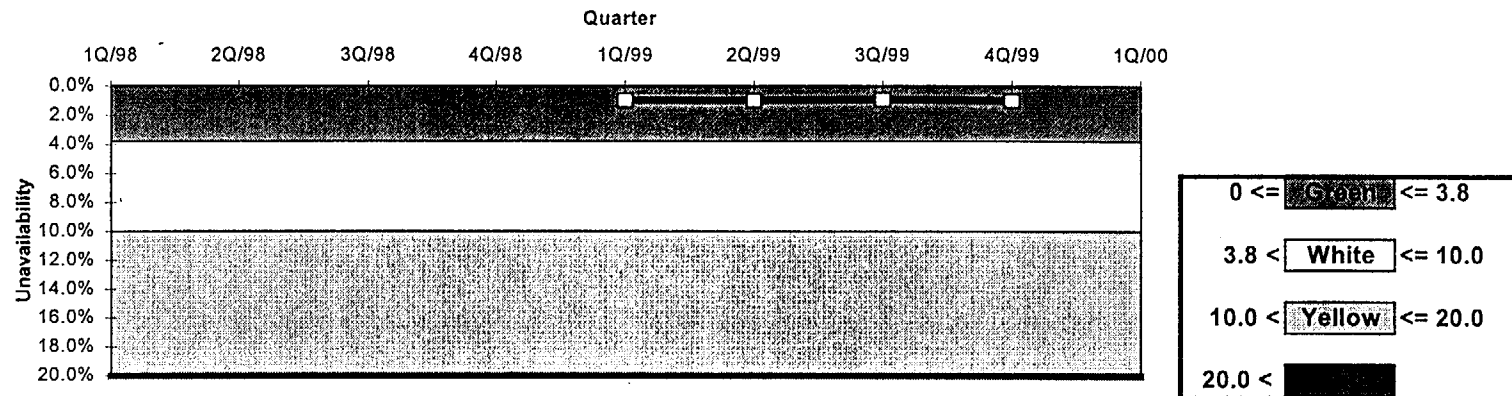
# PERFORMANCE INDICATORS INITIATING EVENTS CORNERSTONE

- CONDITIONS/EVENTS THAT IMPACT THE INDICATOR
  - SECONDARY PLANT COMPONENT RELIABILITY
  - CONTROL OF ACTIVITIES WITH TRIP POTENTIAL
  - PLANT TRANSIENTS
- IMPROVEMENT ACTIONS
  - REPLACED CONDENSER TUBES DURING U1C2 RFO
  - MANAGEMENT FOCUS ON HIGHER RISK ACTIVITIES
  - LOWER THRESHOLD ON CORRECTIVE ACTION DOCUMENTS
  - FOR SCHEDULING ISSUES (CONTROL ROOM SPAN OF CONTROL)
  - R-1 PANEL LOSS - HANDLED WELL BY OPERATORS - HAD PREVIOUSLY RUN ON SIMULATOR

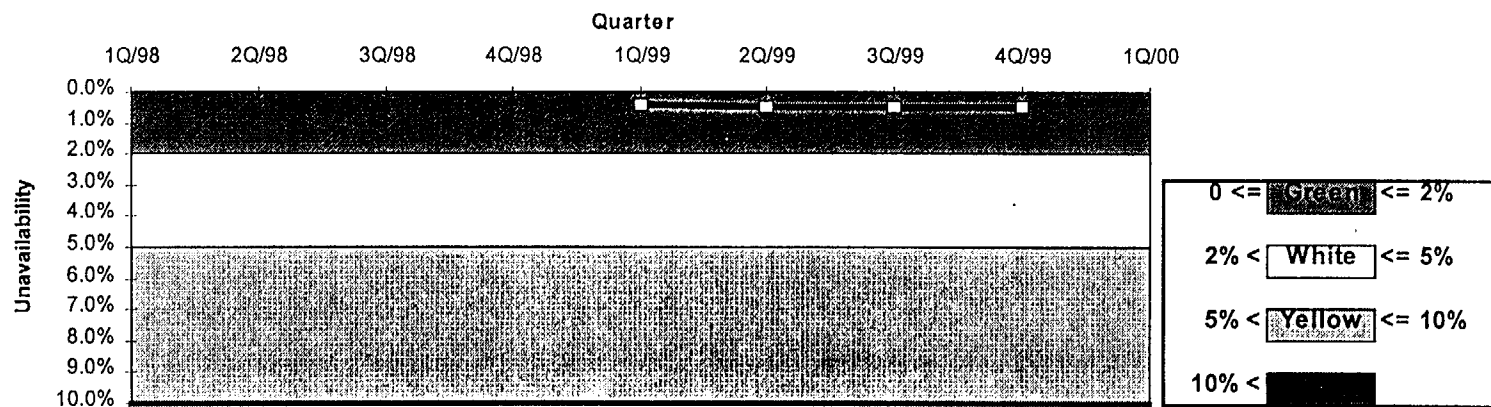


# PERFORMANCE INDICATORS MITIGATING SYSTEMS CORNERSTONE

Safety System Unavailability, Emer. AC Power (12 quarter rolling average)

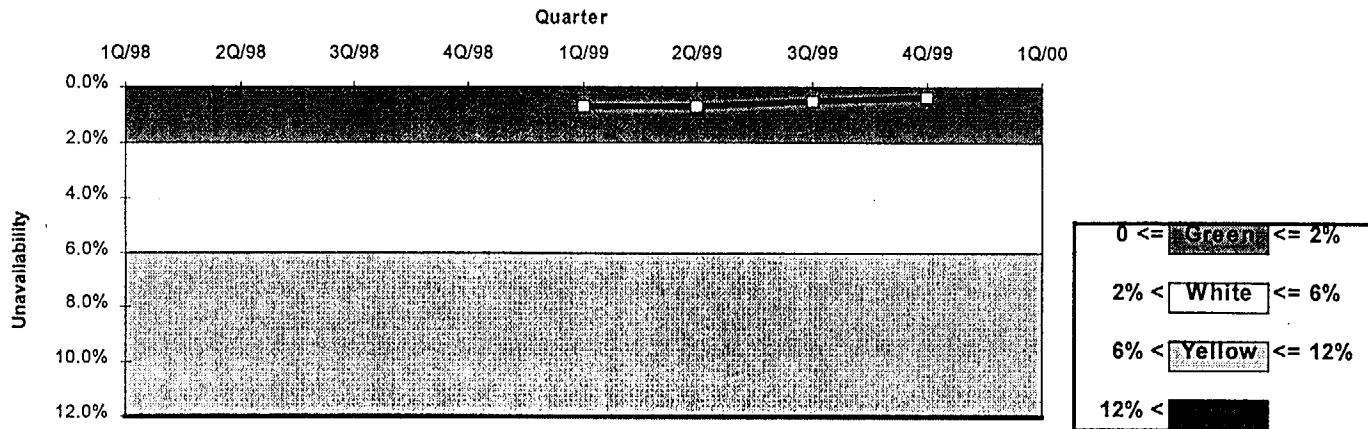


Safety System Unavailability, HP Injection (12 quarter rolling average)

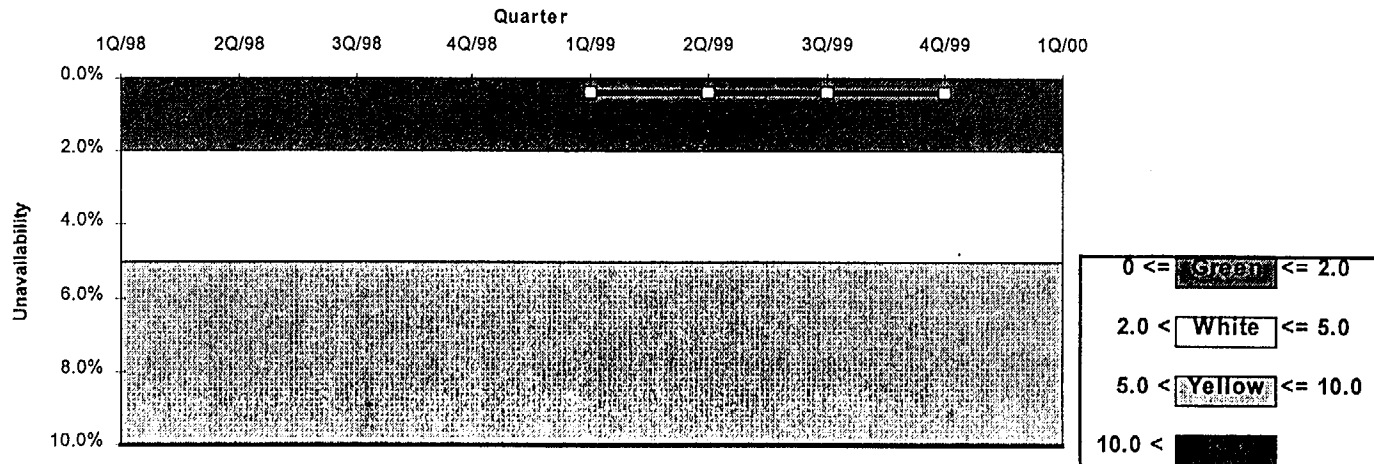


# PERFORMANCE INDICATORS MITIGATING SYSTEMS CORNERSTONE

Safety System Unavailability, Heat Removal (12 quarter rolling average)



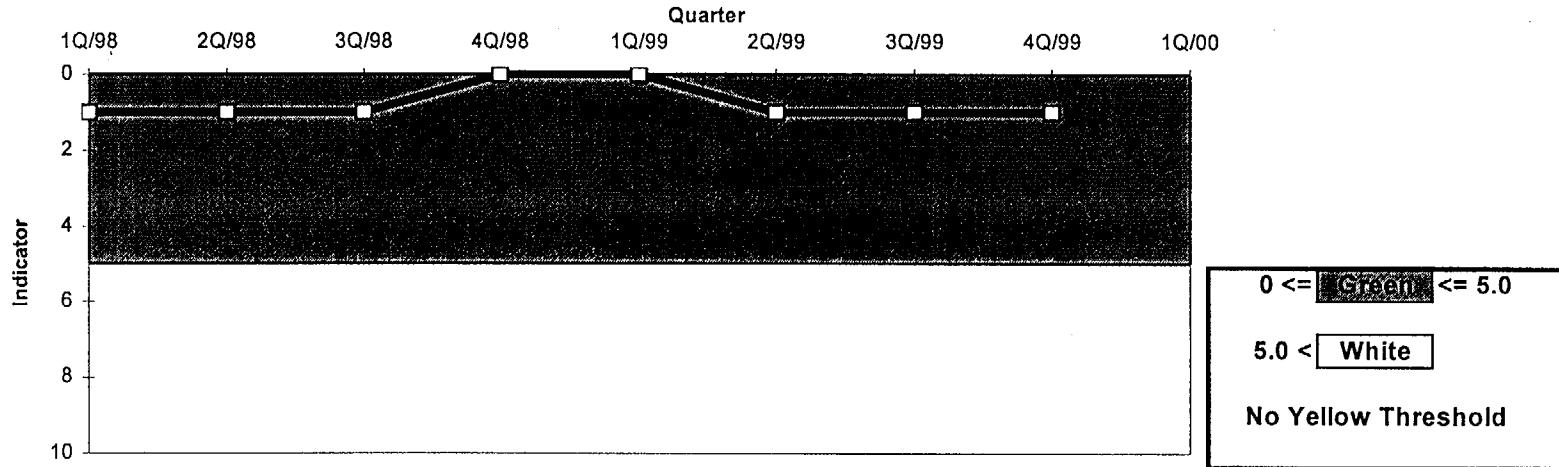
Safety System Unavailability, RHR (12 quarter rolling average)





# PERFORMANCE INDICATORS MITIGATING SYSTEMS CORNERSTONE

**Safety System Functional Failures (4 quarter rolling sum)**



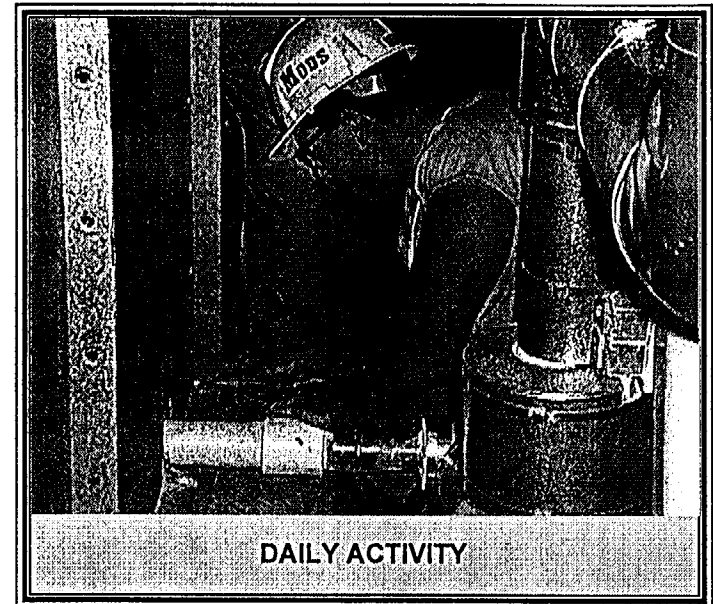
# PERFORMANCE INDICATORS MITIGATING SYSTEMS CORNERSTONE

- CONDITIONS/EVENTS THAT IMPACT THE INDICATOR

- BALANCE OF UNAVAILABILITY AND EQUIPMENT PREVENTIVE MAINTENANCE
- ON-LINE MAINTENANCE ACTIVITIES
- UNPLANNED MAINTENANCE BREAKAGE

- IMPROVEMENT ACTIONS

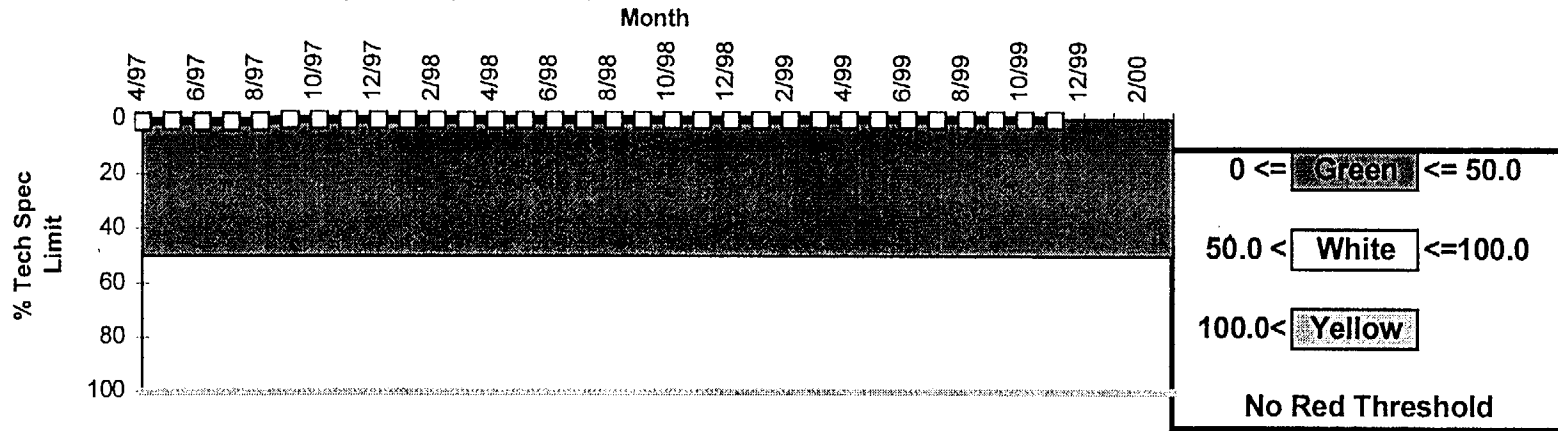
- AGGRESSIVE PLANNING AND SCHEDULING FOR MINIMIZATION OF EQUIPMENT OUTAGE TIME
- REDUCTION OF OPEN WORK ORDERS IMPROVES WORK FOCUS
- MANAGEMENT OVERSIGHT OF TIME IN LCO'S
- BALANCING ON-LINE/OUTAGE MAINTENANCE



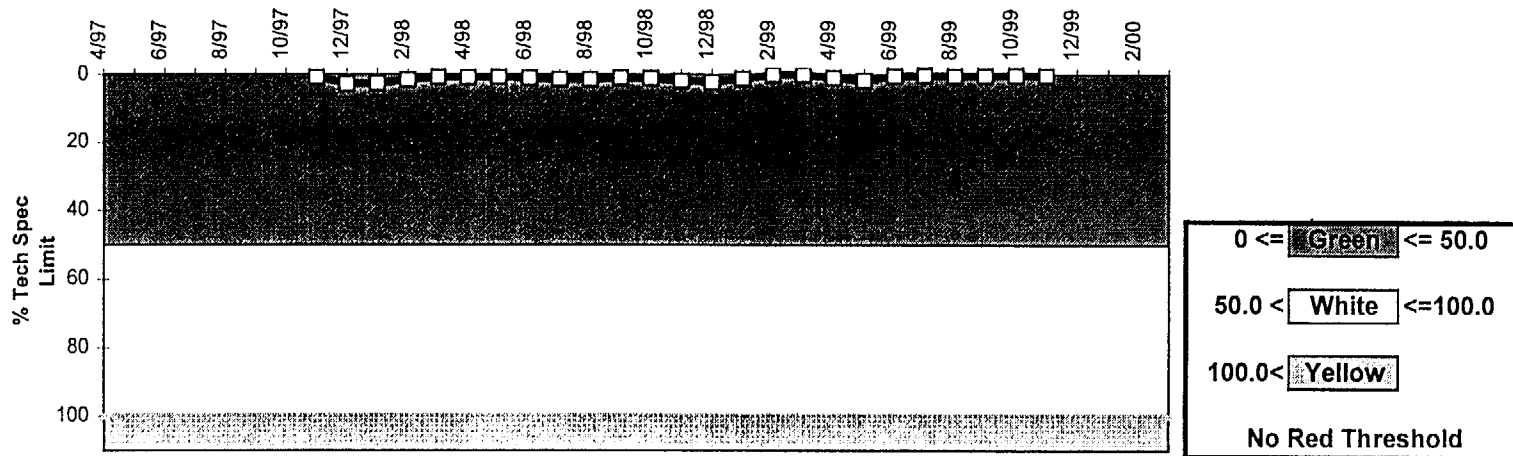
# PERFORMANCE INDICATORS

## BARRIER INTEGRITY CORNERSTONE

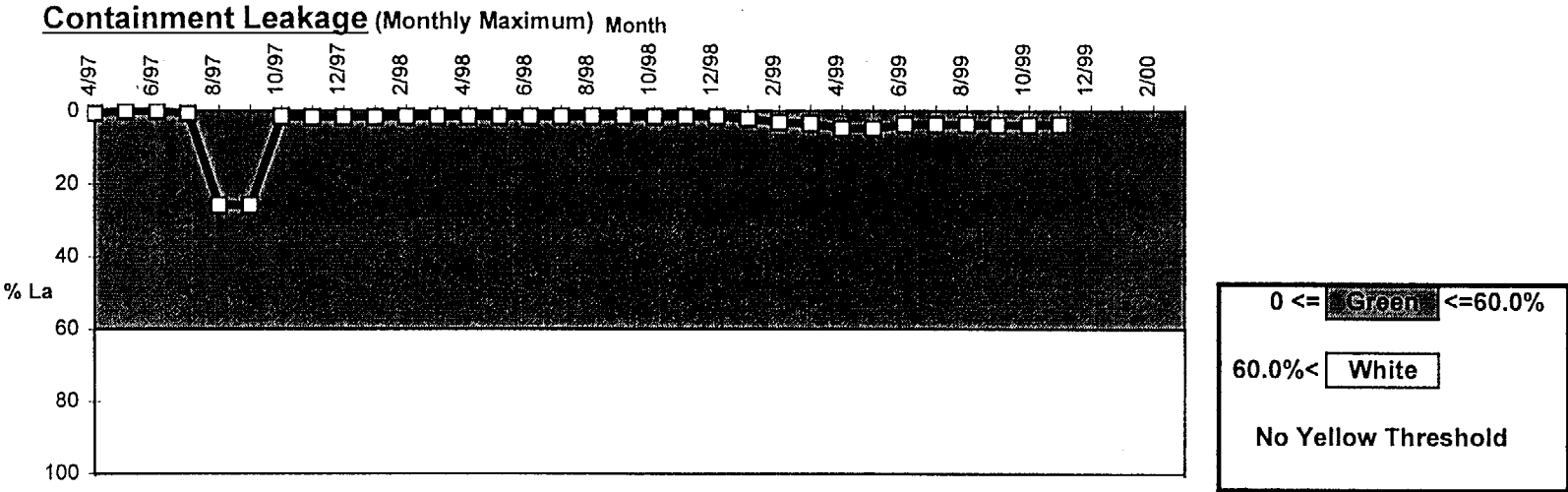
RCS Specific Activity (Monthly Maximum)



RCS Identified Leak Rate (Monthly Maximum)

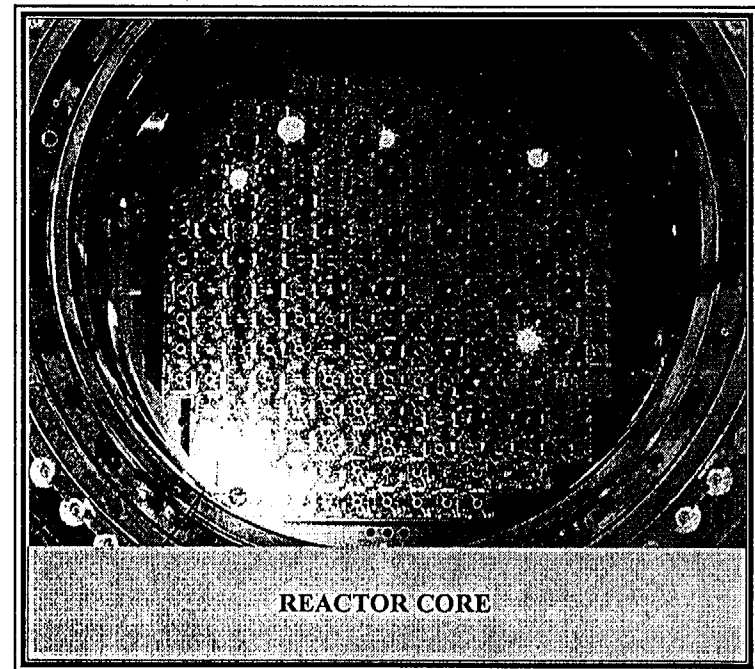


# PERFORMANCE INDICATORS BARRIER INTEGRITY CORNERSTONE



# PERFORMANCE INDICATORS BARRIER INTEGRITY CORNERSTONE

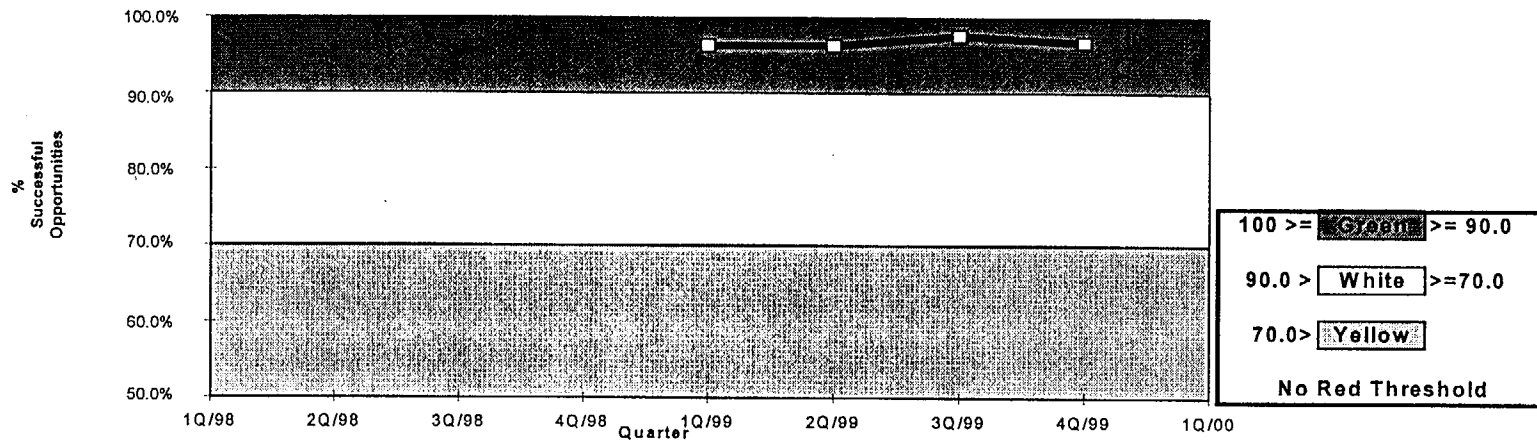
- CONDITIONS/EVENTS THAT IMPACT THE INDICATOR
  - FUEL PERFORMANCE
  - RCS LEAKAGE
  - CONTAINMENT PENETRATION TESTING
  
- IMPROVEMENT ACTIONS
  - CAREFUL INSPECTION OF FUEL DURING REFUELING FOR FOREIGN MATERIAL
  - DETERMINED AND REPAIRED SOURCE OF GASKET MATERIAL PREVIOUSLY FOUND IN RCS
  - MAINTAINING GOOD PRIMARY SYSTEM CHEMISTRY
  - EXTREMELY LOW RCS LEAKAGE



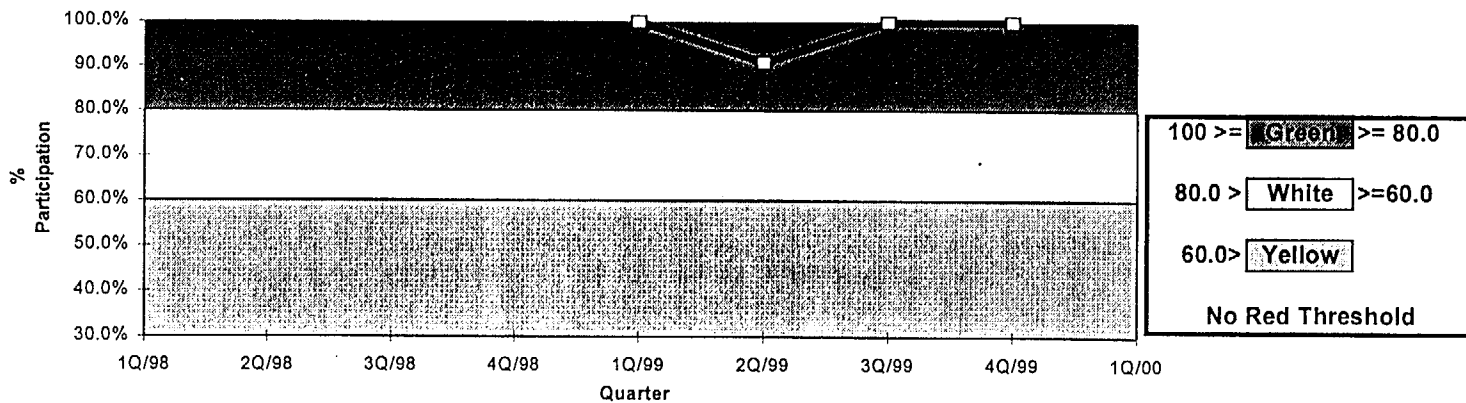
# PERFORMANCE INDICATORS

## EMERGENCY PREPAREDNESS CORNERSTONE

**ERO Drill/Exercise Performance** (8 quarter rolling average)



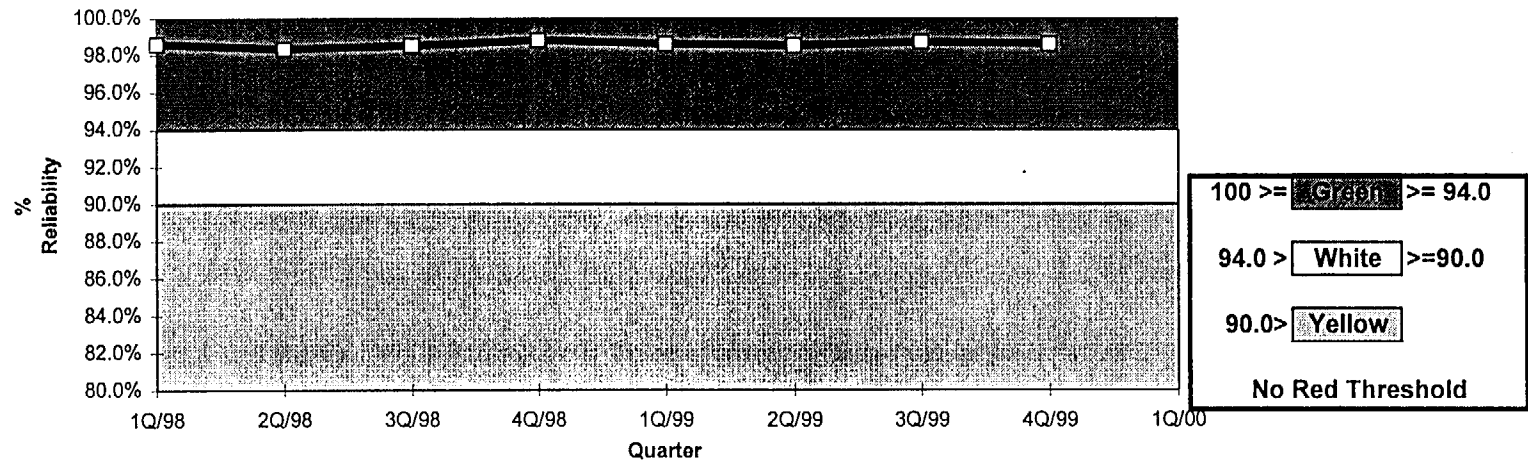
**ERO Drill Participation** (participation of Key personnel during previous 8 qtrs)



# PERFORMANCE INDICATORS

## EMERGENCY PREPAREDNESS CORNERSTONE

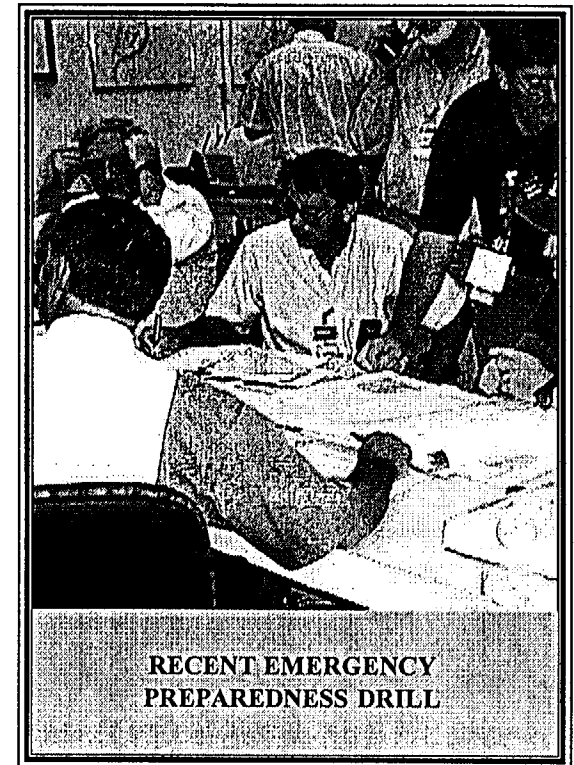
Alert & Notification System Reliability (4 quarter rolling average)



# PERFORMANCE INDICATORS

## EMERGENCY PREPAREDNESS CORNERSTONE

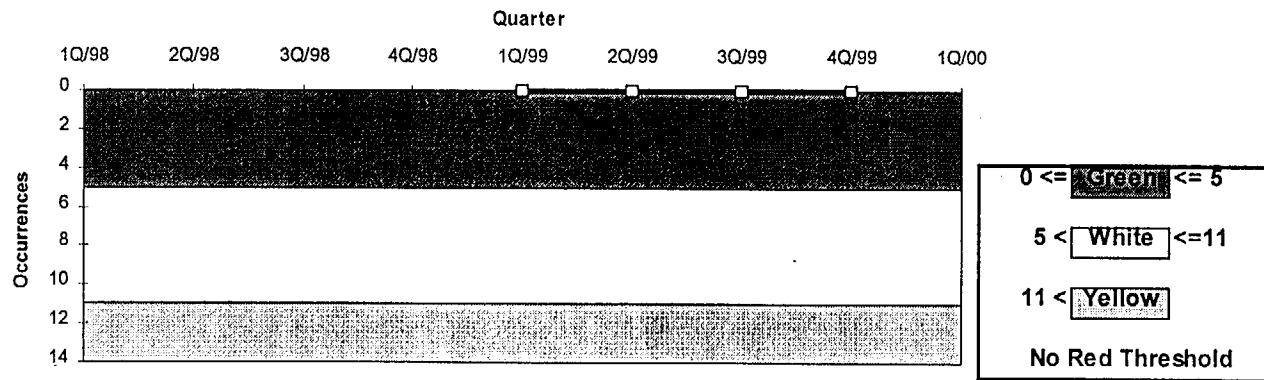
- CONDITIONS/EVENTS THAT IMPACT THE INDICATOR
  - MAKING CORRECT CALLS
    - EMERGENCY DECLARATIONS
    - EMERGENCY NOTIFICATIONS
    - PROTECTIVE ACTION
- IMPROVEMENT ACTIONS
  - FOCUS ON SPAN OF CONTROL FOR NUMBER OF OSC TEAMS
  - COMMAND AND CONTROL FROM TSC DURING RECENT GRADED EXERCISE
  - RELOCATE STATUS BOARDS IN THE OSC TO IMPROVE VISIBILITY



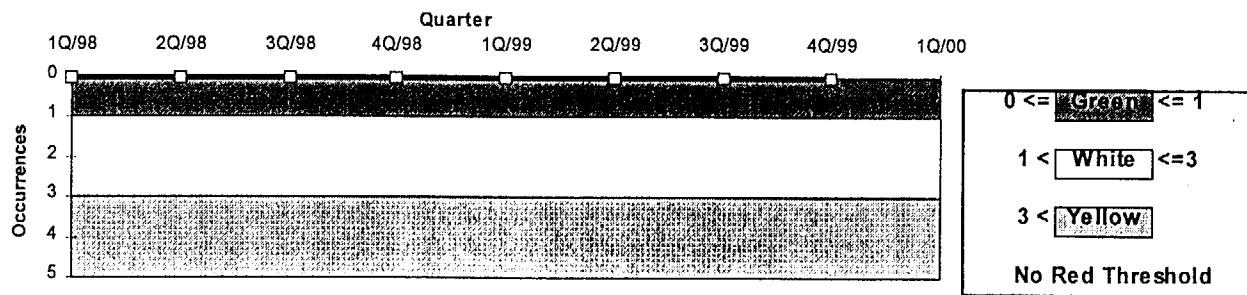


# PERFORMANCE INDICATORS PUBLIC AND OCCUPATIONAL CORNERSTONE

Occupational Exposure Control Effectiveness (12 quarter rolling sum)

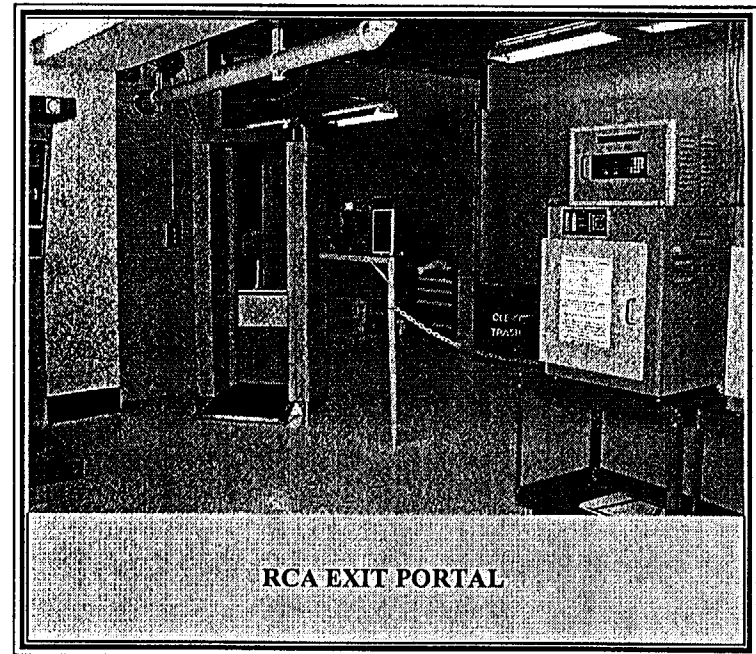


RETS/ODCM Radiological Effluent Occurrences (4 quarter rolling sum)



# PERFORMANCE INDICATORS PUBLIC AND OCCUPATIONAL CORNERSTONE

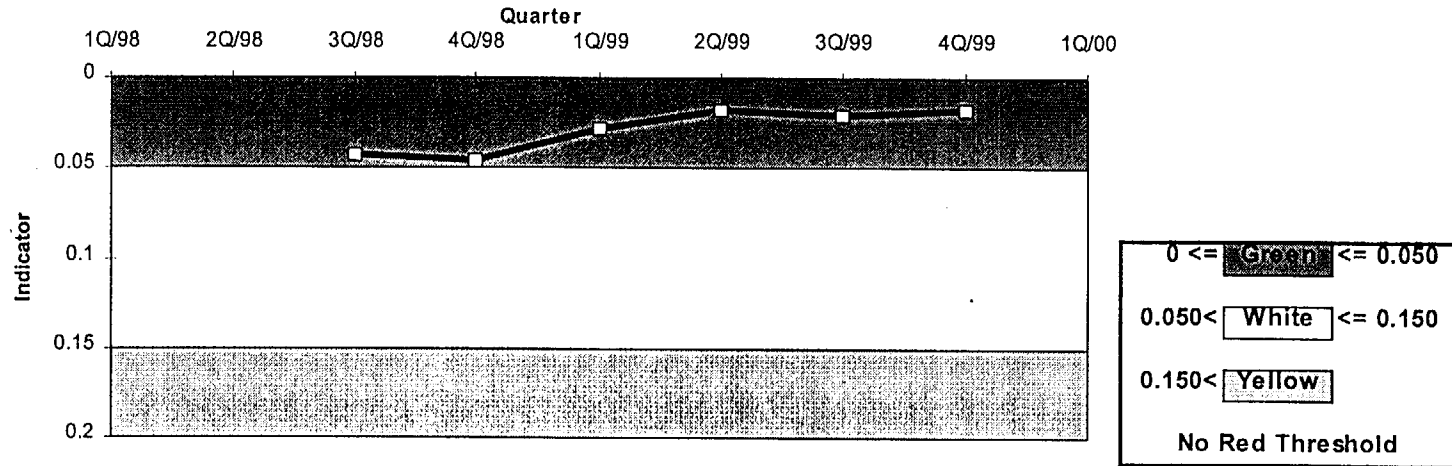
- CONDITIONS/EVENTS THAT IMPACT THE INDICATOR
  - TIGHT CONTROL OF EACH MREM (INDUSTRY RECORD FOR LOW DOSE IN 1998)
  - NO CONTAMINATED FLOOR SPACE
  - STAFF COMPLACENCY IN LOW-CHALLENGE RADWORKER ENVIRONMENT
- IMPROVEMENT ACTIONS
  - INPO RECOMMENDATIONS FOR PRACTICES NOW THAT WILL HELP IN FUTURE
  - DAILY PREJOB FOR ALL JOBS IN RCA
  - CONSTANT EFFORT TO KEEP PLANT FROM GETTING CONTAMINATED



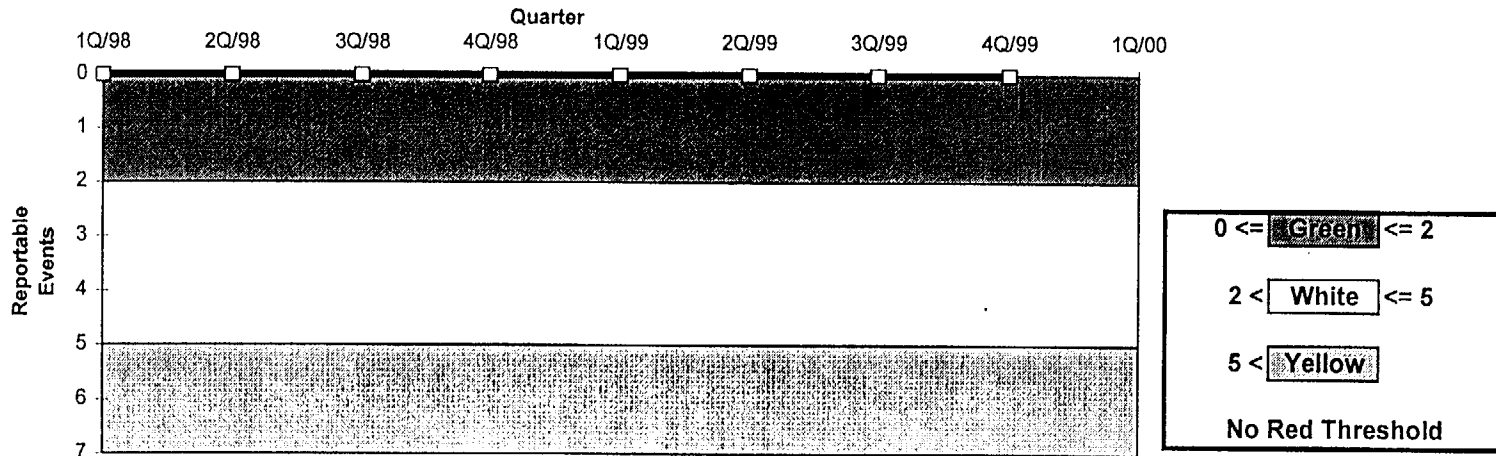
# PERFORMANCE INDICATORS

## PHYSICAL PROTECTION CORNERSTONE

PA Security Equipment Performance Index (4 quarter rolling average)



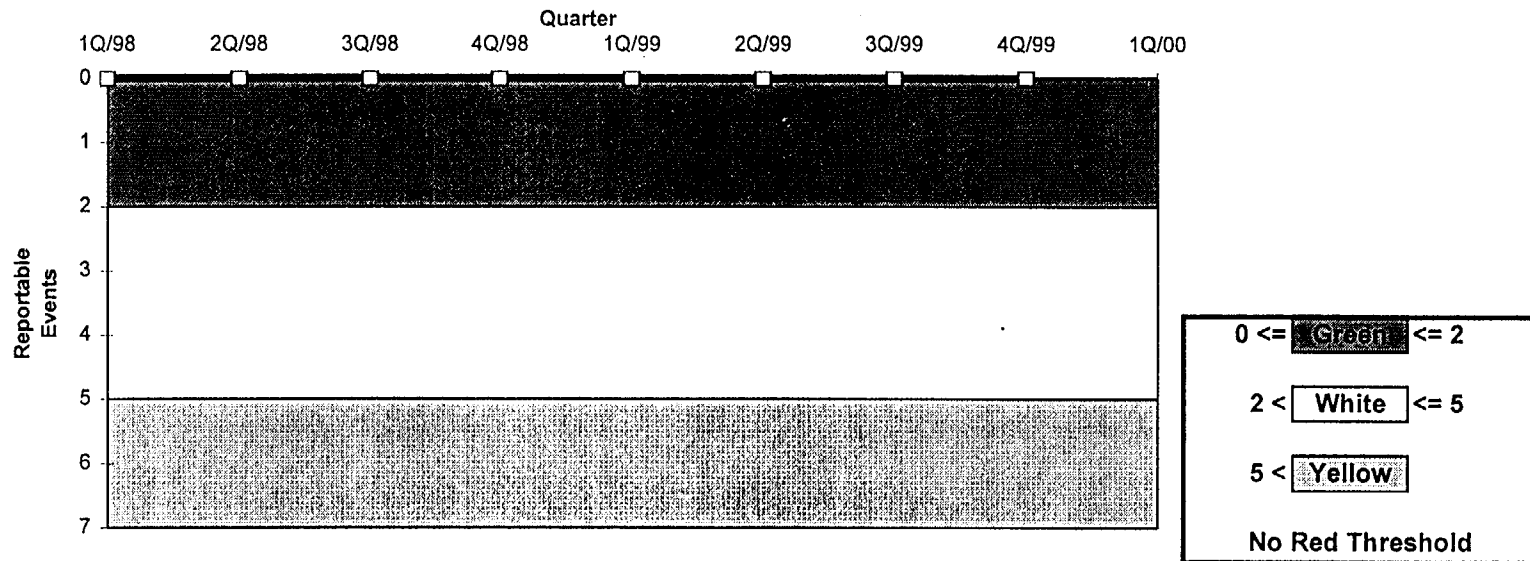
Personnel Screening Program Performance (4 quarter rolling sum)



# PERFORMANCE INDICATORS

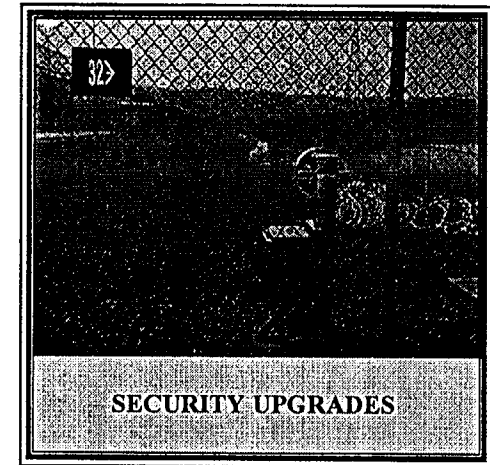
## PHYSICAL PROTECTION CORNERSTONE

FFD/Personnel Reliability Program Performance (4 quarter rolling sum)



# PERFORMANCE INDICATORS PHYSICAL PROTECTION CORNERSTONE

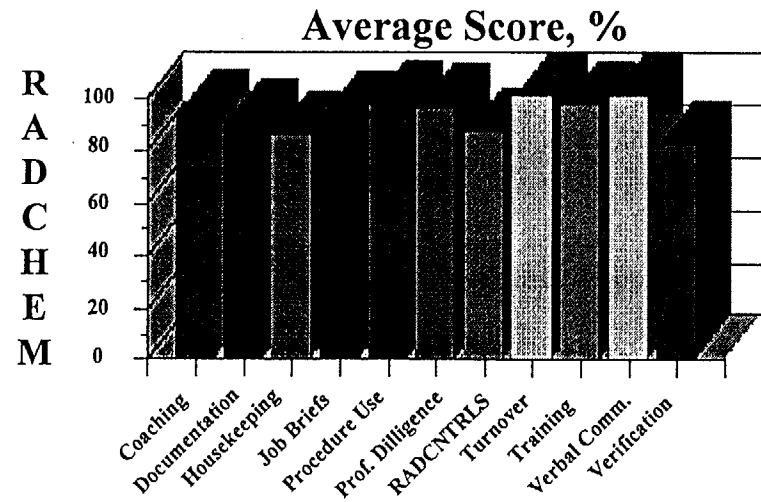
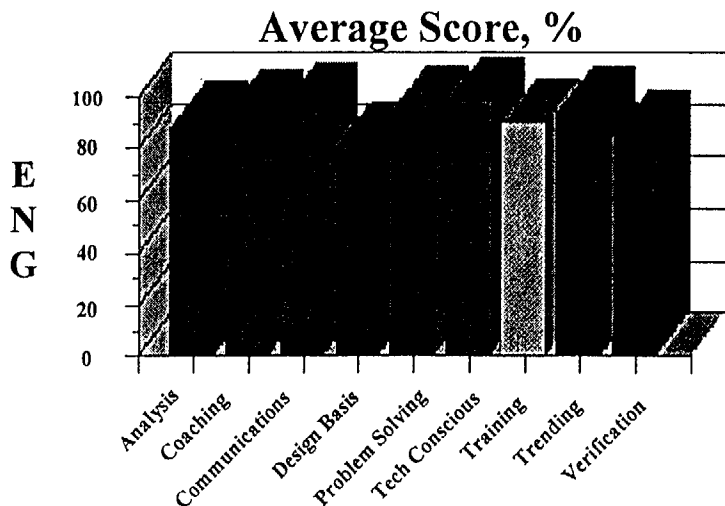
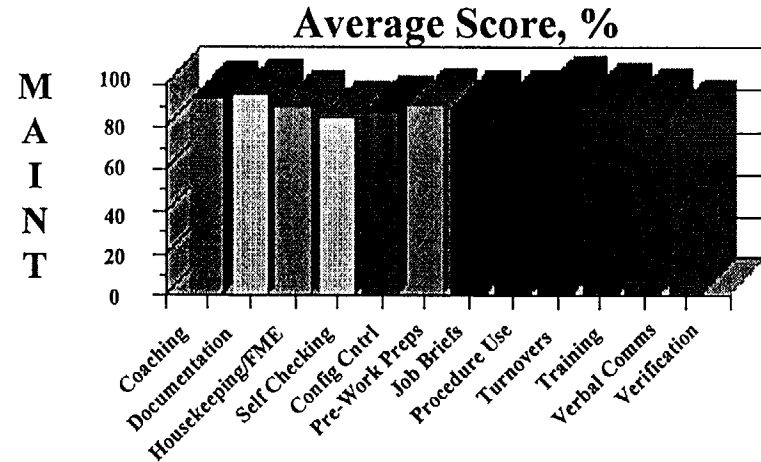
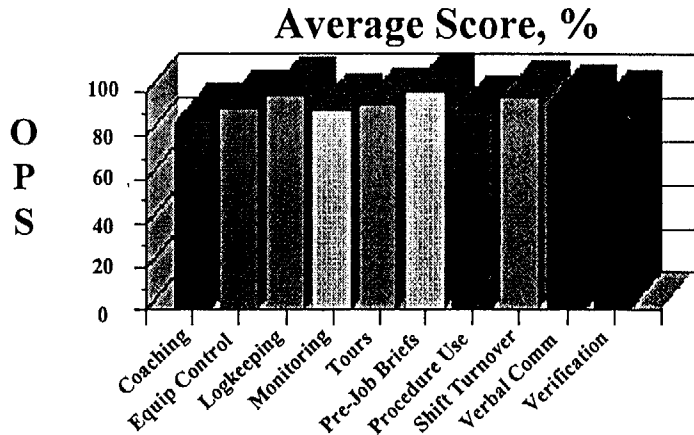
- CONDITIONS/EVENTS THAT IMPACT THE INDICATOR
  - HISTORICAL DATA IMPEDED BY SECURITY SYSTEM UPGRADES PERIOD (PRE-OSRE)
  - “STEADY STATE” WORKFORCE
- IMPROVEMENT ACTIONS
  - ENHANCED THE PREVENTIVE MAINTENANCE PROGRAM
  - MADE HARDWARE ADJUSTMENTS FOR OPTIMUM PERFORMANCE OF EQUIPMENT
  - STRENGTHENED TRACKING AND TRENDING OF SECURITY EQUIPMENT PERFORMANCE
  - SECURITY CONDUCTS WEEKLY MEETINGS WITH MAINTENANCE, ENGINEERING, AND QA PERSONNEL TO ASSESS EQUIPMENT STATUS.



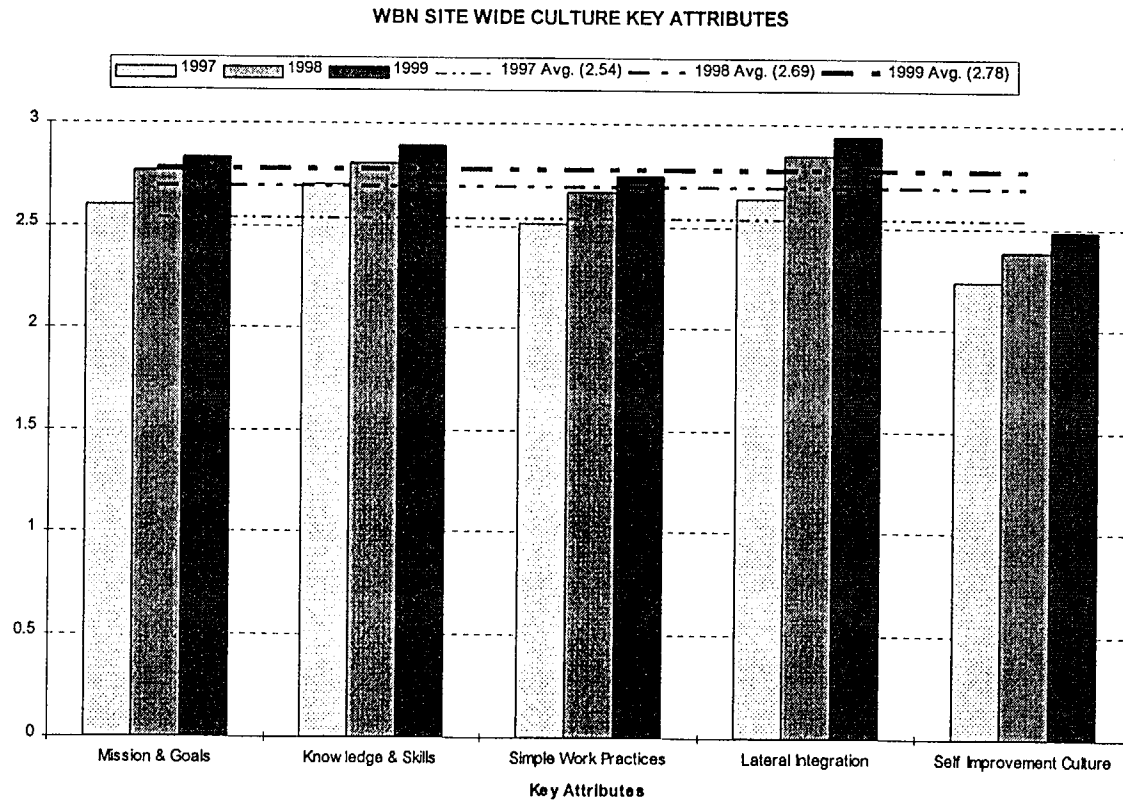
# PERFORMANCE INDICATORS

## CROSSCUTTING ISSUES

### HUMAN PERFORMANCE



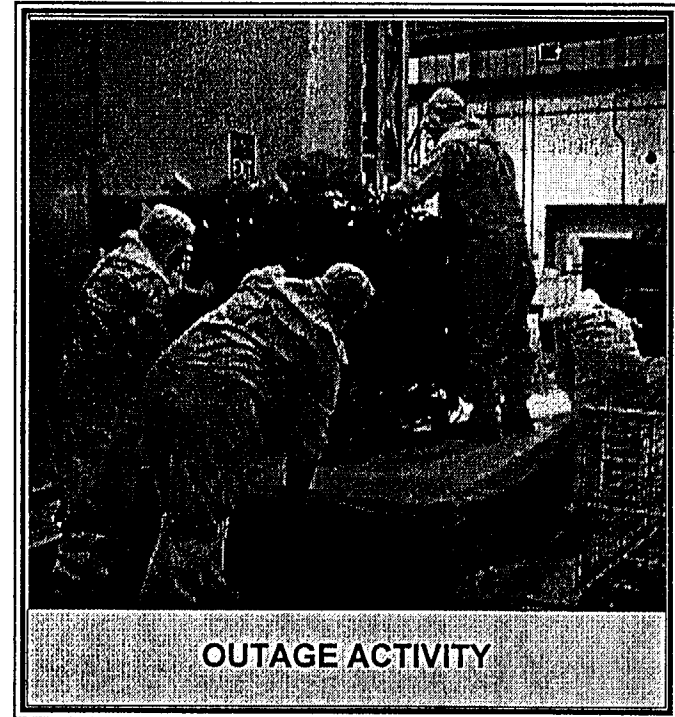
# PERFORMANCE INDICATORS CROSSCUTTING ISSUES PROBLEM IDENTIFICATION AND RESOLUTION/ SAFETY CONSCIOUS WORK ENVIRONMENT



# OUTAGE PREPARATION

## UNIT 1 CYCLE 3

- MAJOR CHANGES
  - INSTALLATION OF DIGITAL STEP COUNTERS IN THE ROD CONTROL SYSTEM
  - REPLACE LEFM
  - REPLACEMENT OF 24-35 HYDROGEN IGNITERS
  - FLOW ACCELERATED CORROSION - PHASE 3
  - ICE BLOWING DURING REFUELING
  - CSST C TAP CHANGER SYSTEM PM
  - CCTV DOSIMETRY SYSTEM
  - GENERATOR STATOR FULL WINDING PROTECTION
  - EHC CONSTANT FLOW PUMPS
  
- TECHNICAL SPECIFICATION CHANGES
  - BELOCA ANALYSIS
  - ALLOW ICE BLOWING DURING REFUELING
  - ALLOW BOTH AIRLOCK DOORS TO BE OPEN DURING REFUELING
  - ICE CONDENSER FLOW PASSAGE REVISION
  - REDUCE ICE CONDENSER MINIMUM STORE WEIGHT
  - RESPONSE TIME TESTING ELIMINATION
  - SG ALTERNATE PLUGGING CRITERIA







# SYSTEM STATUS WBN

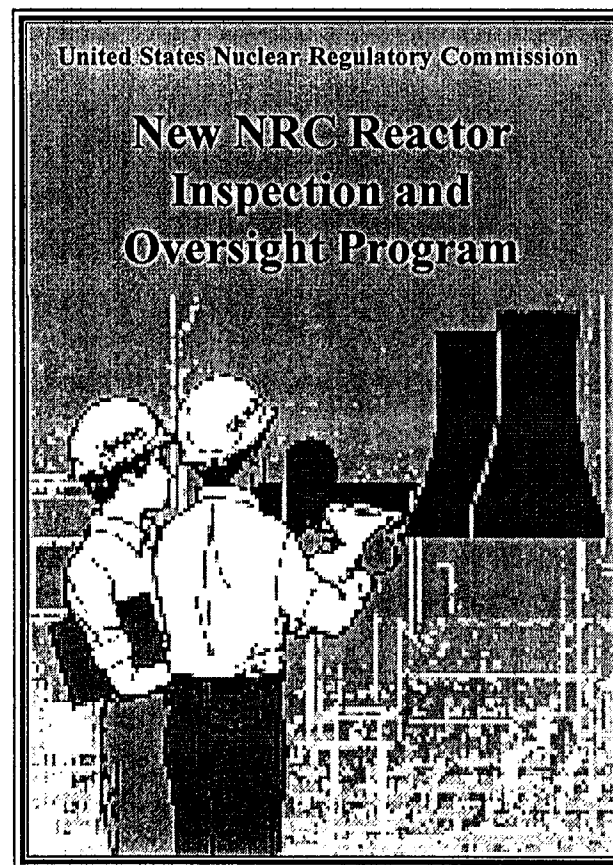
4TH QTR  
FY99

## SYSTEM COLOR RATING MATRIX

<b>SAFETY</b>  WHITE ↔	3B <sub>R/S</sub> AFW (a)(2) WHITE ↓	61 <sub>R/S</sub> ICE CONDENSER (a)(2) WHITE ↑	62 <sub>R</sub> CVCS & RCP SEALS (a)(2) WHITE ↔	63 <sub>R/S</sub> SI (a)(2) YELLOW ↑	65 <sub>R/S*</sub> EGT (a)(2) WHITE ↔	67 <sub>R</sub> ERCW (a)(2) WHITE ↑	68 <sub>R</sub> RCS (a)(2) WHITE ↔	
	70 <sub>R</sub> CCS (a)(2) WHITE ↔	72 <sub>R/S</sub> CSS (a)(2) GREEN ↔	74 <sub>R/S</sub> RHR (a)(2) GREEN ↔	82 <sub>R/S</sub> /18 <sub>R</sub> DIG (a)(2) GREEN ↔	83 <sub>S</sub> /268 <sub>S</sub> H2 CTRL (a)(1) RED ↔	84 <sub>S</sub> FLOOD MODE BORAN (a)(2) WHITE ↓		
<b>INSTRUM'N</b>  WHITE ↔	55 <sub>O</sub> MCR ANNUN (a)(2) WHITE ↑	85 <sub>O</sub> ROD CTRL (a)(2) YELLOW ↔	92 <sub>O</sub> NIS (a)(2) GREEN	94 <sub>O*</sub> INCORES (a)(2) WHITE ↔	99 <sub>R*</sub> RX PROT (a)(2) WHITE ↔	261/264 ICS WHITE ↔	502 <sub>O</sub> AUX CR INSTRUMENT'N (a)(2) GREEN ↔	
	1 <sub>O*</sub> MAIN STM (a)(2) WHITE ↑	1 MAIN TURBINE (a)(2) WHITE ↔	2 <sub>O</sub> CONDENSATE (a)(2) WHITE ↔	3A <sub>O*</sub> MFW (a)(2) WHITE ↔	5 <sub>O</sub> EXT STEAM (a)(2) WHITE ↔	6 <sub>O</sub> HTR DRAINS (a)(2) WHITE ↓	35 <sub>O</sub> GEN CLG (a)(2) GREEN	
<b>MWe</b>  WHITE ↔	46A <sub>O</sub> MFW CTRL (a)(2) WHITE ↔	47 <sub>O</sub> MAIN TURB CTRL (a)(2) WHITE ↔	244/50 <sub>O</sub> MAIN GEN (a)(2) GREEN ↔					
	200/201/202/211/262 <sub>R</sub> 161/6.9KV (a)(2) GREEN ↔	203/205/206/226 <sub>R</sub> 212/480V SWGR (a)(2) GREEN ↔	204/245/246 <sub>R</sub> SWITCHYARD (a)(2) GREEN ↔	207/208/209/213/214/215/220/231/232 <sub>R</sub> 480V MTR CTRL CNTRS (a)(2) GREEN ↔	227/228 <sub>O</sub> EMERG LIGHTING (a)(2) GREEN ↔			
<b>ELECT'L</b>  GREEN ↔	235 <sub>R</sub> 120VAC VITAL (a)(2) WHITE ↔	236 <sub>R</sub> 125VDC VITAL (a)(2) WHITE ↔	237 <sub>O</sub> 120VAC INST (a)(2) GREEN ↔	238 <sub>O</sub> 120VAC PREF (a)(2) GREEN ↔	239 <sub>O</sub> 250VDC (a)(2) GREEN ↔	240 48VDC GREEN ↔		
	14 <sub>O</sub> COND DEMIN (a)(2) YELLOW ↔	15 <sub>O</sub> SGBD (a)(2) WHITE ↔	43 <sub>O</sub> SAMPLING (a)(2) WHITE ↑	77 <sub>O</sub> WASTE DISPOSAL (a)(2) GREEN ↔	90 <sub>O</sub> RAD MON (a)(1) YELLOW ↔			
<b>RAD/CHEM</b>  WHITE ↓	20 <sub>O</sub> LUBE OIL (a)(2) GREEN ↔	24 <sub>O</sub> RAW CLG WTR (a)(2) GREEN ↔	13 <sub>W/A</sub> /26 <sub>S</sub> FIRE PROT (a)(2) WHITE ↔	27 <sub>O</sub> CCW (a)(2) WHITE ↑	30 <sub>O*</sub> VENTILATION (a)(2) GREEN ↔	31 <sub>O*</sub> A/C & CREVS (a)(1) RED ↔	32 <sub>O*</sub> CTRL AIR (a)(2) WHITE ↔	
	39 <sub>O</sub> CO2 FIRE PROT GREEN ↔	40 <sub>O</sub> STATION DRAINAGE (a)(2) WHITE ↑	54 <sub>O</sub> INJ WTR (a)(2) GREEN ↔	64 <sub>O</sub> /88 <sub>R/S</sub> /304 <sub>O</sub> CNTMT INTEG (a)(1) WHITE ↔	78 <sub>O</sub> SFP CLG (a)(2) WHITE ↔	79 <sub>O</sub> FUEL HANDL'G (a)(2) RED ↔	81 <sub>O</sub> PRIM M/U WTR (a)(2) GREEN	
<b>SUPPORT</b>  WHITE ↔	250/251/252/253 <sub>O</sub> COMMUNICATIONS (a)(2) GREEN ↔	257 SECURITY WHITE ↑	600 <sub>O</sub> M RULE STRUCTURES (a)(2) WHITE ↔	PREVIOUS 4 QUARTERS (OLDEST ON LEFT) <b>ABBREVIATIONS</b> <b>MAINTENANCE RULE (MR)</b> G: GREEN RATING    Δ: UP TREND      : NOT IN SCOPE      2: (a)(2) RATING (GOOD) W: WHITE RATING    v: DOWN TREND    O: IN SCOPE ONLY    1: (a)(1) RATING (BAD) Y: YELLOW RATING    +: NEUTRAL TREND    R: RISK SIGNIFICANT   ? : NOT RATED YET R: RED RATING      S: SAFETY STANDBY -: BLUE- NO DATA    R/S: RISK SIG & SAFE STDBY *: SOME SYS FUNCTIONS HAVE DIFF MR SCOPE			<b>SYS #<sub>R</sub></b> <b>NAME</b>	<b>M RULE SYS SYS</b> <b>RATING RATING TREND</b>

# REVISED REACTOR OVERSIGHT PROCESS (RROP)

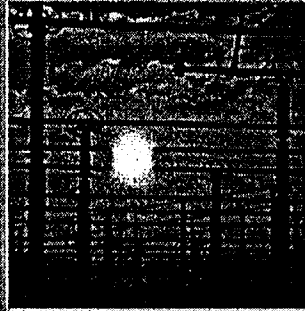
- “LESSONS LEARNED” FROM PILOT PLANTS
- EMPLOYEE COMMUNICATION
- MANAGEMENT/LICENSING TRAINING ON SDP
- PREPARATION OF PERFORMANCE INDICATOR DATA
  - SELF ASSESSMENT OF HISTORICAL DATA 12/99



# CONCLUSIONS

- CONTINUOUS MANAGEMENT OF HUMAN PERFORMANCE
- ATTENTION TO MATERIAL CONDITION
- CRITICAL SELF-ASSESSMENTS

WATTS



BAR



NUCLEAR



PLANT