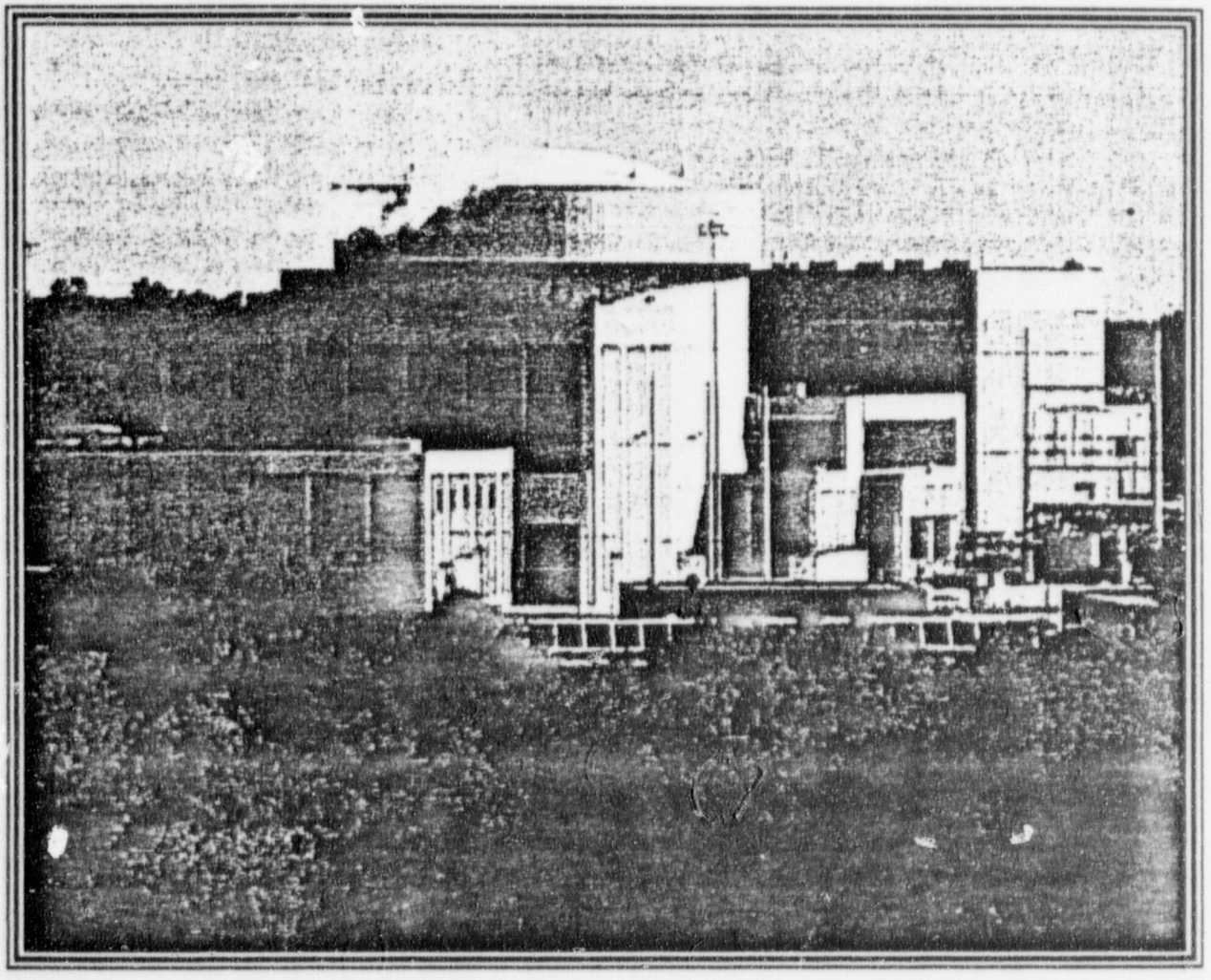
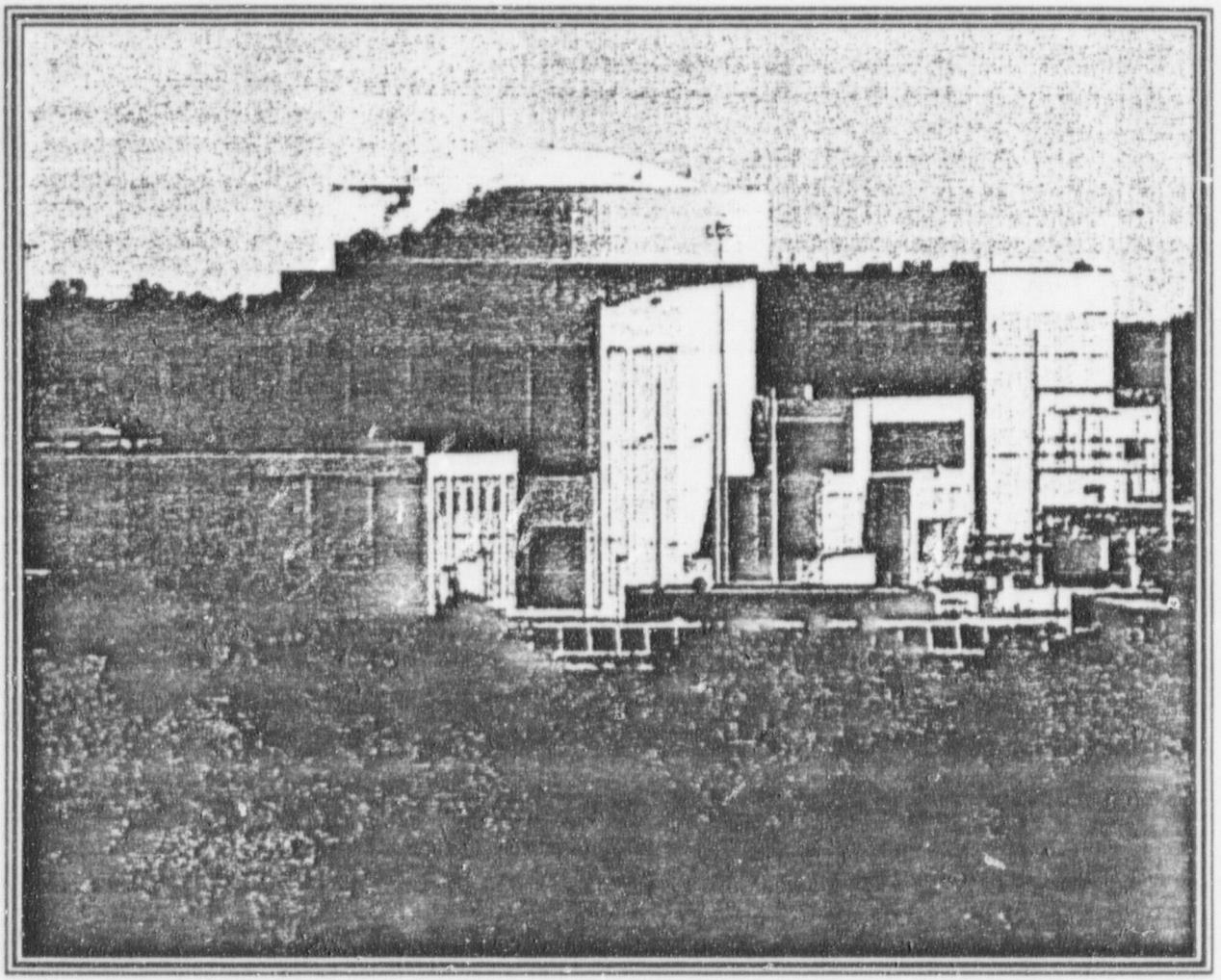
OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN STATION



PERFORMANCE INDICATORS

MAY 1999

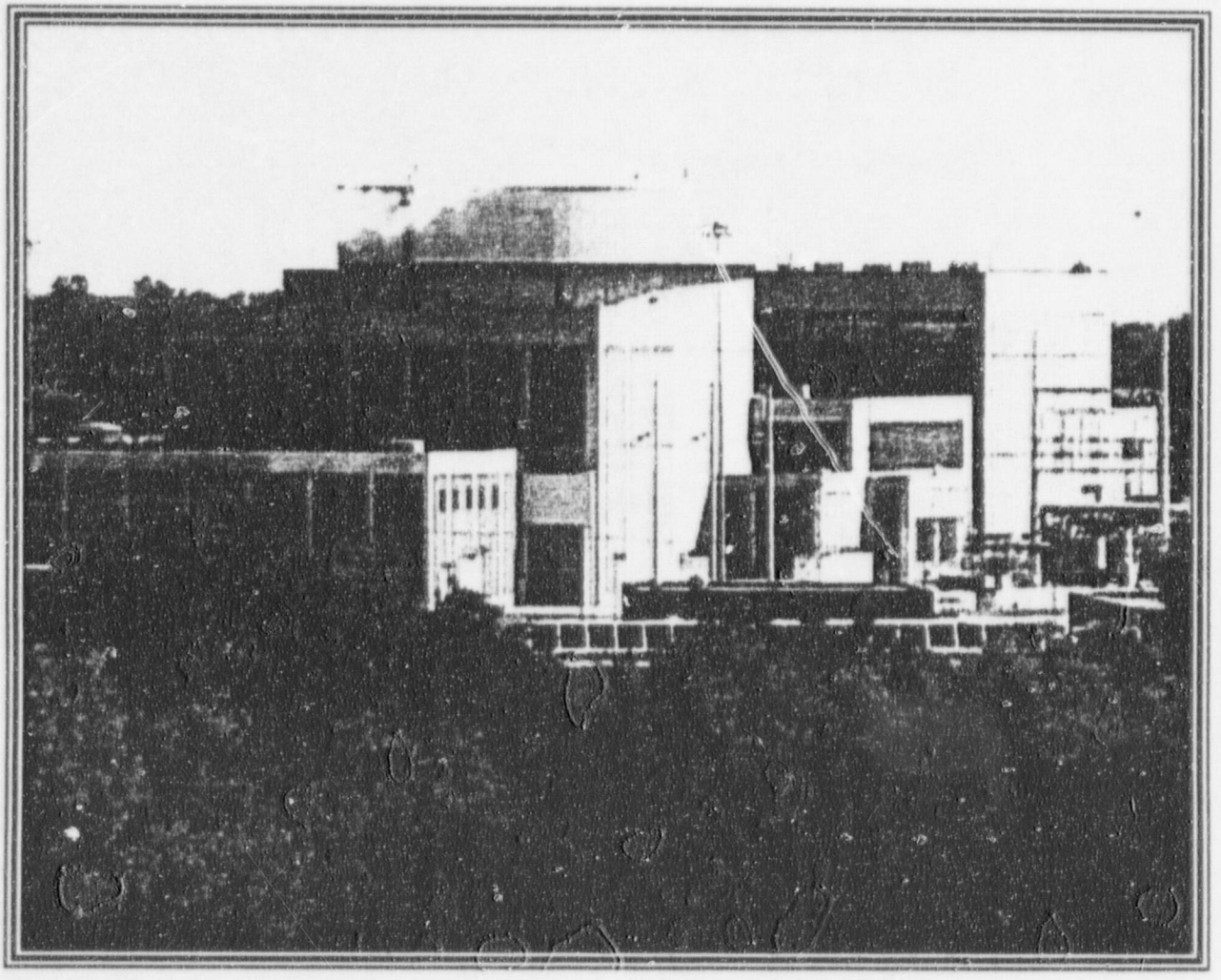
OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN STATION



PERFORMANCE INDICATORS

MAY 1999

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN STATION



PERFORMANCE INDICATORS

MAY 1999

FORT CALHOUN STATION

THE MAIN THING

Safe - Event Free Nuclear Production of Electricity

Being the Best Is A Matter Of:

C ritical Self-Assessment

H uman Performance is Exemplary

O perations are event free

I nitiatives in high visibility areas have strong performance

C orrective Actions are Broad and Lasting

E xcellance in materiel condition

Get Back to Basics!

VALUES

- **Safety Conscious**
- **Individual Respect**
- **Integrity**
- **Accountability**
- **Teamwork**
- **Simplicity**

DO THE RIGHT WORK - AT THE RIGHT TIME - THE RIGHT WAY
-----FOLLOW THE RIGHT PROCESS-----

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FORT CALHOUN STATION

Monthly Summary

OPERATIONS

During the month of May 1999, the Fort Calhoun Station (FCS) operated at a nominal 100% power. Normal plant maintenance, surveillance and equipment rotation activities were performed during the month.

WANO PERFORMANCE INDICATORS

The overall WANO Performance Index was 85.6% during the 1st Quarter of 1999. Significant percentage point losses are attributed to the WANO Performance Indicators (decreasing order of loss) below:

1. The ***Unplanned Capability Loss Factor Indicator,*** calculated over the previous 24 months.
2. The ***Emergency AC Power***, calculated over the previous 24 months.
3. The ***Unit Capability Factor Indicator,*** calculated over the previous 24 months.
4. The ***Thermal Performance***, calculated over the previous 12 months.
5. The ***Collective Radiation Exposure***, calculated over the previous 24 months.

PERFORMANCE INDICATORS SUMMARY REPORT

POSITIVE TREND REPORT

A performance indicator with data representing three consecutive months of improving performance or three consecutive months of performance that is superior to the stated goal is exhibiting a positive trend per Nuclear Operations Division Quality Procedure 37 (NOD-QP-37). The following performance indicators exhibited positive trends for the reporting month:

Industrial Safety Accident Rate (Page 19)

ADVERSE TREND REPORT

A performance indicator with data representing three consecutive months of declining performance or three consecutive months of performance that is trending toward declining as determined by the Manager - Nuclear Licensing, constitutes an adverse trend per NOD-QP-37. A manager whose performance indicator exhibits an adverse trend by this definition may specify in written form (to be published in this report) why the trend is not adverse. The following performance indicators exhibited adverse trends for the reporting month.

There are no adverse trends this month.

INDICATORS NEEDING INCREASED MANAGEMENT ATTENTION REPORT

A performance indicator with data for the reporting period that is inadequate when compared to the OPPD goal is defined as "Needing Increased Management Attention" per NOD-QP-37. The following performance indicators need increased management attention:

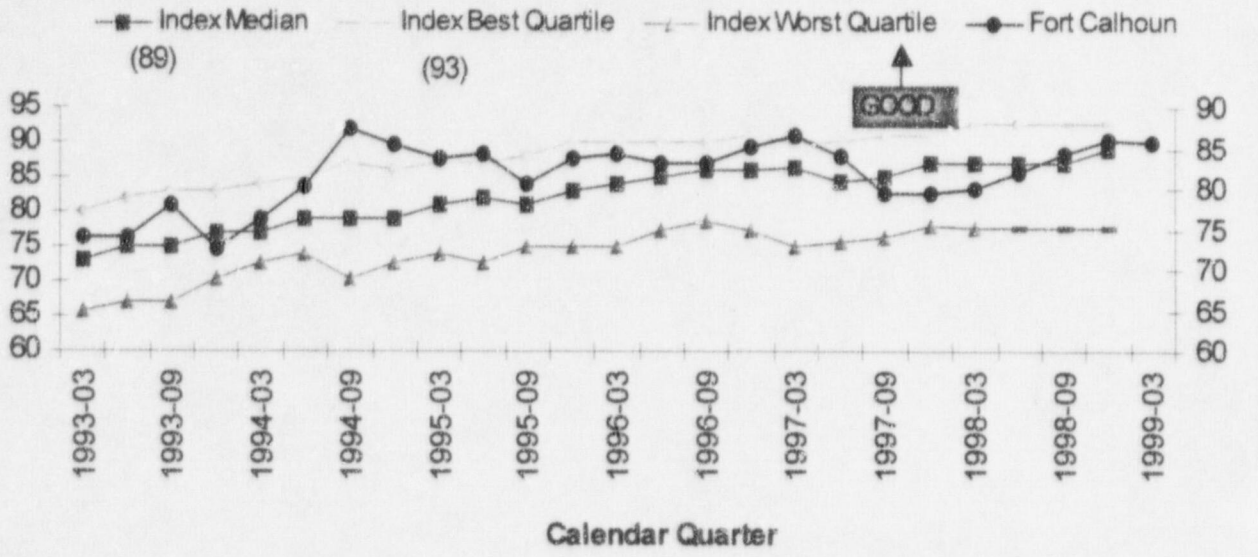
Thermal Performance (Page 15)

RCS Activity (Page 31)

ERO Drill/Exercise Performance (Page 34)

Individual Error Human Performance LERs (Page 49)

INPO PERFORMANCE INDEX TREND

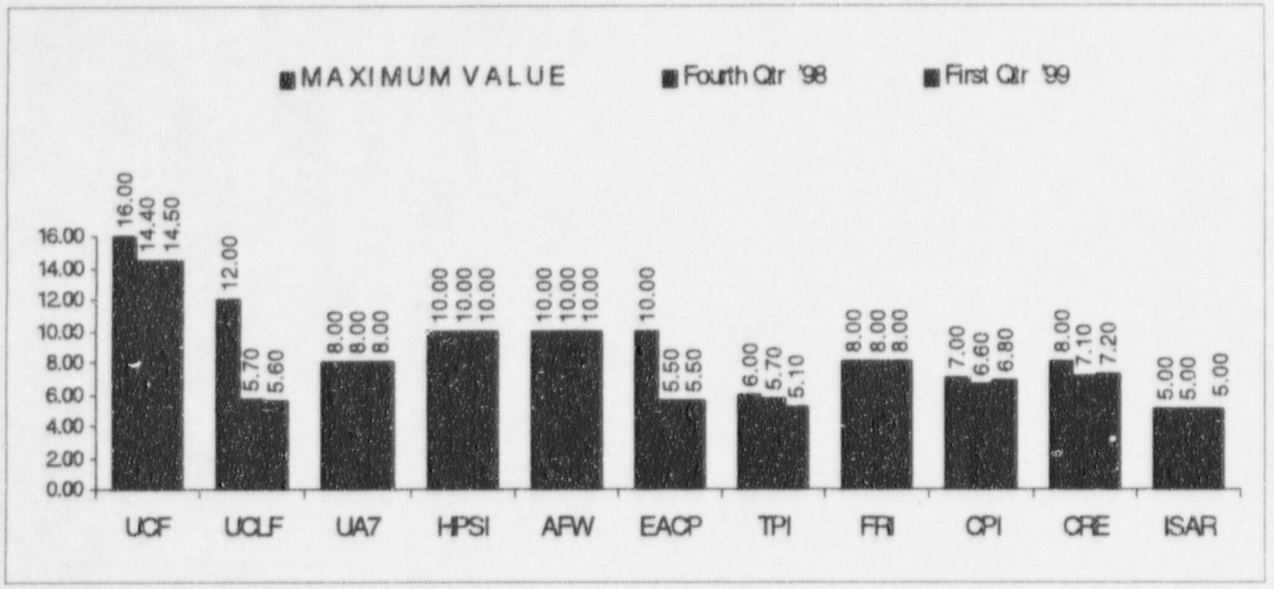


Fort Calhoun Index Calculation			First Quarter 1999		
Overall Performance Indicator		Weight	Value	Index	Product
Unit Capability Factor	(2yr)	0.16	85.2	90.4	14.5
Unpl. Cap. Loss Factor	(2yr)	0.12	8.0	46.7	5.6
Unplanned Auto Scrams	(2yr)	0.08	0.0	100.0	8.0
Safety System Performance:					
PWR High Press. Inj.	(2yr)	0.10	0.001	100.0	10.0
PWR Aux. Feedwater	(2yr)	0.10	0.002	100.0	10.0
Emergency AC Power	(2yr)	0.10	0.028	55.0	5.5
Thermal Performance	(1yr)	0.06	99.7	85.0	5.1
Fuel Rel.	(Most recent qtr)	0.08	3.2E-04	100.0	8.0
Chemistry Perf. Ind.	(1yr)	0.07	1.13	96.7	6.8
Collective Rad. Exposure	(2yr)	0.08	132	89.4	7.2
Ind. Safety Acc. Rate	(1yr)	0.05	0.16	100.0	5.0
			Total Index		85.6

An audit of the information on this page discovered that the data being displayed was not correct. The data has been recovered from original sources and checked for accuracy for fourth quarter 1998 and first quarter 1999. Changes from the audit are as follows:

UCF	**not reporting the power rampdown in 1997 and 1998 as planned power losses. (14.6 to 14.5)**
UCLF	**errors in recording the data in the spreadsheet. (6.5 to 5.6)**
Thermal Performance	**errors in recording the data in the spreadsheet. (6.0 to 5.1)**
EACP	**reporting two fault exposures that had not been previously reported. (8.5 to 5.1) The fault exposure occured in June/July of 1997 and will not contribute to the indicator in the fourth quarter calculation.**

INPO PERFORMANCE INDEX TREND INDICATORS

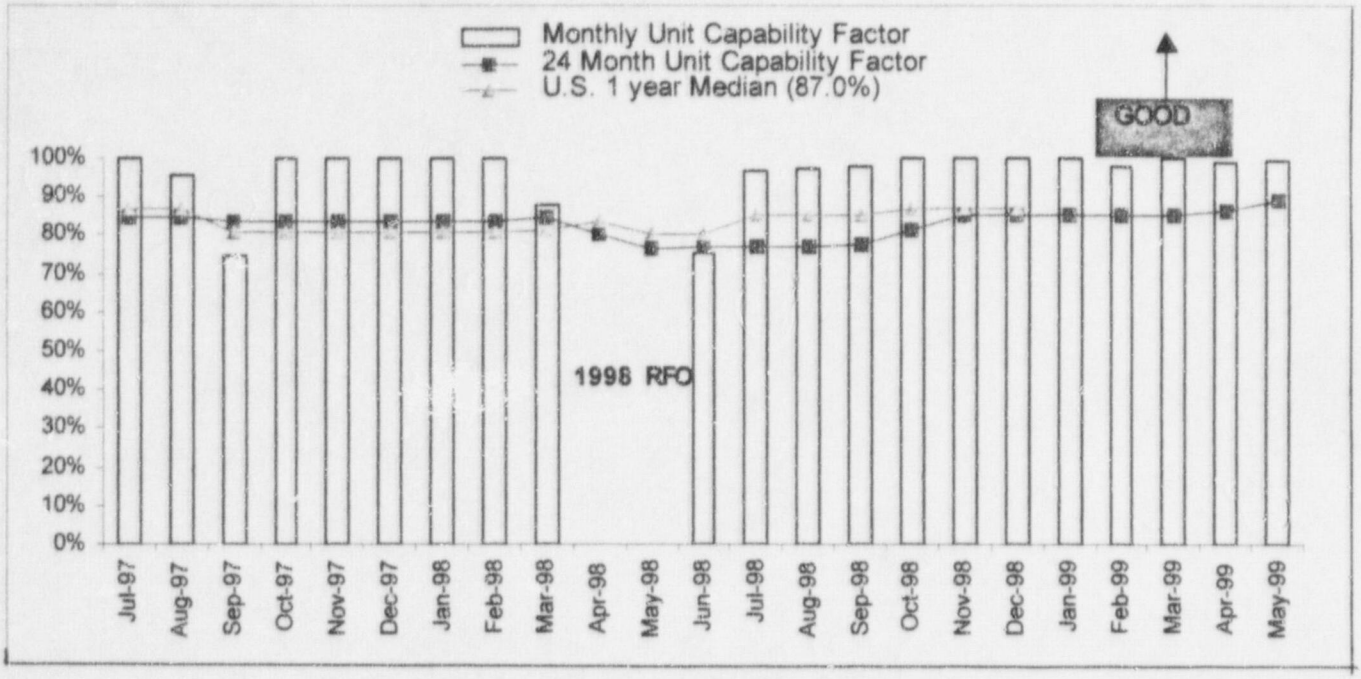


This graph shows the difference between **Fourth Qtr '98** and **First Qtr '99** actual values achieved by Fort Calhoun. These values are updated quarterly.

CALCULATED OVER A 24 MONTH PERIOD		**MAXIMUM/ACTUAL VALUES**	**QTR. TREND**
UCF	Unit Capability Factor	16 / 14.50	**Neutral**
UCLF	Unplanned Capability Loss Factor	12 / 5.60	**Neutral**
UA7	Unplanned Auto Scrams/ 7000 Hours	8 / 8.00	**Neutral**
HPSI	High Pressure Safety injection	10 / 10.00	**Neutral**
AFW	Auxiliary Feedwater	10 / 10.00	**Neutral**
EACP	Emergency AC Power	10 / 5.50	**Neutral**
CRE	Collective Radiation Exposure	8 / 7.20	**Neutral**
CALCULATED OVER A 12 MONTH PERIOD			
TPI	Thermal Performance Indicator	6 / 5.10	Negative
CPI	Secondary Chemistry Indicator	7 / 6.80	Positive
ISAR	Industrial Safety Accident Rate	5 / 5.00	**Neutral**
CALCULATED OVER A QUARTERLY PERIOD			
FRI	Fuel Reliability Indicator	8 / 8.00	**Neutral**

WANO PERFORMANCE INDICATORS

UNIT CAPABILITY FACTOR



UNIT CAPABILITY FACTOR (PERCENT)	1996	1997	1998	1999	2000	2001	2002	2003
ANNUAL GOAL	83.6	96.0	87.5	84.3	95.9	85.5	82.2	95.9
YTD PERFORMANCE	78.1	90.1	81.4	99.7				
THREE YEAR AVERAGE	83.9	82.5	83.2					
INDUSTRY MEDIAN (3 Year Average)	82.8	83.6	>85.1					

Definition:

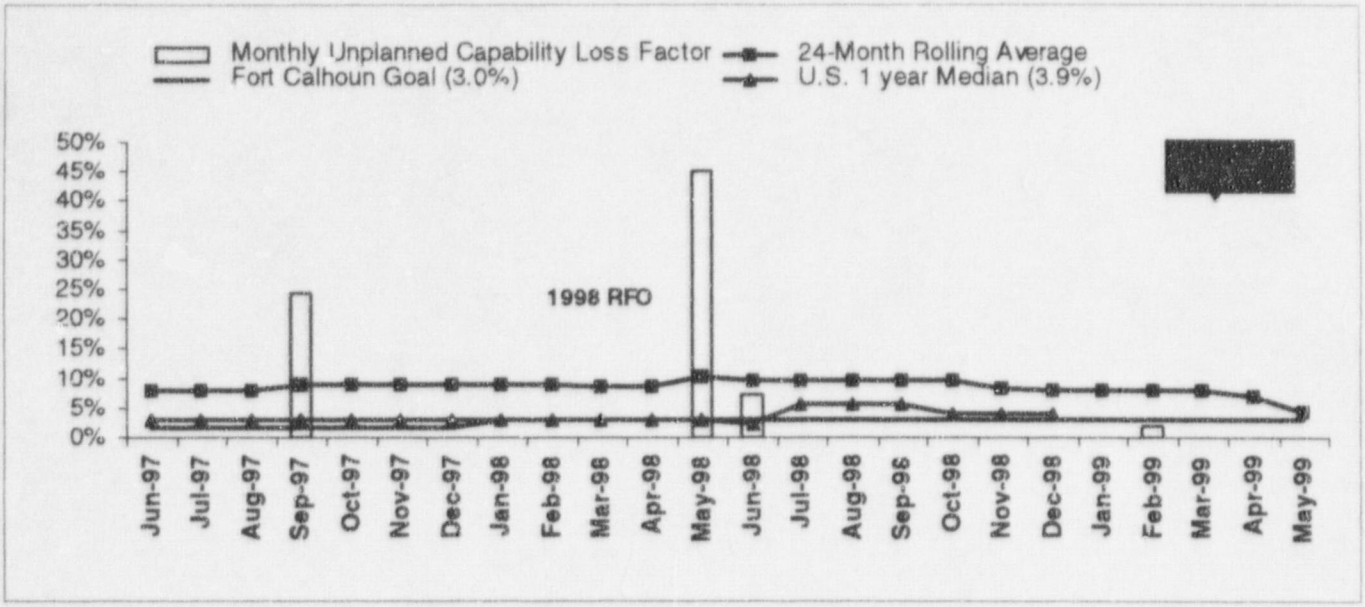
Unit Capability Factor (UCF) is defined as the ratio of the available energy generation over a given period of time to the reference energy generation over the same time period, expressed as a percentage.

Analysis:

The 24 month calculation of the INPO indicator was **14.5** points out of 16 points. At the end of the **First Quarter 1999** the FCS Value was **14.5** which compared to the **Fourth Quarter 1998** value of **14.7**. The reduction in points was a result of the power reduction associated with inoperability of AFW pump FW-10 in February. The three months dropping off the indicator were all 100% power months. Next quarter's data may significantly improve with the dropping off of April and May 1997 data at 69.5% and 43.7% capability factors respectively.

Green **Manager** **Jim Tills** **Data Source** **Ruth Bilau**

UNPLANNED CAPABILITY LOSS FACTOR



UNPLANNED CAP. LOSS FACTOR (percent)	1996	1997	1998	1999	2000	2001	2002	2003
ANNUAL GOAL	3.0	1.5	3.5	3.0	4.1	3.0	3.1	4.1
YTD ACTUAL PERFORMANCE	7.9	9.9	3.8	0.3				
THREE YEAR AVG.	6.6	9.3	7.2					

Definition:

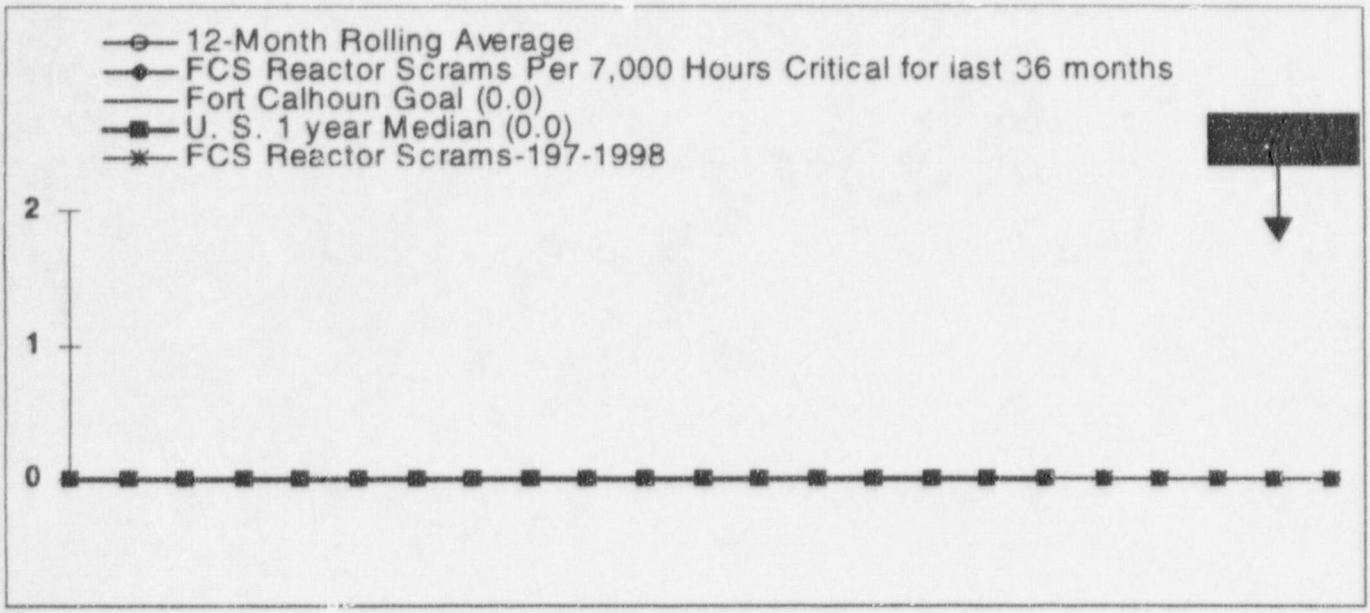
Unplanned Capability Loss Factor (UCLF) is defined as the ratio of Unplanned Energy Losses during a given period of time to Reference Energy Generation. Unplanned Energy Loss is defined as energy not produced such as: unscheduled shutdowns, outage extensions, or load reductions due to causes under plant management control if they are not scheduled at least four weeks in advance.

Analysis:

The 24 month calculation of the INPO UCLF indicator was 5.6 points out of 12 points. At the end of the **First Quarter 1999** the FCS Value was **5.6,** which compared to the **Fourth Quarter 1998** value of **5.7.** The only unplanned capability loss during 1999 occurred in February when a unit shutdown was initiated following expiration of a 24 hour LCO on FW-10. Next quarter's data is expected to improve as the April and May 1997 poor performance will not be included, assuming continued good performance this year.

[redacted] **Manager** **Jim Tills** **Data Source** **Ruth Bilau**

UNPLANNED AUTOMATIC REACTOR SCRAMS PER 7000 HOURS CRITICAL



UNPLANNED AUTOMATIC REACTOR SCRAMS PER 7000 HOURS CRITICAL	1996	1997	1998	1999	2000	2001	2002	2003
ANNUAL GOAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
YTD ACTUAL PERFORMANCE	0.00	0.00	0.00	0.00				
THREE YEAR AVERAGE	0.48	0.31	0.00					

Definition:

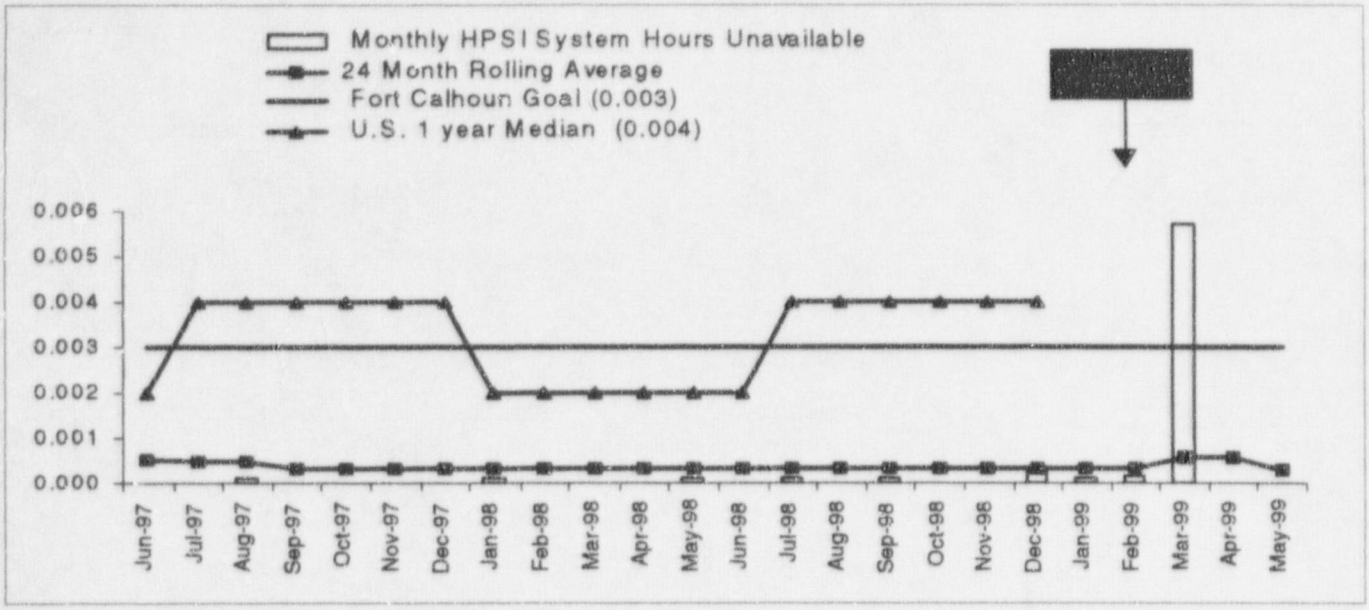
Unplanned Automatic Scrams per 7000 Critical Hours (**UA7**) is defined as the number of unplanned automatic scrams (RPS Logic Actuations) that occur per 7000 hours of critical operation. The value is calculated by multiplying the number of unplanned automatic scrams by the total hours critical in the same time period and dividing by 7000.

Analysis:

The 24 month calculation of the **UA7** indicator was **8.0** points out of 8 points. At the end of the **First Quarter 1999** the FCS Value was **8.0** which compared to the **Fourth Quarter 1998** value of **8.0**.

Green **Manager** **Ross Ridenoure** **Data Source** **Ruth Bilau**

HIGH PRESSURE SAFETY INJECTION SYSTEM
SAFETY SYSTEM PERFORMANCE



HPSI SAFETY (SP1) 24 MONTH	1996	1997	1998	1999	2000	2001	2002	2003
ANNUAL GOAL	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
24 MONTH ROLLING AVERAGE	0.000	0.000	0.000	0.000				
THREE YEAR AVERAGE	0.000	0.001	0.000					

Definition:

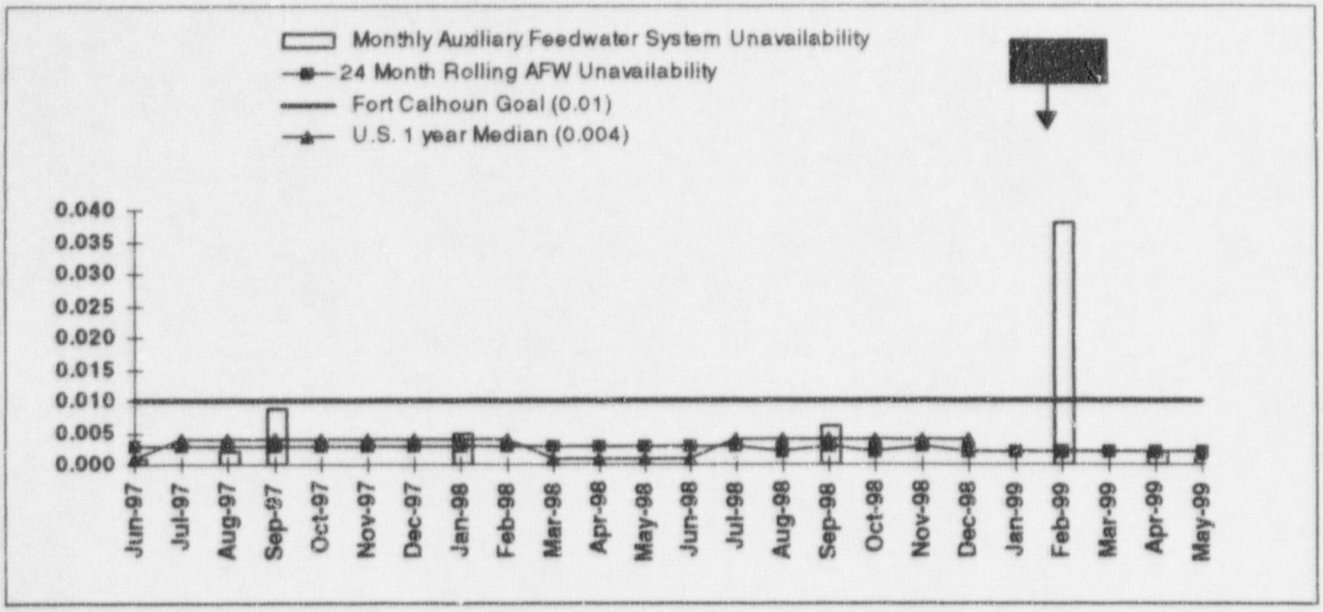
High Pressure Safety System **(SP1)** is defined as the sum of: 1) the known (planned and unplanned) unavailable hours and 2) the estimated fault exposure unavailable hours for the high pressure safety injection system for the reporting period, divided by: 1) the critical hours for the reporting period and 2) the number of trains in the high pressure safety injection system.

Analysis:

The availability of the HPSI system remains high due to excellent equipment reliability. Surveillance testing is well planned and executed resulting in an absolute minimum of equipment unavailability. The frequency of Preventative Maintenance activities are based on a conservative balance of EPRI guidelines and observed equipment performance. The HPSI pumps are dedicated to the ECCS function (e.g., they do not serve a dual role as charging pumps).This places FCS as one of the best performers in the industry for this indicator. The 24 month calculation of the **SP1** indicator was **10.0** points out of 10 points. At the end of the **First Quarter 1999** the FCS Value was **10.0** which compares to the **Fourth Quarter 1998** value of **10.0**.

Green **Manager** **Merl Core** **Data Source** **Chuck Schaffer**

AUXILIARY FEEDWATER
SAFETY SYSTEM PERFORMANCE



AFW SAFETY SYSTEM (SP2)	1996	1997	1998	1999	2000	2001	2002	2003
ANNUAL GOAL	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
YTD ACTUAL PERFORMANCE	0.002	0.004	0.001	0.005				
THREE YEAR AVERAGE	0.001	0.001	0.002					

Definition:

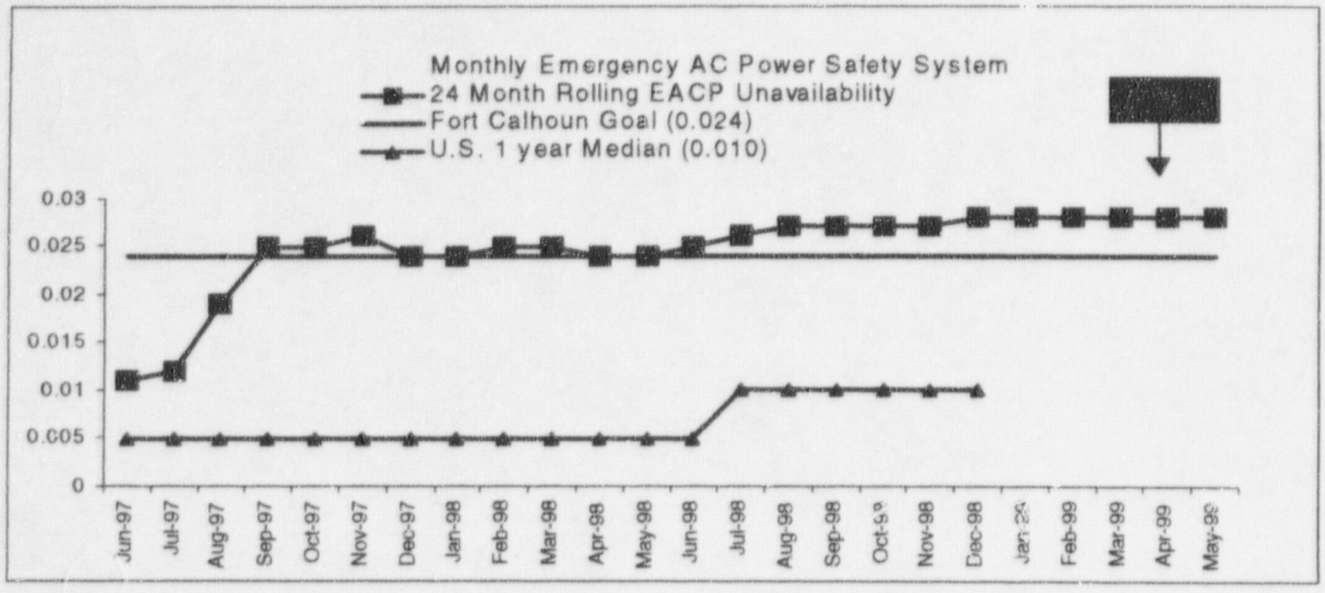
Auxiliary Feedwater Safety System **(SP2)** is defined as the sum of : 1) the known (planned and unplanned) unavailable hours and 2) the estimated fault exposure unavailable hours for the auxiliary feedwater system for the reporting period, divided by: 1) the critical hours for the reporting period and 2) by the number of trains in the auxiliary feedwater system.

Analysis:

In May 1999, a scheduled outage of 2.2 hours for FW-10 surveillance testing was completed. Both trains of AFW passed quarterly performance testing in May with no deficiencies. The 24 month calculation of the **SP2** indicator was **10.0** points out of 10 points. At the end of the **First Quarter 1999** the FCS Value was **10.0** which compared to the **Fourth Quarter 1998** value of **10.0.**

Green **Manager** **Merl Core** **Data Source** **Russ Cusick**

EMERGENCY AC POWER
SAFETY SYSTEM PERFORMANCE



EMERGENCY AC POWER SAFETY SYSTEM (SP5)	1996	1997	1998	1999	2000	2001	2002	2003
ANNUAL GOAL	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024
YTD ACTUAL PERFORMANCE	0.010	0.015	0.017	0.008				

Definition:

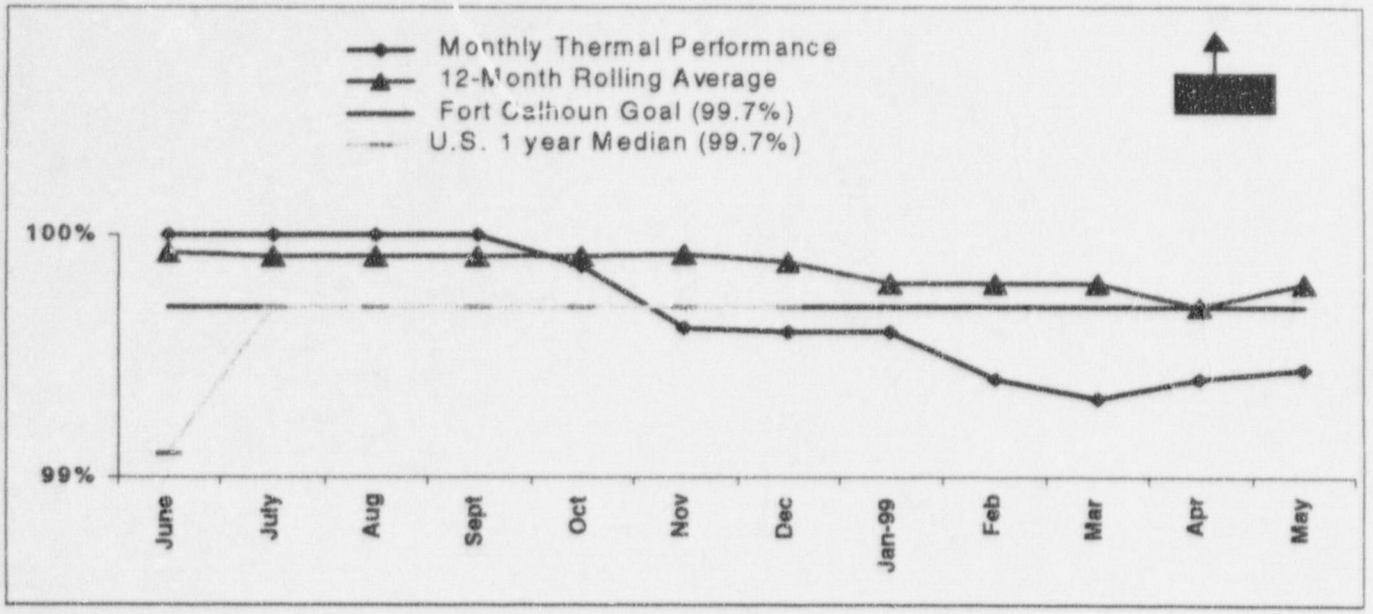
Emergency AC Power Performance **(SP5)** is defined as the sum of: 1) the known (planned and unplanned) unavailable hours and the estimated fault exposure unavailable hours for the emergency AC power system for the reporting period and divided by the number of hours in the reporting period hours for the number of trains in the emergency AC power system.

Analysis:

Less than 10% of the total unavailable hours were for unplanned maintenance. Approximately half of the total unavailable hours stem from "fault time exposure" hours due to a DG-1 field flash failure in September 1997. The remaining unavailable hours were for planned maintenance. The 24 month calculation of the **SP5** indicator was **5.5** points out of 10 points. At the end of the **First Quarter 1999** the FCS Value was **5.5** which compares to the **Fourth Quarter 1998** value of **5.5** This parameter is currently under review for previous reporting discrepancy.

Green **Manager** **Merl Core** **Data Source** **Rich Ronning**

THERMAL PERFORMANCE



THERMAL PERFORMANCE (TPI) (percent)	1996	1997	1998	1999	2000	2001	2002	2003
ANNUAL GOAL	99.6	99.6	99.7	99.7	99.8	99.8	99.8	99.8
YTD ACTUAL PERFORMANCE	99.7	99.9	100	99.4				
THREE YEAR AVERAGE	99.7	99.9	99.9					

Definition:

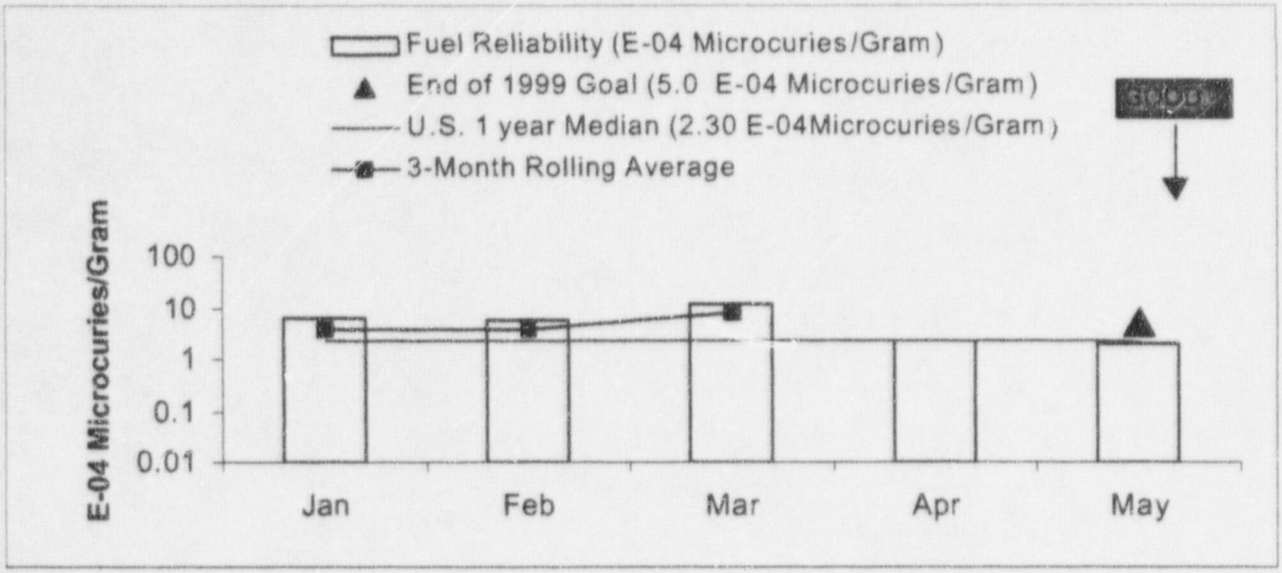
Thermal Performance Indicator **(TPI)** is defined as the ratio of the average adjusted actual gross heat rate best achievable gross heat rate expressed as a percentage.

Analysis:

The Thermal Performance Indicator had a decreasing trend from October of 1998, until March of 1999. Major equipment issues that contributed to that trend include circulating water system outages (planned maintenance) and leakage through the heater drain tank high level dump valve. Investigations are in progress to identify any additional equipment deficiencies that may be having an adverse affect on plant Thermal Performance. The 12 month calculation of the **TPI** indicator was **6.0** points out of 6 points. At the end of the **First Quarter 1999** the FCS Value was **5.1** which compared to the **Fourth Quarter 1998** value of **5.7.** A 24 month calculation of the **TPI** indicator was **5.1** points out of 6 points.

Yellow **Manager** **Meri Core** **Data Source** **Kevin Naser**

FUEL RELIABILITY INDICATOR



FUEL RELIABILITY (FRI) (xE-04 Micro curies/Gram)	1996	1997	1998	1999	2000	2001	2002	2003
ANNUAL GOAL	----	147	17.3	5.0	5.0	5.0	5.0	5.0
MAY ACTUAL PERFORMANCE	1.7	99	5.2	2.0				

Definition:

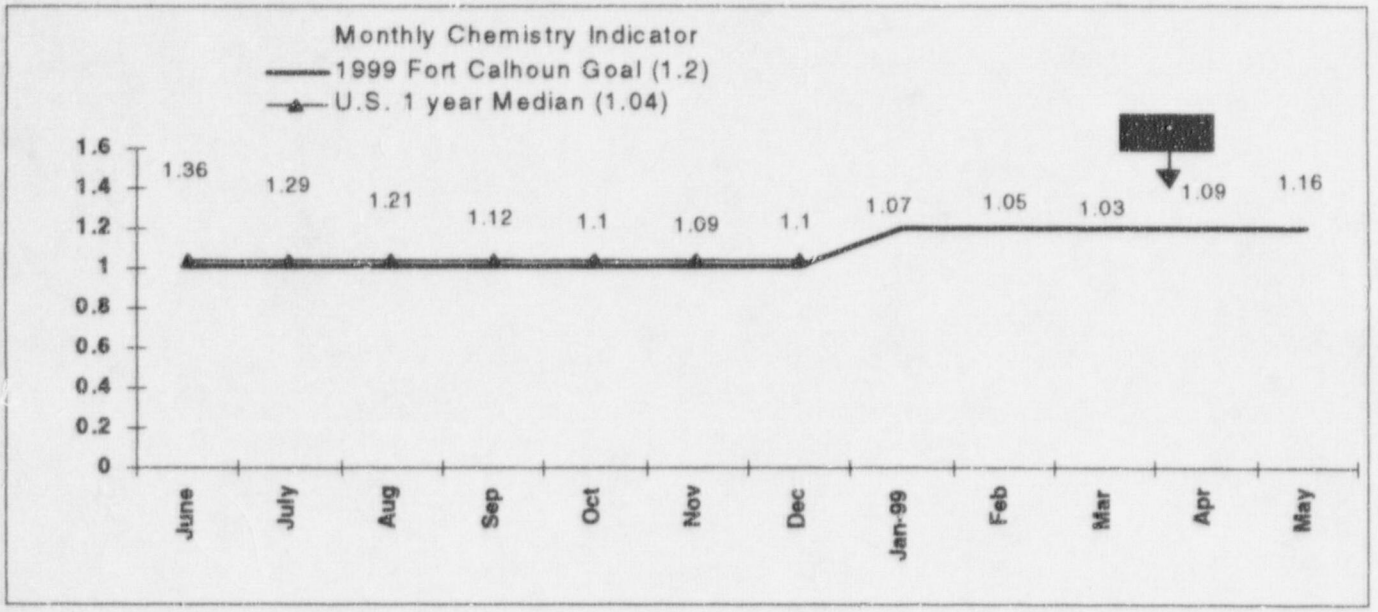
Fuel Reliability **(FRI)** is defined as the steady-state primary coolant I-131 activity, corrected for the tramp uranium contribution and power level and normalized to a common purification rate, and average linear heat generation rate.

Analysis:

Elimination of the initial Westinghouse fuel design, which resulted in spacer grid induced fretting of numerous fuel rods in Cycles 15-17, was completed for Cycle 18. Additional improvements originally implemented in Cycle 18 will continue to be used for Cycle 19. Coolant activity data through May 1999 shows the presence of thirteen defective fuel rods. This is an increase from eleven failed rods through April. The increase is attributed to an increase in Xe-133 activity. In May the FRI value was 2.0 E-04 uci/gm compared to 83.0E-04 uci/gm at the same time point in Cycle 17. The May FRI value was smaller then the previous month's value. This decline in FRI is a result of statistical difficulties when dealing with large amounts of tramp material (I-134) in the core compared to the amount of I-131 which is coming out of the failed fuel rods. The recent quarterly calculation of the FRI indicator was **8.0** points out of a possible **8.0** points. At the end of the **First Quarter 1999**, the FCS Value was **8.0**, which compared to the **Fourth Quarter 1998** value of **8.0**.

White **Manager** **Ruben Hamilton** **Data Source** **Susan Baughn**

SECONDARY SYSTEM CHEMISTRY



SECONDARY SYSTEM CHEMISTRY (CPI)	1996	1997	1998	1999	2000	2001	2002	2003
ANNUAL GOAL	1.4	1.4	1.1	<1.2	<1.2	<1.15	<1.15	<1.15
MAY ACTUAL PERFORMANCE	1.26	1.33	1.16	1.16				

Definition:

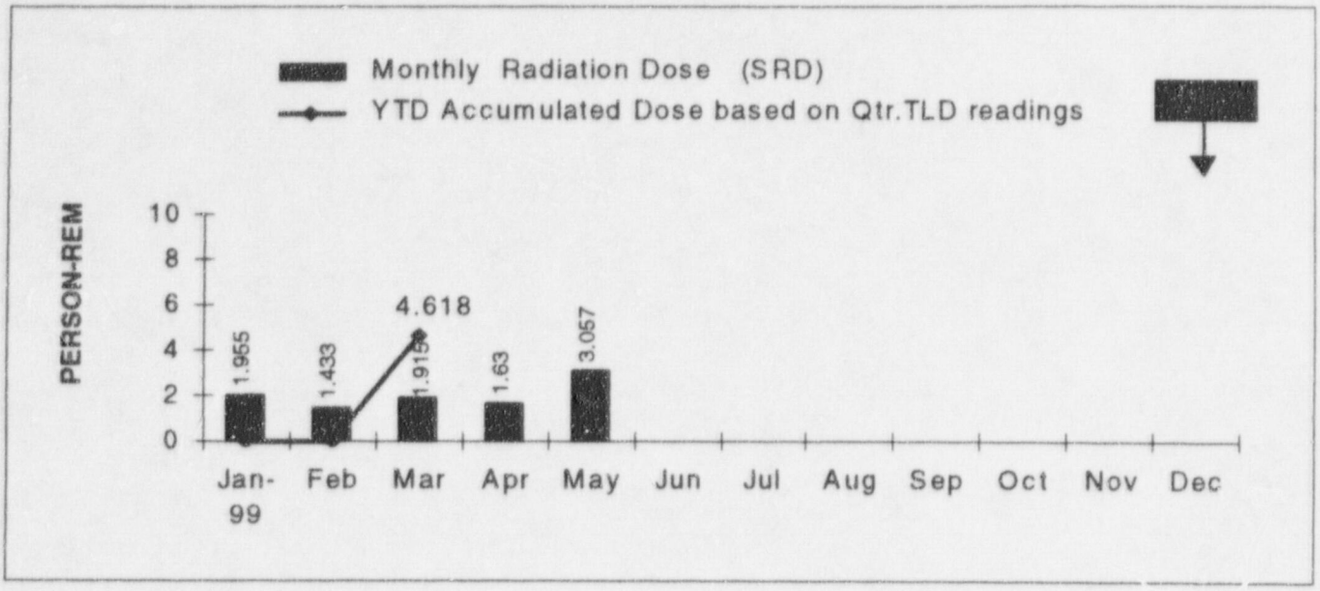
Secondary System Chemistry **(CPI)** is defined as a calculation based on the concentration of key impurities in the secondary side of the plant. These key impurities are the most likely cause of deterioration of the steam generators. Criteria for calculating the CPI are: 1) the plant is at greater than 30 percent power, and 2) the power is changing less than 5% per day.

Analysis:

At the end of the **First Quarter 1999** the FCS Value was **6.8** which compared to the **Fourth Quarter 1998** value of **6.6**. Value increased due to abandonment of in-line instrumentation. Data collecting instrumentation now being used has a higher detection limit.

Yellow **Manager** **Ruben Hamilton** **Data Source** **Mark Ostien**

COLLECTIVE RADIATION EXPOSURE



COLLECTIVE RAD EXPOSURE (CRE) (PERSON-REM)	1996	1997	1998	1999	2000	2001	2002	2003
ANNUAL GOAL	1380	38.0	224.0	200.0	*	*	*	*
YTD ACTUAL PERFORMANCE	226.0	40.8	223.8	9.305				
THREE YEAR AVERAGE	117.0	138.0	163.2					
INDUSTRY MEDIAN 3 YEAR AVG	145.0	144.0	116.0					

* Annual goal is established on a yearly basis by an ALARA subcomittee based on projected work in RCA.

Definition:

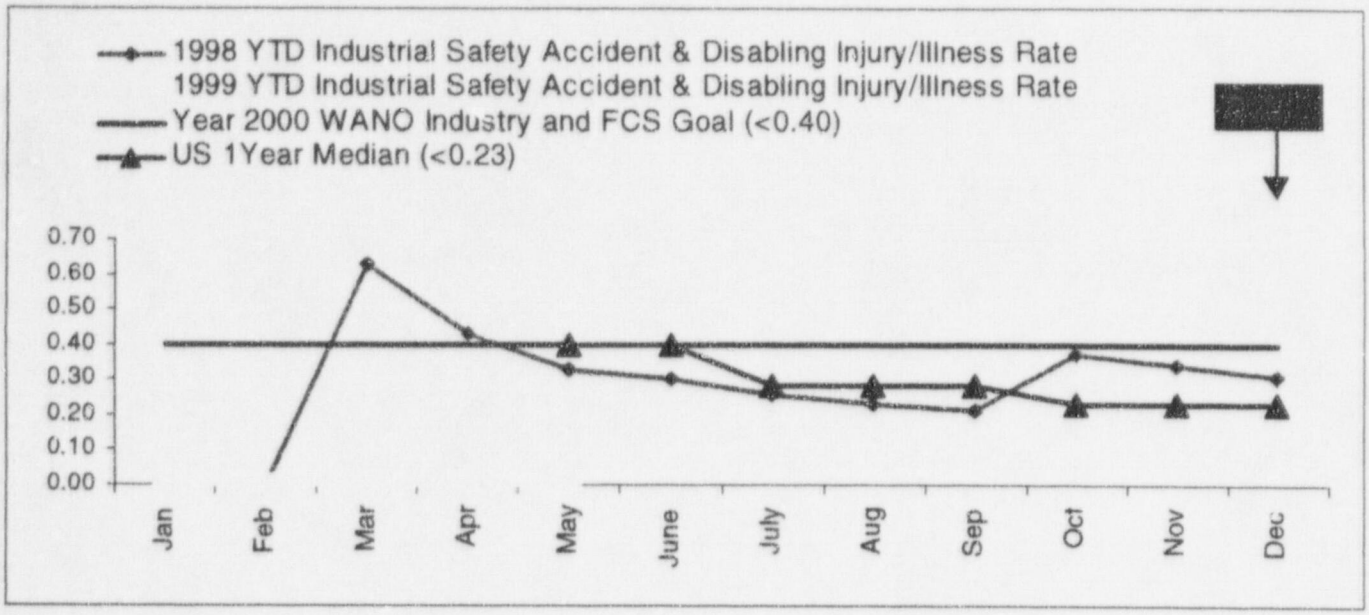
Collective Radiation Exposure (**CRE**) is defined as the total external whole-body dose received by all on-site personnel (including contractors and visitors) during a time period, as measured by the thermoluminescent dosimeter (TLD). Collective radiation exposure is reported in units of person-rem.

Analysis:

The collective radiation exposure as of May 31, 1999 is 9.305 person-Rem. This is approximately 5% of the 200 person-Rem goal for 1999. This collective radiation exposure is below the exposure amount of 12 person-Rem projected by the Radiation Protection Department for the specified time frame. The 24 month calculation of the **CRE** indicator was **7.2** points out of 8 points. At the end of the **First Quarter 1999** the FCS Value was **7.2** which compared to the **Fourth Quarter 1998** value of **7.1**.

Green **Manager** **Mark Puckett** **Data Source** **Ann Nieland**

INDUSTRIAL SAFETY ACCIDENT RATE



INDUSTRIAL SAFETY ACCIDENT RATE (ISAR)	1996	1997	1998	1999	2000	2001	2002	2003
ANNUAL GOAL	<0.5	<0.5	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
YTD ACTUAL PERFORMANCE	0.29	0.00	0.18	0.00				

Definition:

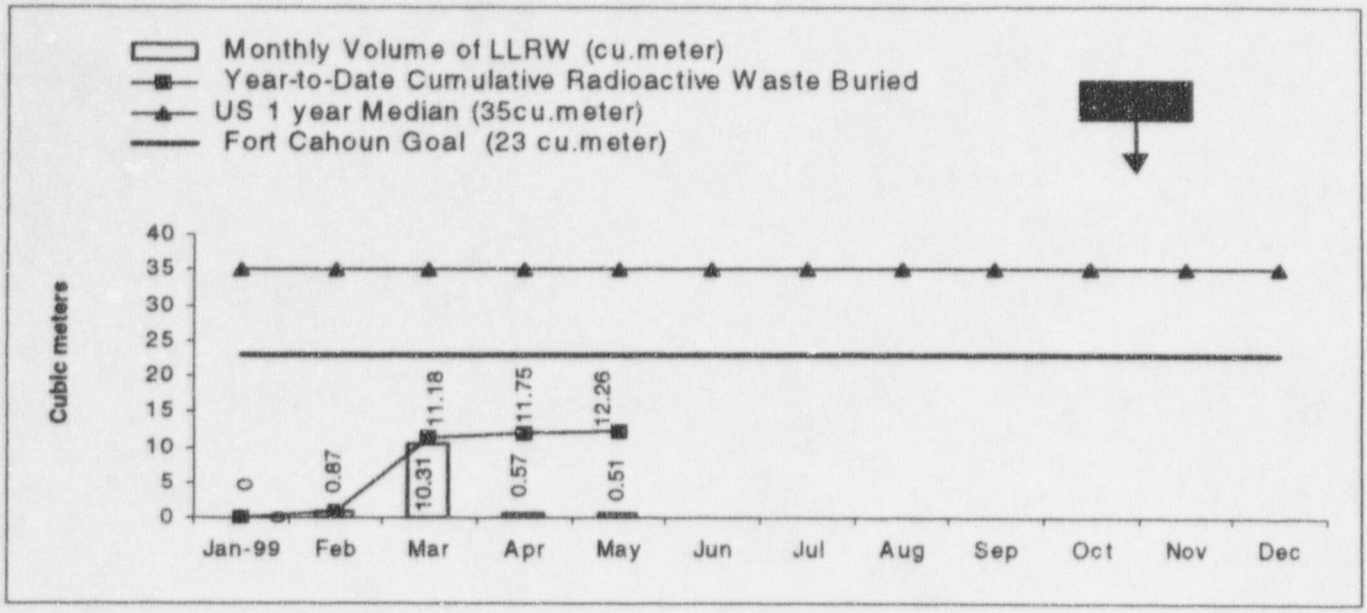
Industrial Safety Accident Rate **(ISAR)** is defined as the number of accidents for all utility personnel permanently assigned to the station. Involving days away from work per 200,000 person-hours worked (100 person-years). The purpose of this indicator is to monitor progress in improving industrial safety performance for utility personnel permanently assigned to the station. ***Contractor work-hours are not included in this indicator.***

Analysis:

There have been no lost time accidents in 1999 and the last one occurred in October 1998. The 12 month calculation of the **ISAR** indicator was 5.0 points out of **5.0** points. At the end of the **First Quarter 1999** the FCS Value was **5.0** which compares to the **Fourth Quarter 1998** value of **5.0**.

Green **Manager** **Ron Short** **Data Source** **Duane Booth**

VOLUME OF LOW-LEVEL RADIOACTIVE WASTE



VOLUME OF LOW-LEVEL RADIOACTIVE WASTE (RWV)	1996	1997	1998	1999	2000	2001	2002	2003
ANNUAL GOAL	18.6	34.0	<23.0	<23.0	<15	TBD	TBD	TBD
YTD ACTUAL PERFORMANCE	18.38	22.20	17.09	12.26				

Definition:

Low-Level Radioactive Waste **(LLRW)** is defined as the volume of low-level solid radioactive waste actually shipped for burial.

Analysis:

The volume of radioactive waste buried as of May 31, 1999 is 12.26 m3. The high volume shipped for burial this year is due to the possible closing of the Barnwell, South Carolina waste repository facility. The **LLRW** indicator is no longer calculated as part of the INPO PI Index.

Green **Manager** **Mark Puckett** **Data Source** **Ann Nieland**

NRC PERFORMANCE INDICATORS

NRC MODEL FOR EVALUATING FCS PERFORMANCE

ACCEPTABLE PERFORMANCE - FCS Response Band
- Cornerstone objectives fully met
- Nominal Risk/Nominal Deviation From Expected Performance

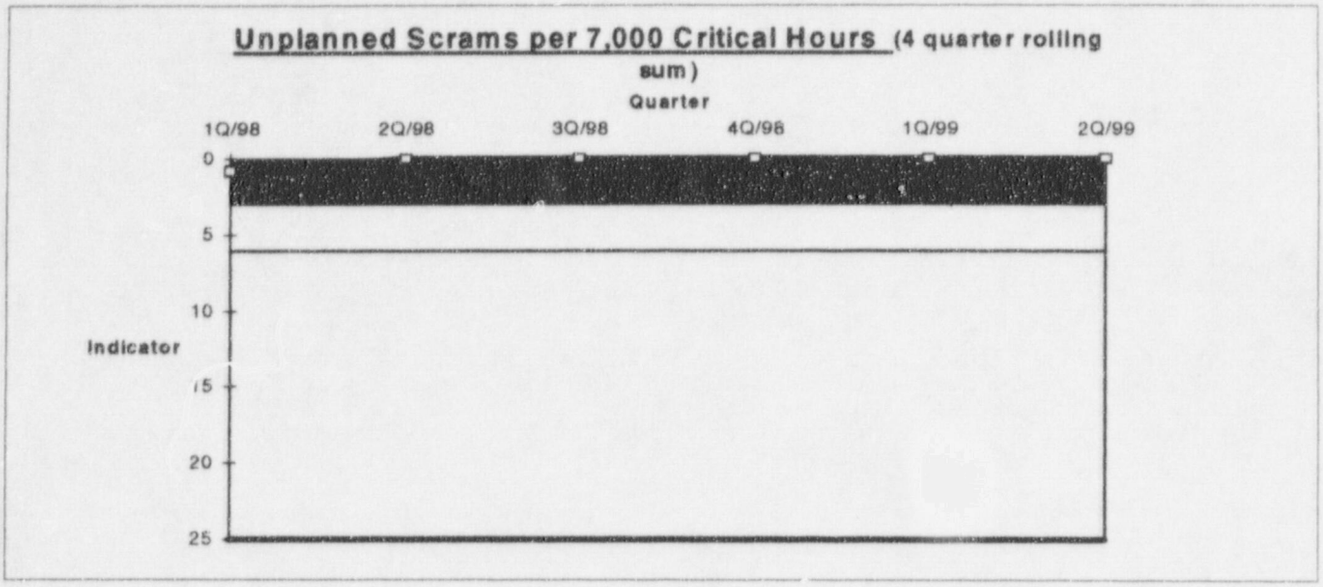
ACCEPTABLE PERFORMANCE - Increased Regulatory Response Band
- Cornerstone objectives met w/minimal reduction in safety margin
- Outside bounds of nominal performance
- Within Technical Specification Limits
- Changes in performance consistent w/changes of Core Damage Frequency (CDF)<E-5

ACCEPTABLE PERFORMANCE - Required Regulatory Response Band
- Cornerstone objectives met w/significant reduction in safety margin
- Technical Specification limits reached or exceeded
- Changes in performance consistent w/changes of CDF<E-4

UNACCEPTABLE PERFORMANCE - FCS not normally permitted to operate within this band
- Plant performance significantly outside design basis
- Loss of confidence in ability of plant to provide assurance of public health and safety w/continued operation
- Unacceptable margin to safety

UNSAFE PERFORMANCE

"INITIATING EVENTS"
Unplanned Scrams Per 7000 Critical Hours
(Automatic And Manual Scrams)



Definition:

The number of unplanned scrams during the previous four quarters, both manual and automatic, while critical per 7,000 hours.

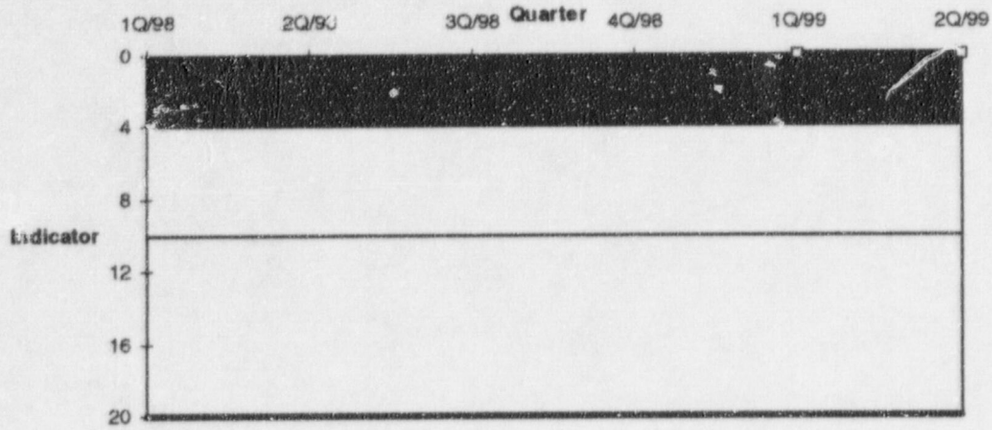
Analysis:

No unplanned scrams occurred during the previous four quarters.

Green | **Manager** Ross Ridenoure | **Data Source** Ruth Bilau

"INITIATING EVENTS"
Scrams with Loss of Normal Heat Removal

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



Definition:

The number of unplanned scrams while critical, both manual and automatic, during the previous 12 quarters that also involved a loss of the normal heat removal path through the main condenser.

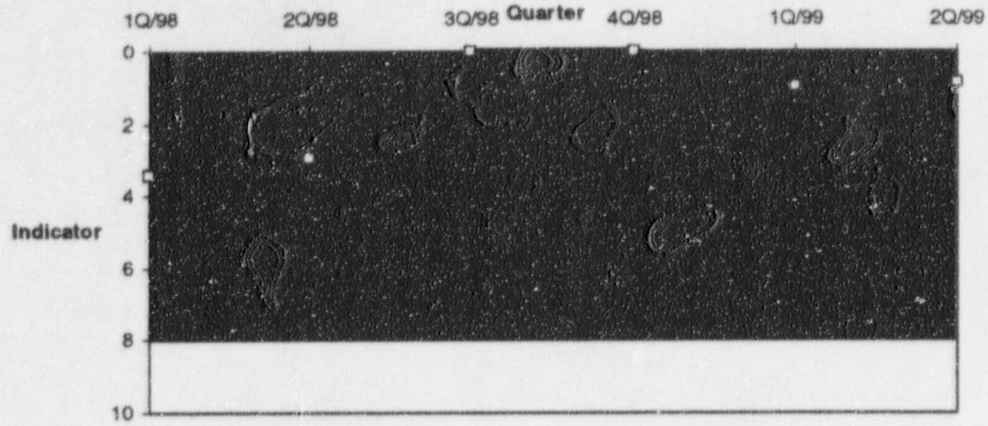
Analysis:

No unplanned scrams occurred during the previous twelve quarters.

Green | **Manager** Ross Ridenoure | **Data Source** Erick Matzke

"INITIATING EVENTS"
Unplanned Power Changes per 7000 Critical Hours

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



Definition:

The number of unplanned changes in reactor power of greater than 20% full-power, per 7,000 hours of critical operation excluding manual and automatic scrams.

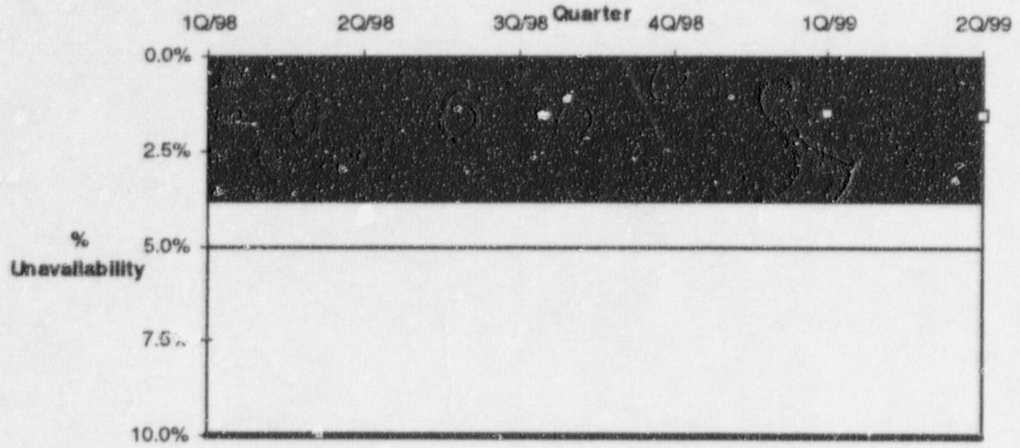
Analysis:

The changes indicated in the first and second quarter of 1998 are carryovers from 1997. The change indicated in the first quarter of 1999 was a result of surveillance test failure of steam driven auxiliary feedwater pump (FW-10) due to an incorrect testing methodology. The power reduction (from 100% to 60%) was a result of reaching the Tech. Spec. LCO time limit for FW-10.

Green **Manager** **Ross Ridenoure** **Data Source** **John Drahota**

"MITIGATION SYSTEMS"
Safety System Unavailability, Emergency AC Power

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



Definition:

Emergency AC Power Performance is defined as the three year running average of the sum of: 1) the known (planned and unplanned) unavailable hours and 2) the estimated fault exposure unavailable hours for the Emergency AC Power system for the reporting period, divided by 3) number of hours in the reporting period hours, and 4) the number of trains in the emergency AC power system.

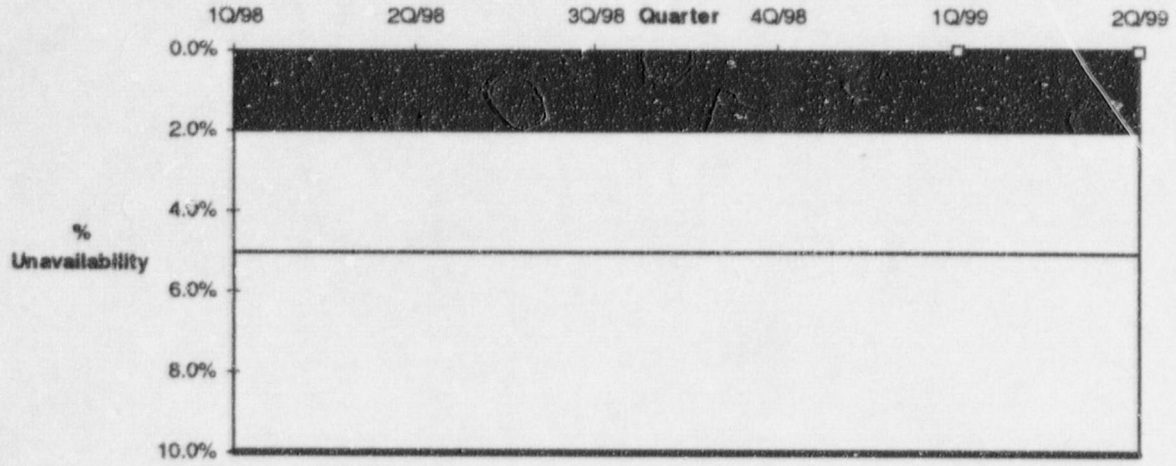
Analysis:

Less than 10% of the total unavailable hours were for unplanned maintenance. Approximately half of the total unavailable hours stem from "fault time exposure" hours due to a DG-1 field flash failure in September 1997. The remaining unavailable hours were for planned maintenance.

Green **Manager** **Merl Core** **Data Source** **Rich Ronning**

"MITIGATION SYSTEMS"
Safety System Unavailability, High Pressure Injection System

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



Definition:

High Pressure Safety System for the NRC Safety System performance is defined as three year running average of sum of: 1) the known (planned and unplanned) unavailable hours, and 2) the estimated fault exposure unavailable hours for the high pressure safety injection system for the reporting period, divided by: 1) the critical hours for the reporting period, and 2) the number of trains in the high pressure safety injection system.

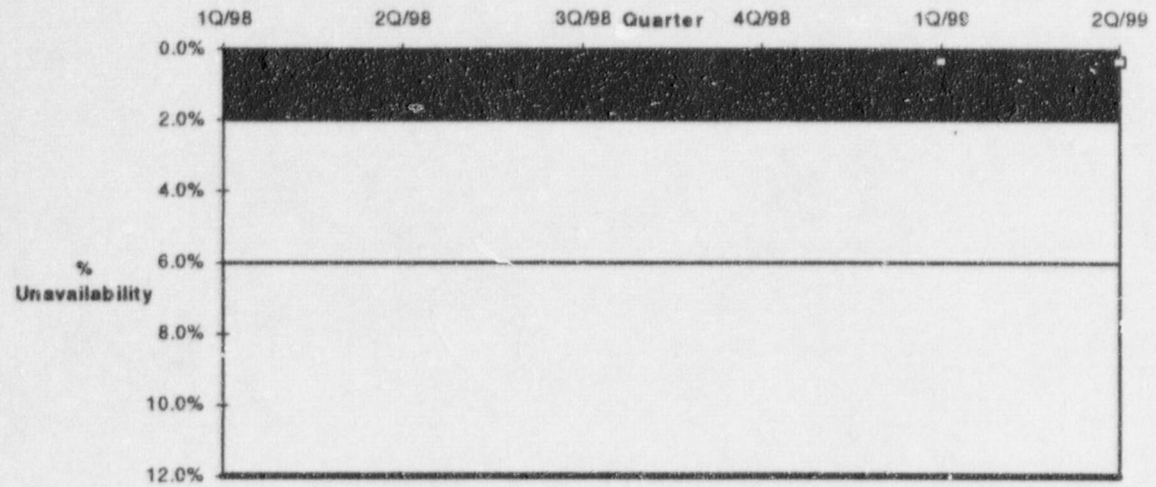
Analysis:

The availability of the HPSI System remains high due to excellent equipment reliability. Surveillance testing is well planned and executed resulting in an absolute minimum of equipment unavailability. The frequency of Preventative Maintenance activities are based on a conservative balance of EPRI guidelines and observed equipment performance. The HPSI pumps are dedicated to the ECCS function (e.g., they do not serve a dual role as charging pumps).

Green | **Manager** Meri Core | **Data Source** Chuck Schaffer

"MITIGATION SYSTEMS"
Safety System Unavailability, AFW System

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



Definition:

Auxiliary Feedwater Safety System for the NRC safety system performance is defined as the three year running average sum of: 1) the known (planned and unplanned) unavailable hours and 2) the estimated fault exposure unavailable hours for the auxiliary feedwater system for the reporting period, divided by: 1) the critical hours for the reporting period, and 2) the number of trains in the auxiliary feedwater system.

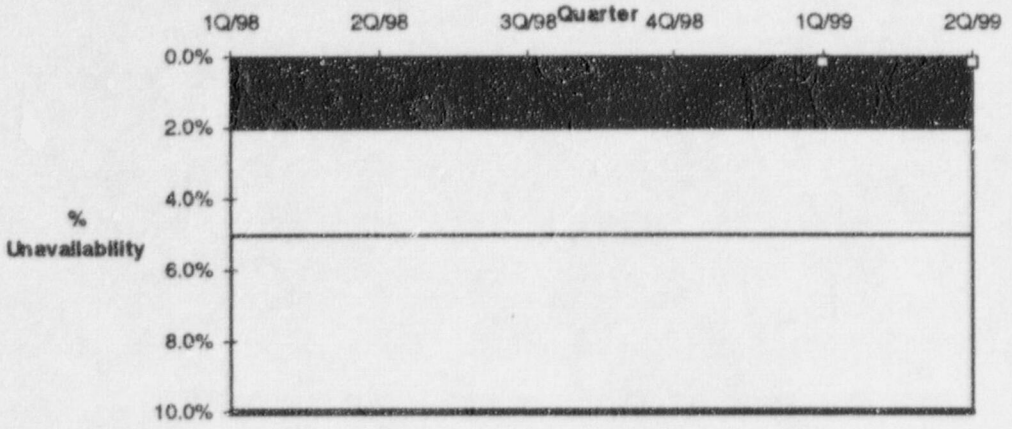
Analysis:

In May 1999, a scheduled outage of 2.2 hours for FW-10 surveillance testing was completed. Both trains of AFW passed quarterly performance testing in May with no deficiencies.

Green | **Manager** Merl Core | **Data Source** Russ Cusick

"MITIGATION SYSTEMS"
Safety System Unavailability, Low Pressure Safety Injection System (Residual Heat Removal)

Safety System Unavailability, RHR (12 quarter rolling average)



Definition:

Residual Heat Removal System for the NRC safety system performance is defined as the three year running average sum of: 1) the known (planned and unplanned) unavailable hours and 2) the estimated fault exposure unavailable hours for the auxiliary feedwater system for the reporting period, divided by: 1) the critical hours for the reporting period, and 2) the number of trains in the Residual Heat Removal System.

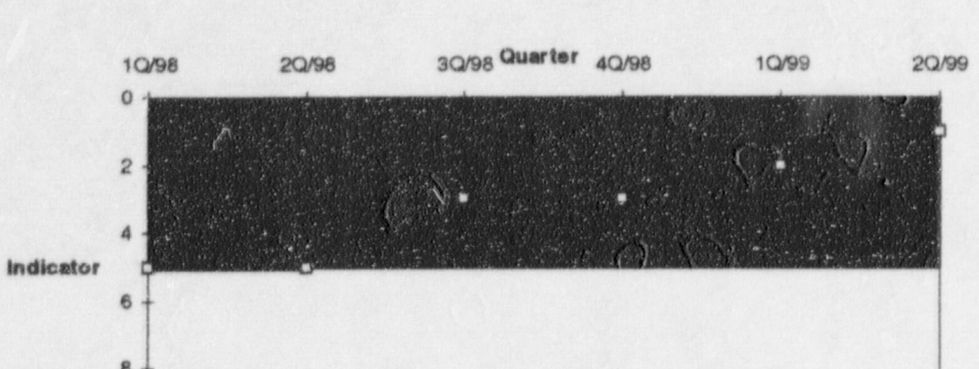
Analysis:

The availability of the LPSI system remains high due to excellent equipment reliability. Surveillance testing is well planned and executed resulting in an absolute minimum of equipment unavailability. The frequency of Preventative Maintenance activities are based on conservative balance of EPRI guidelines and observed equipment performance.

Green | **Manager** Merl Core | **Data Source** Chuck Schaffer

"MITIGATION SYSTEMS"
Safety System Functional Failures

Safety System Functional Failures (4 quarter rolling sum)



Definition:

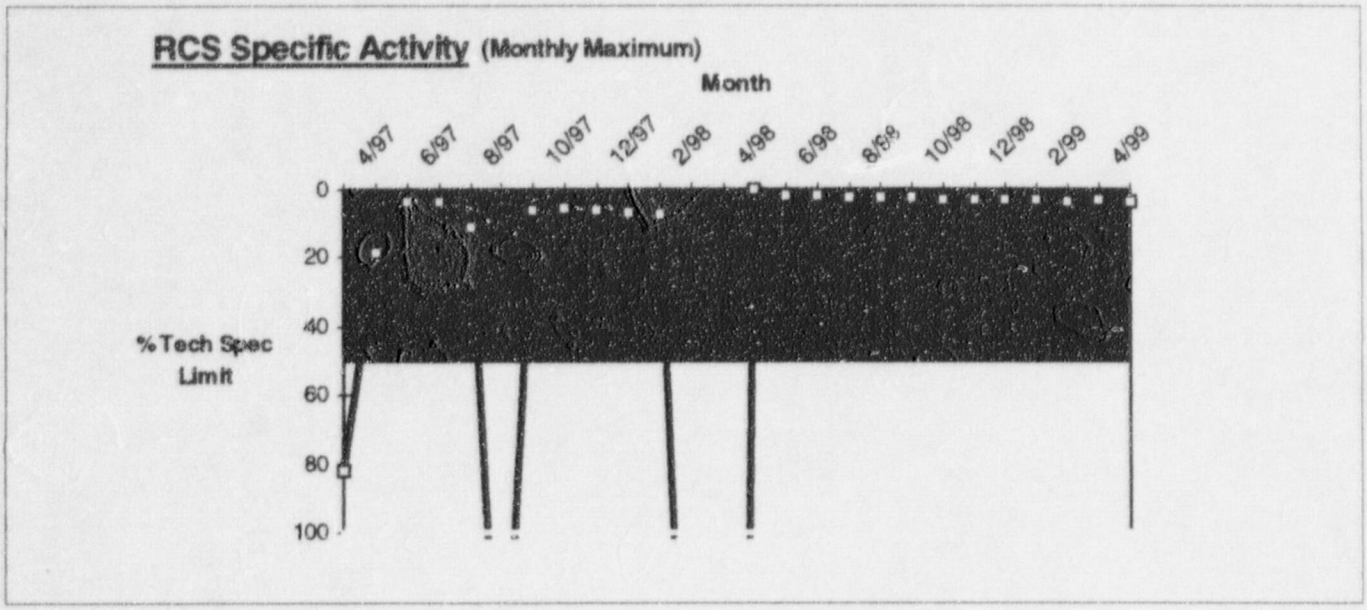
The number of events or conditions that have been reported in LERs that prevented, or could have prevented, the fulfillment of safety functions specified in NEI-99-02 in the previous four quarters.

Analysis:

Performance is showing a strong positive trend. The last SSFF LER reportable item occurred in the 4th quarter 1998.

Green	Manager	Ralph Phelps	Data Source	Erick Matzke

"BARRIERS"
Reactor Coolant System (RCS) Activity



Definition:

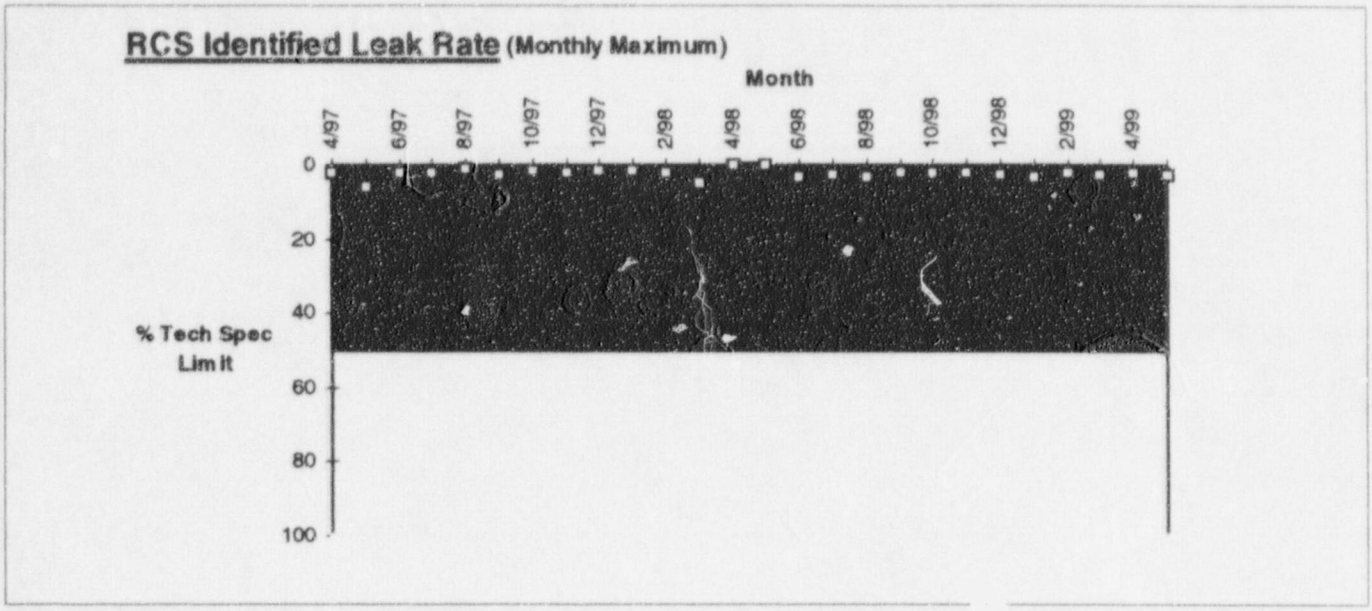
The maximum monthly RCS activity in micro-Curies per gram (μCi/gm) dose equivalent Iodine-131 per the technical specifications, and expressed as a percentage of the technical specification limit.

Analysis:

Current DEI is at about 3% of Technical Specification Limit. If we were to trip DEI could be expected to reach 80% to 90% of limit after this point in time. It is projected that TS limit will be exceeded at the end of the operating cycle for a rapid shutdown.

Green	Manager	Ruben Hamilton	Data Source	Jim Hoffman

"BARRIERS"
Reactor Coolant System Leakage



Definition:

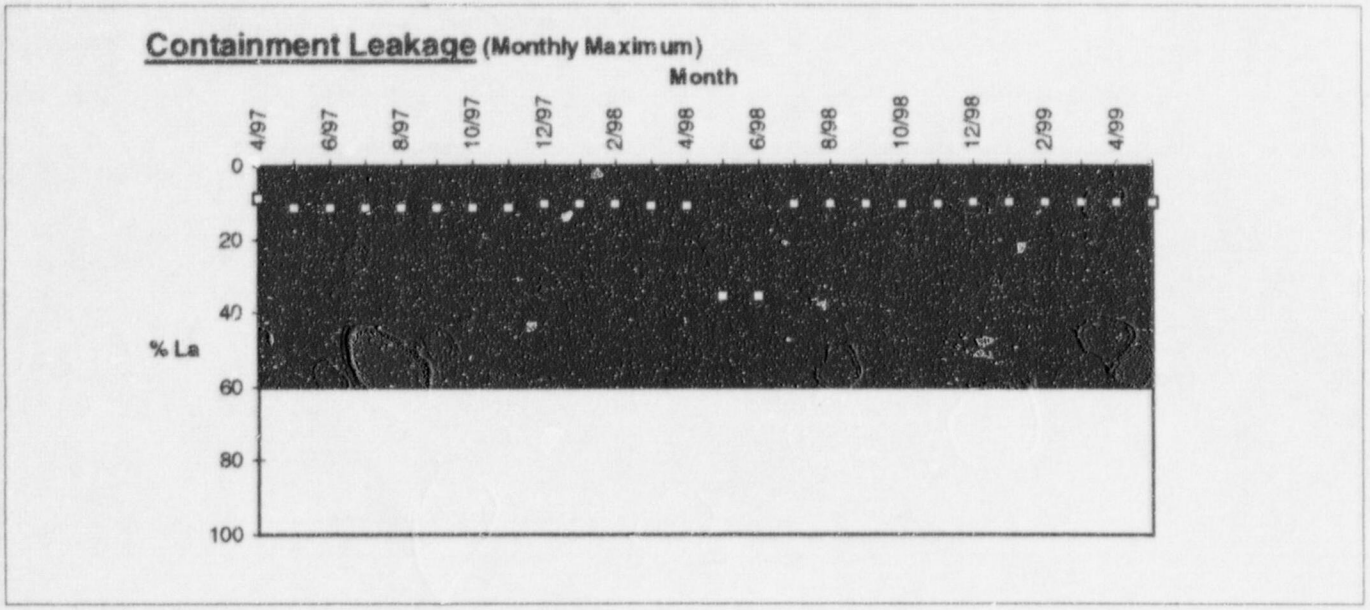
The maximum RCS Identified Leakage in gallons per minute each month per the technical specifications and expressed as 2.5% (0.253 gpm)of the technical specification limit.

Analysis:

RCS leakage continues to be a small fraction of the allowable Tech Spec limit.

Green	Manager	Ross Ridenoure	Data Source	John Drahota

"BARRIERS"
Containment Leakage



Definition:

Containment Leakage is the monthly maximum total Type B and Type C leakage as a percentage of the design basis leak rate (L_a), as determined in accordance with 10 CFR 50, Appendix J.

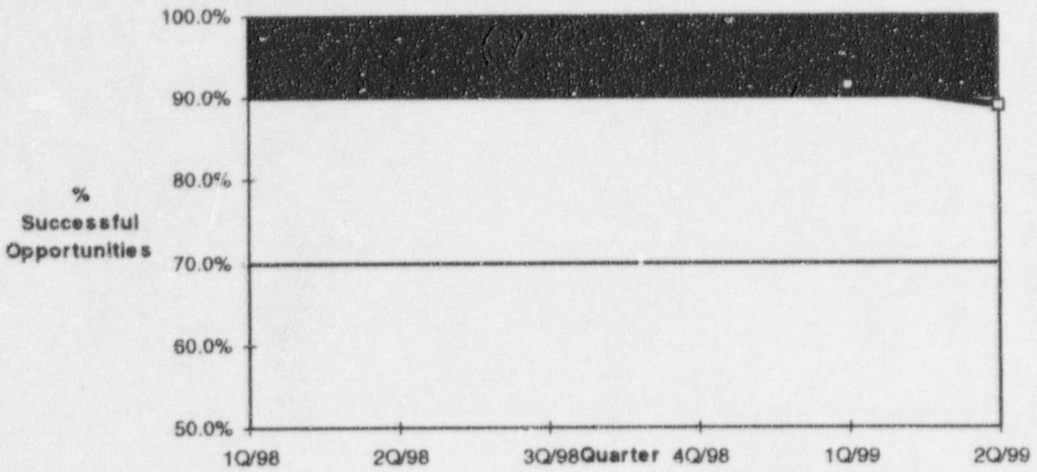
Analysis:

The "running total" containment leakage, based on the most recent Local Leak Rate Test, continues to trend well within acceptable limits. FCS has implemented option 'B' to appendix J. This results in extended containment local leakage rate testing performance internals. All leakage rate tests are currently scheduled for outage periods. Leakage rate testing may be performed on line to assess an emergent problem or address area of potential leakage. Current level of leakage is low. The anomaly of a higher leakage was as a result of 'as found' testing during the last refueling outage.

Green **Manager** **Merl Core** **Data Source** **Glenn Miller**

"EMERGENCY PREPAREDNESS "
ERO Drill / Exercise Performance

ERO Drill/Exercise Performance (8 quarter rolling average)



Definition:

The percentage of all drill, exercise, and actual opportunities that were performed timely and accurately during the previous eight quarters.

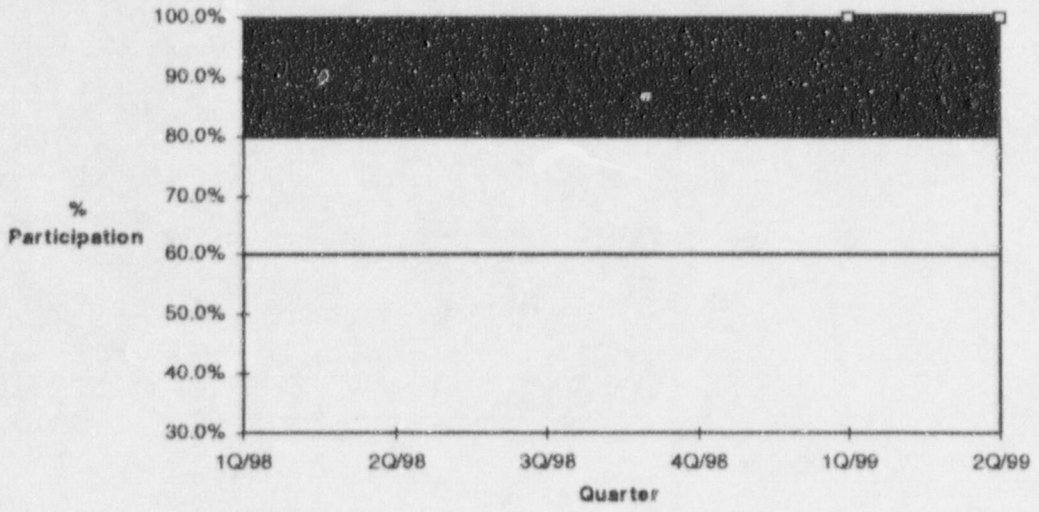
Analysis:

ERO Drill Exercise Performance needs improvement. This indicator is in the white level of performance. The last dress rehearsal indicated a deficiency in this area. Increased attention in this area is warranted. The next opportunity will be the June 29, 1999 dress rehearsal.

[redacted] **Manager** **John Sefick** **Data Source** **Carl Simmons**

"EMERGENCY PREPAREDNESS"
Emergency Response Organization Drill Participation

ERO Drill Participation (% participation of Key personnel during previous 8 quarters)



Definition:

The percentage of key ERO members that have participated in a drill, exercise, or actual event during the previous eight quarters, as measured on the last calendar day of the quarter.

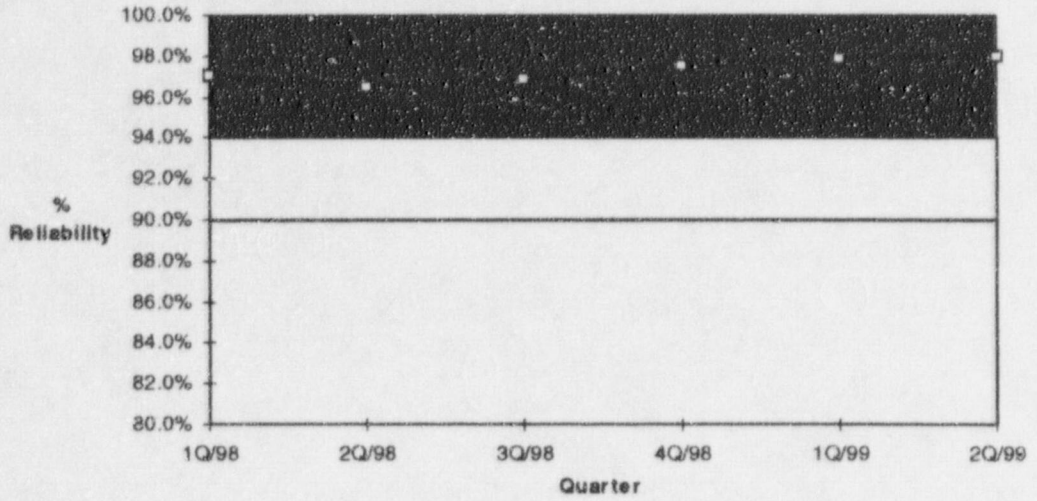
Analysis:

Drill participation is currently very good.

Green | **Manager** John Sefick | **Data Source** Carl Simmons

"EMERGENCY PREPAREDNESS"
Alert and Notification System Reliability

Alert & Notification System Reliability (4 quarter rolling average)



Definition:

The percentage of ANS sirens that are capable of performing their function, as measured by periodic siren testing in the previous 12 months.

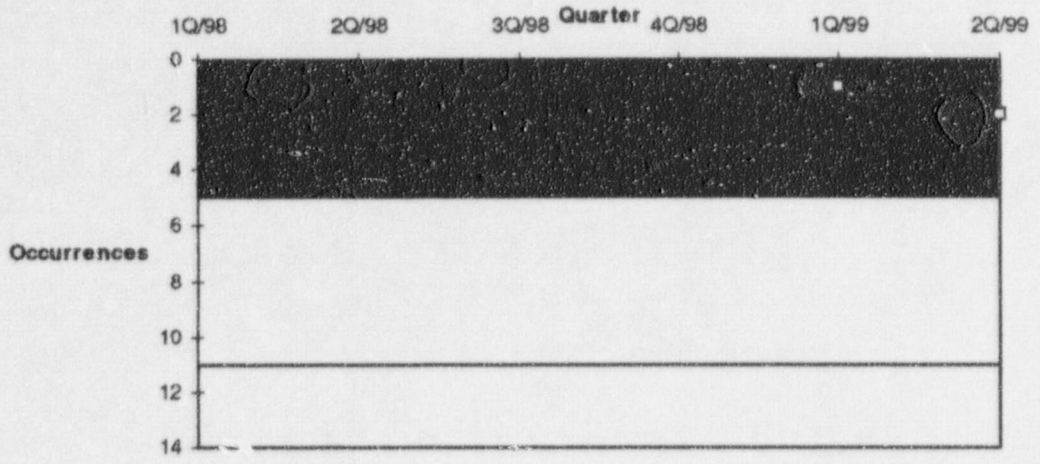
Analysis:

Siren reliability has been steady between 97- 98%. No adverse trends have been identified in this area.

Green	**Manager**	**John Sefick**	**Data Source**	**Carl Simmons**

"OCCUPATIONAL RADIATION "
Occupational Exposure Control Effectiveness

Occupational Exposure Control Effectiveness (12 quarter rolling sum)



Definition:

The performance indicator for this cornerstone is the sum of the following, Technical Specification high radiation area occurrences, very high radiation area occurrences and unintended exposure occurrences, over the previous 12 quarters.

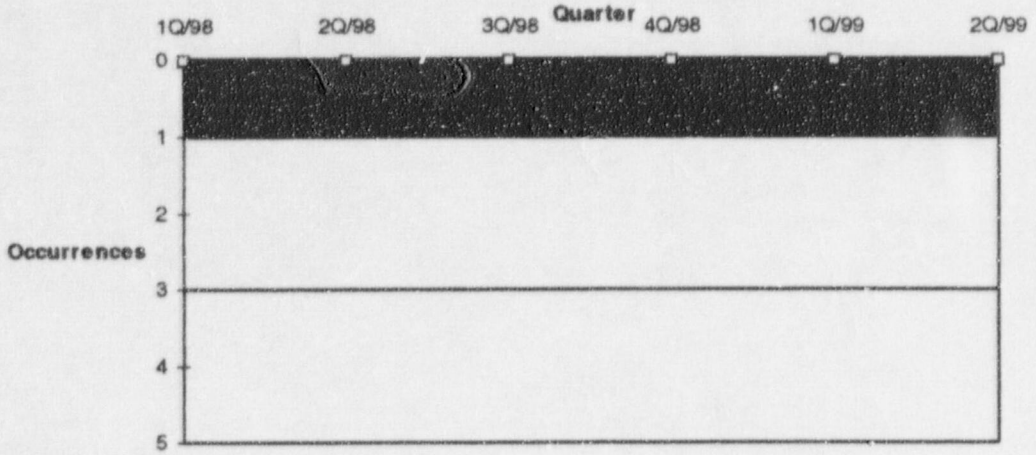
Analysis:

Two events have affected the Occupational Exposure Control Effectiveness Performance Indicator. The events are associated with TS Restricted High Radition Area (dose rates greater than 1000 mr/hr/). The first event occurred in April 1998. The second event occurred in April 1999. A Root Cause Analysis (RCA) has been completed and corrective actions are in progress.

Green | **Manager** | **Mark Puckett** | **Data Source** | **Ann Nieland**

"PUBLIC RADIATION SAFETY"
RETS/ODCM Radiological Effluent Occurrence

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



Definition:

Radiological effluent release occurrences per reactor unit over the previous 4 quarters.

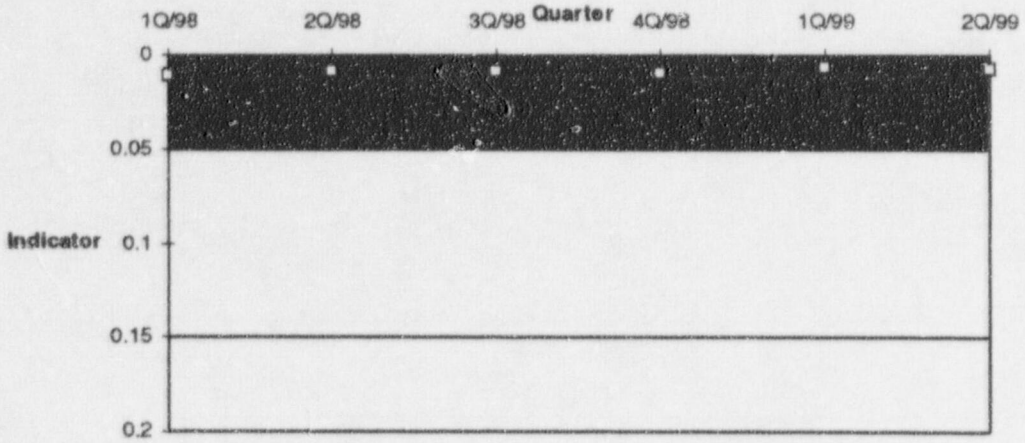
Analysis:

Current goals would not exceed 10% of the threshold values.

Green | **Manager** Ruben Hamilton | **Data Source** Bruce Renaud

"PHYSICAL PROTECTION "
Protected Area (PA) Security Equipment Performance Index

PA Security Equipment Performance Index (4 quarter rolling average)



Definition:

PA Security equipment performance is measured by an index that compares the amount of the time Closed Circuit Television and Interjected Detection System are unavailable, as measured by compensatory hours, to the total hours in the period. A normalization factor is used to take into account site variability in the size and complexity of the systems.

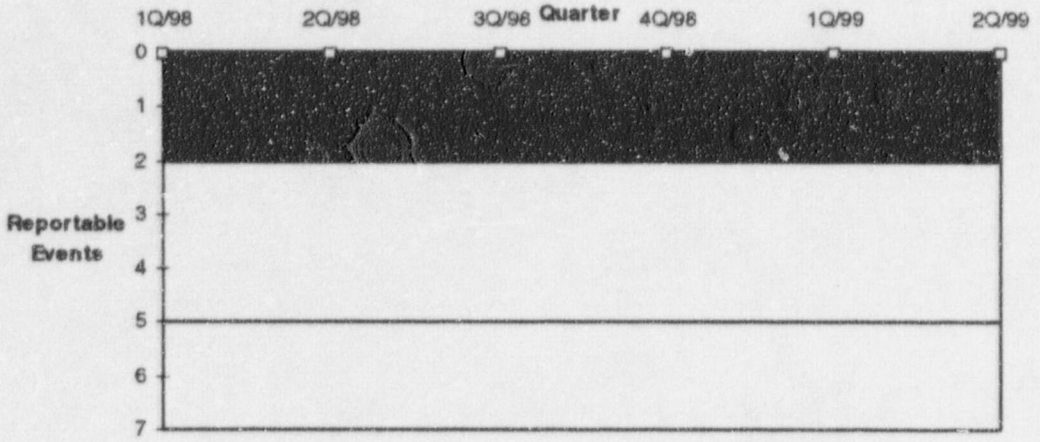
Analysis:

Performance continues to be acceptable in this area.

Green **Manager** **John Sefick** **Data Source** **Don Lieber**

"PHYSICAL PROTECTION "
Personnel Screening Program Performance

Personnel Screening Program Performance (4 quarter rolling sum)



Definition:

The number of reportable failures to properly implement the regulatory requirements, over the previous 4 quarters.

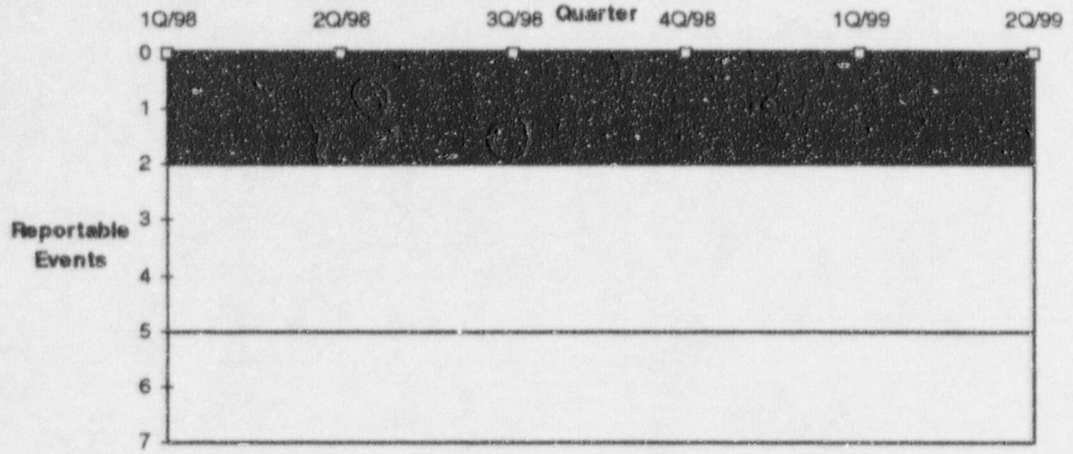
Analysis:

Performance continues to be acceptable in this area.

Green	Manager	John Sefick	Data Source	Don Lieber

"PHYSICAL PROTECTION "
Fitness-For Duty (FFD) Personnel Reliab lity

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



Definition:

The number of reportable failures to properly implement the requirements of 10 CFR Part 26 and 10 CFR 73.56, over the previous 4 quarters.

Analysis:

Performance continues to be acceptable in this area.

Green | **Manager** John Sefick | **Data Source** Don Lieber

CHOICE PERFORMANCE INDICATORS

CRITICAL SELF-ASSESSMENT

Strategic Objective: To promote a learning organization and to continuously strive toward improving safety and operational performance. Self-Assessments compare actual performance to industry standards of excellence and management expectations to identify and correct areas needing improvement.

Performance Indicators:

- **Problem Identification Rates (Self & Site)**
- **Self-Assessment Quality Index**

Key Actions Taken to date:

Critical Self-Assessment Leadership session given to MTM
Human Performance Day on Critical Self-Assessments
Held first Joint Corrective Action/Self-Assessment advisory meeting
Revised Self-Assessment Guideline (FCS-G4)
Developing formal Self-Assessment Training for Managers, Supervisors and Team Leaders-September

Definition:

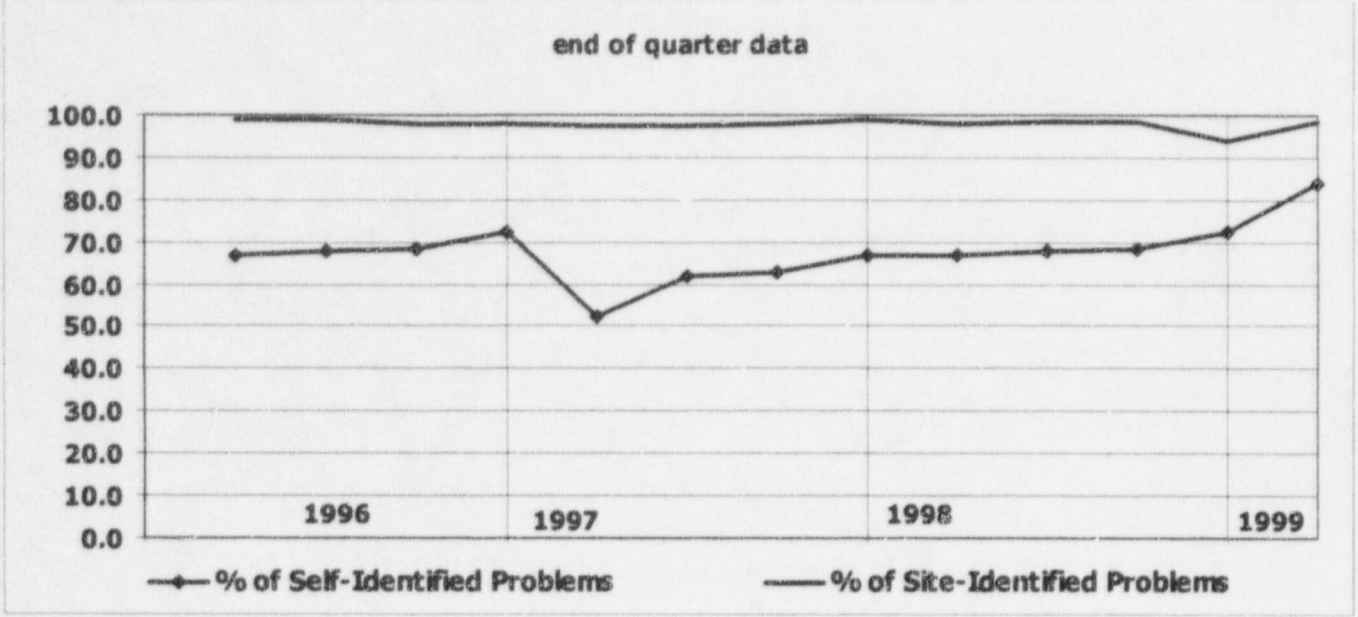
Emphasis on the conduct of Formal Self-Assessments in 1997 and 1998 has contributed toward improved station performance.
Improved focus on the completion of post job critiques to capture operating experience and to identify and track performance problems.
The formal self-assessment process is recognized as an industry strength in the latest INPO evaluation

Analysis:

Process for performing self assessments is being improved by revising procedure. One of the changes is allowing for smaller assessments as opposed to team approaches to the assessment process. training of personnel on how to conduct assessments is being scheduled, staring in September. Current status is that assessments are finding the same problems that previous assessments have identified. More work is needed in this area.

White **Manager** **Jim Chase**

PROBLEM IDENTIFICATION RATES (Self & Site)



% of Self Identified Problems:

	1996	1997	1998	1999 (YTD)	2000	2001	2002	2003
Target Performance	N/A	N/A	N/A	85.0	TBD	TBD	TBD	TBD
Actual Performance	68.8	61.0	68.8	83.9				

% of Site Identified Problems:

	1996	1997	1998	1999 (YTD)	2000	2001	2002	2003
Target Performance	N/A	N/A	N/A	>98.0	TBD	TBD	TBD	TBD
Actual Performance	98.6	97.8	97.3	98.5				

Definition:

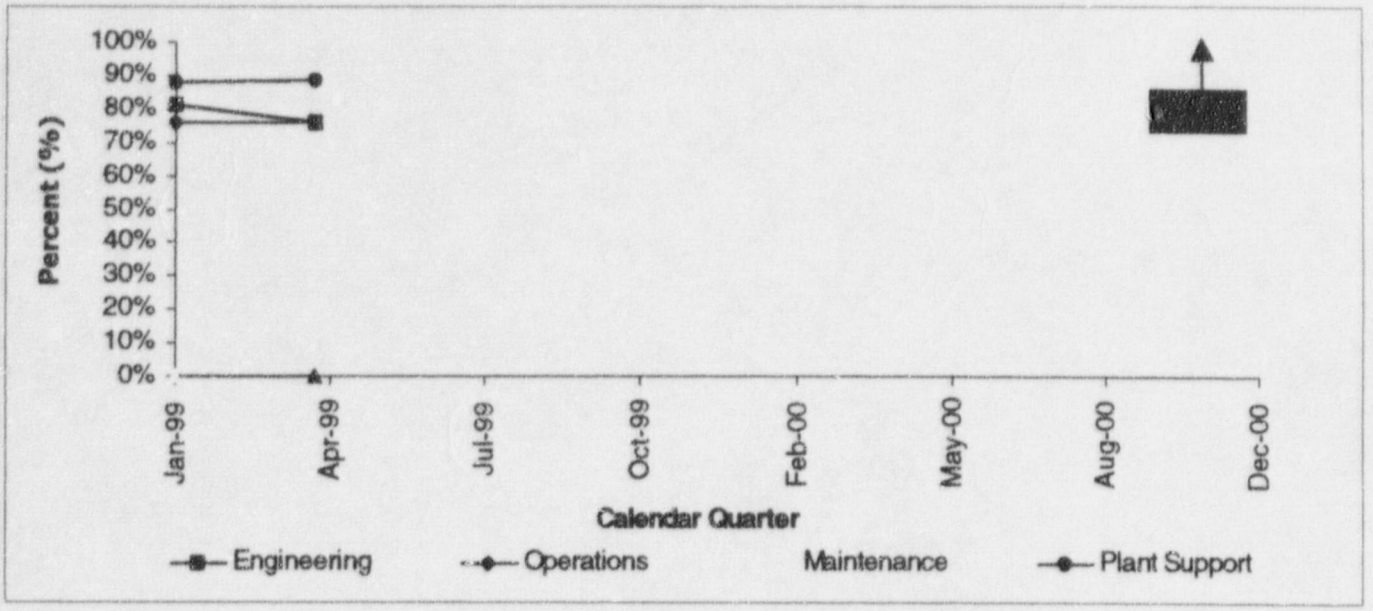
This is a measure of our ability to identify problems internally. The first ratio (% of Self-Identified Problems) represents the percentage of Condition Reports identified by the Work Group. The second ratio (% of Site-Identified Problems) represents the percentage of Condition Reports identified by the Work Group, Non Oversite Work Groups, and Oversite Work Groups (does not include NRC or INPO identified problems).
The Goals are to continue to increase the number of self-identified problems and reduce the number of external identified problems.

Analysis:

Year-end Projection: An improving trend is expected. Further efforts are planned to improve the "Self-Evaluation" culture.
Year-to-date Performance: During the first quarter of 1999, the Self-Identification rate has increased by approximately 15% indicating a positive trend. The Site-Identification rate continues to be high.

White **Manager** **Del Trausch** **Data Source** **Ken Steele**

SELF-ASSESSMENT QUALITY INDEX



	1996	1997	1998	1999	2000	2001	2002	2003
ANNUAL GOAL	N/A	N/A	N/A	85	90	90	90	90
ACTUAL PERFORMANCE	N/A	N/A	N/A	74	------	------	------	------

Definition:

This performance indicator is based upon evaluation of individual area self-assessment activities. Self-assessment activities are grouped into the areas of Operations, Maintenance, Engineering and Plant Support. Assessment quality is evaluated by the NSRG through the use of a self-assessment scorecard. Data is provided as 12 month Rolling Averages.

Analysis:

Year-end Projection: an improving trend is expected. Further efforts were planned to improve the 'Self Assessment' culture
Year to date Performance: due to a limited number of self assessments in the first quarter (2) no trend can be determined at this time.

Yellow **Manager** **Del Trausch** **Data Source** **Ken Steele**

HUMAN PERFORMANCE IS EXEMPLARY

Strategic Objective: To promote a high quality, well-motivated work force willing to work together as a team to increase productivity while also reducing the probability for human error through the utilization of high quality work practices related to organizational, leadership and individual human performance behaviors.

Performance Indicators:

- **Average Days for Resetting the Site Wide Event Clock**
- **Departmental Noteworthy Events**
- **Individual Error Human Performance LERs**
- **Organizational/Programmatic Error LERs**

Key Actions Taken to date:

The use of a "Four Key Question" concept within the pre-job briefing process as a means of improving on the early identification and elimination of error-likely situations.

The adoption of a Focus Manager program designed to apply supervisory oversight focused on the prevention of error-likely situations.

Weekly Leadership Sessions and routinely scheduled discussions among managers on issues involving the improvement of leadership skills.

Training of Shift Technical Advisors and other selected personnel on the INPO "Human Performance Fundamentals" course. Training of engineering and operations personnel on the INPO "Excellence in Human Performance document" (Titanic training).

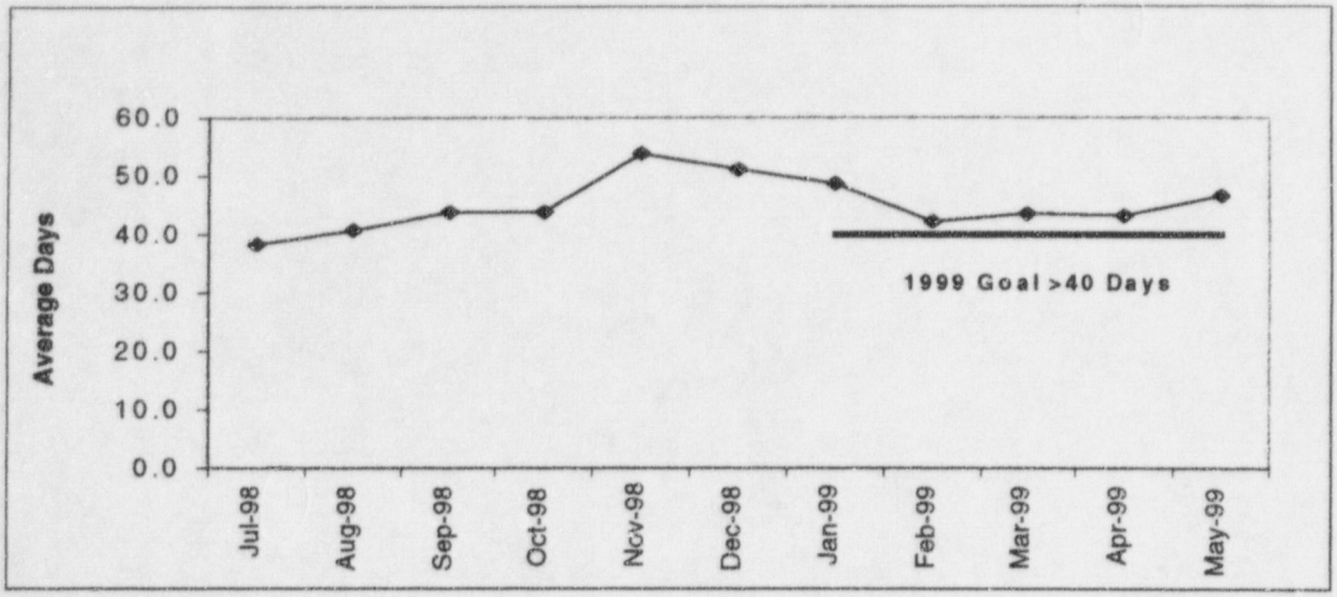
Increased focus of operations simulator training on the use of self and peer-checking concepts.

Analysis:

Over all human performance trends are positive, however, there are four noteworhty departmental events which could be a precurser to a site wide event. Therefore continued site wide emphasis on human performance is essential.

White **Manager** **Mary Tesar**

AVERAGE DAYS FOR RESETTING THE SITE WIDE EVENT CLOCK



AVERAGE DAYS FOR RESETTING THE SITE WIDE EVENT CLOCK	1996	1997	1998	1999	2000	2001	2002	2003
ANNUAL GOAL	N/A	N/A	N/A	40	50	60	90	90
MAY ACTUAL PERFORMANCE	20.6	17.3	38.7	43.1	------	------	------	------

Definition:

The site wide event clock is reset following the occurance of a significant condition report (Level 1 or 2) that adversely affects plant operating status or safety margin and which was within the organization's ability to prevent. This indicator tracks a 12 month rolling average of the number of days between succeeding event clock resets.

Analysis:

Trend for this indicator remains stable above the 1999 goal. With no additional Significant Condition Reports FCS will meet the 1999 goal.

Green **Manager** **Mary Tesar** **Data Source** **John Kellams**

DEPARTMENTAL NOTEWORTHY EVENTS

Department	1999	Months Since Last Event
Chemistry	0	10
Emergency Preparedness	3	0
Industrial Safety	1	0
Maintenance	6	2
Nuclear Engineering Division	2	1
Operations	0	5
Planning and Scheduling	0	13
Radiation Protection	3	0
Security	1	0
Other	0	NA

Definition:

Departmental Noteworthy Events are significant events or precursors to these events. If comprehensive corrective actions are taken for these events, future significant events can be avoided. Each department defines the definition and threshold for their department. In most cases they include level 1, 2, and 3 condition reports along with some level 4 precursor events as specified by the department manager.

***Analysis*:**

Four Noteworthy Events occurred in May:

Deficiency identified in Emergency Preparedness on evaluation and issuance of protective action recommendations.

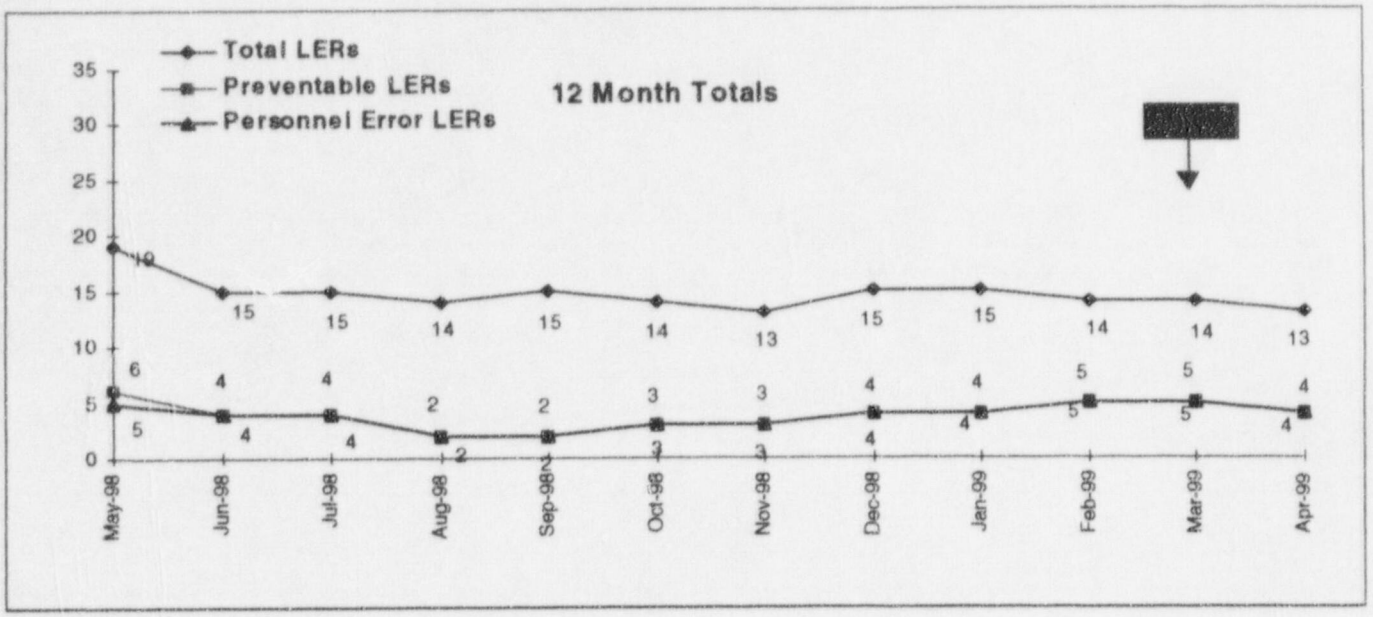
Negative trend in failures of patrolling officers to accurately complete their assigned patrols.

Actions unsuccessful in minimizing bird droppings in the area of the main transformers.

Radiation Protection personnel directed electricians to use an inappropriate RWP to enter an airborne area.

White **Manager** **Mary Tesar** **Data Source** **Jim Tills**

INDIVIDUAL ERROR HUMAN PERFORMANCE LERS



NUMBER OF HUMAN PERFORMANCE LICENSEE EVENT REPORTS	1996	1997	1998	1999	2000	2001	2002	2003
ANNUAL GOAL	2	2	2	2	1	1	0	0
ACTUAL PERFORMANCE	2	4	4	1	------	------	------	------

Definition:

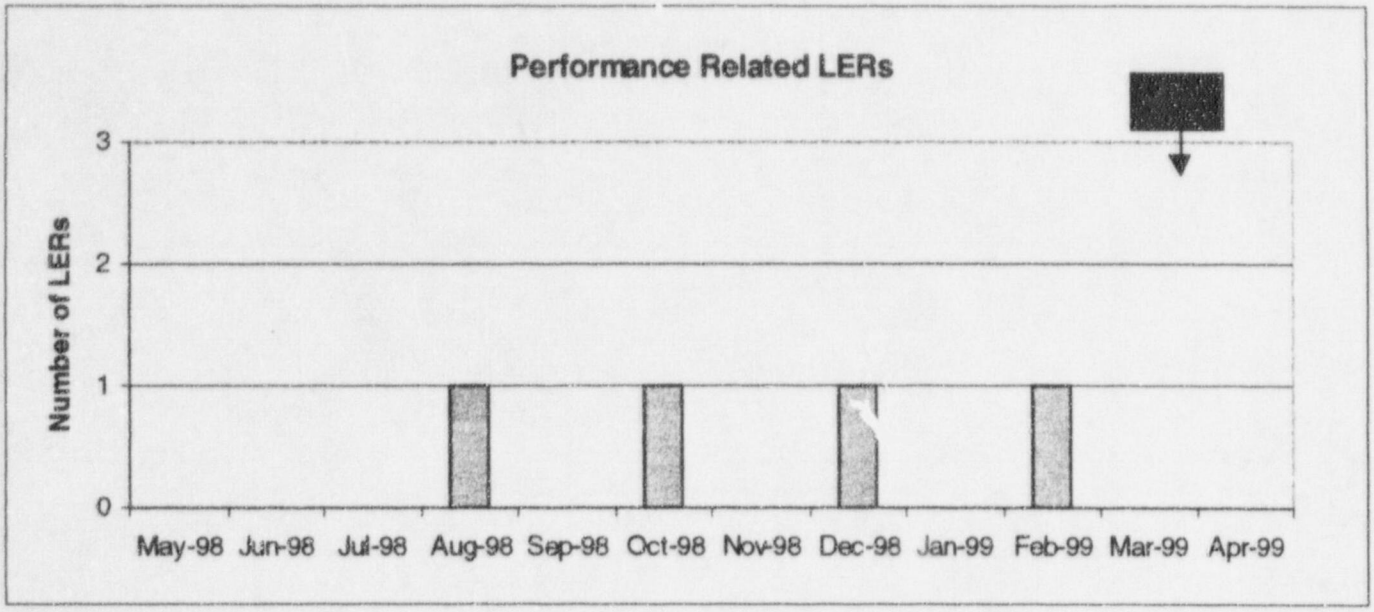
LERs caused by personnel error such as inappropriate action by one of more individuals, as opposed to being attributed to a department or general group. LERs falling into this category would include those events which can be shown to have been created or driven by an underlying organizational or programmatic weakness. These are typically indicated by the failure of more than one defensive barrier.

Analysis:

Human Performance trends show an overall decline in the number and percentage of causal factors attributed to human performance errors in several categories.
Note: Due to the way LERs are tracked & reported, this indicator lags by one month.

Yellow **Manager** **Mary Tesar** **Data Source** **Erick Matzke**

ORGANIZATIONAL/PROGRAMMATIC ERROR LERS



NUMBER OF ORGANIZATIONAL/ PROGRAMMATIC ERROR LERs	1996	1997	1998	1999	2000	2001	2002	2003
ANNUAL GOAL	N/A	N/A	N/A	5	4	4	3	3
ACTUAL PERFORMANCE	9	5	5	1	------	------	------	-----

Definition:

This performance indicator monitors organizational/programmatic performance error LERs where the root cause is personnel error such as a department or general group, as opposed to being attributed to inappropriate action by one or more individuals. LER's falling in this category would include those events which can be shown to have been created or driven by an underlying organizational or programmatic weakness. These are typically indicated by the failure of more than one defensive barrier.

Analysis:

The trend for 1999 is very positive.

Green **Manager** **Mary Tesar** **Data Source** **Erick Matzke**

OPERATIONS ARE EVENT FREE

Strategic Objective: To ensure that weak barriers are identified and strengthened to prevent events.

Performance Indicators:

- **INPO Identified Significant/Noteworthy Events** (Choice indicator)
- **Departmental Noteworthy Events** (Choice indicator)
- **Unplanned Capability Loss Factor** (WANO indicator)
- **Transients per 7000 Critical Hours** (NRC indicator)
- **Unplanned Reactor Scrams per 7000 Hours** (NRC indicator)

Key Actions Taken to date:

Enhanced formality in Operations, including annunciator response and self checking.

Completed two "behavior based" Operations self-assessments.

Operations procedures are being revised to address human performance issues.

Scorecard Observation Process continues. Significant improvement. Realized in area of pre-job briefings. Additional focus needed in use of OE.

Noteworthy event definition, setup for all station departments/divisions.

Strategic agreements between line organization and Training that require review of Condition Reports, Operating Experience and Human Performance errors.

Use of focus instructors and focus managers in the simulator. Continued use of focus managers in the field.

Actions underway to improve use of operating experience in the field for both on-line and refueling.

Radiological posting information made easier for radiation workers to utilize.

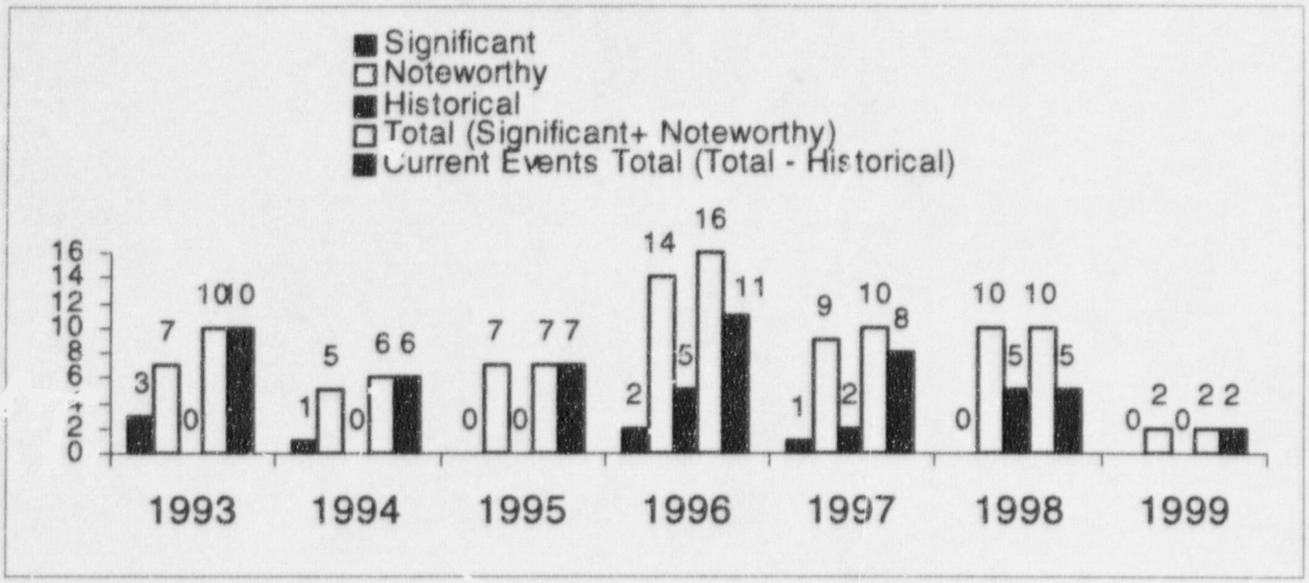
Switchyard activity control strengthened by use of FCS engineering management involvement and shift manager/PRC approvals. Management notifications used to involve entire organization, in resolving critical activities such as system bus loading concerns and control room air conditioning operability issues. Use of condition reporting process used to trade post job critiques.

Analysis:

The reason this area is not green was felt to be due to the WANO indicator for unit capability loss factor, the February down-power and departmental Noteworthy Events.

White **Manager** **Jim Tills**

INPO Identified Significant/Noteworthy Events



INPO SIGNIFICANT EVENTS	1996	1997	1998	1999	2000	2001	2002	2003
FCS GOAL	0	0	0	0	0	0	0	0
FCS ACTUAL	2	1	0	----	----	----	----	----

INPO NOTEWORTHY EVENTS	1996	1997	1998	1999	2000	2001	2002	2003
FCS GOAL	N/A	N/A	N/A	7	6	5	5	5
FCS ACTUAL	14	9	9	----	----	----	----	----

Definition:

FCS events are screened and designated by INPO as significant events if they exhibit one or more of the following characteristics: 1) severe or unusual transients, 2) safety system malfunctions or improper operations, 3) major equipment damage caused by lengthy unplanned outages or significant reductions in power levels, replacement of or extensive repairs to major equipment, fuel rod failures requiring a shutdown, and 4) other events involving nuclear safety and plant reliability. Noteworthy events are determined to be not "Significant," but indicative of (i.e indicates the existence of precursors) maintenance, operations, administrative or management problems. Historical Events are events classified by OPPD as caused by conditions greater than eighteen months old.

Analysis:

Significant Events for 1999:

- None

Noteworthy Events for 1999:

- Fast transfer of safety-related buses due to switchyard cable being cut during excavation work.
- Surveillance procedure deficiency leads to entry into technical specification required shutdown due to auxiliary feedwater inoperability.

Noteworthy Historical Events for 1999:

- None

Green **Manager** **Jim Tills** **Data Source** **Donna Guinn**

INITIATIVES IN HIGH VISIBILITY AREAS HAVE STRONG PERFORMANCE

Strategic Objective: To ensure that initiatives in high visibility areas have strong performance. Areas of interest are defined as an issue, area, initiative or activity that has major impact on:

1) Safe and Event Free Nuclear Production of Electricity
2) Being Successful in a Competitive Environment
3) Building and Maintaining Trust with Regulators, Employees and Customers

Performance Indicators:

Milestone schedules for high visibility areas will be monitored. These areas are:

- **Resolution of INPO findings (Frans)**
- **RAMS Project (Chamberlain)**
- **Work Management Process (Wylie)**
- **Improvements in Preventive Maintenance and Predictive Maintenance Programs (Swearngin)**
- **1999 Graded Exercise (Simmons)**
- **1999 Refueling Outage Milestones (Wylie)**
- **Y2K (Henry)**
- **Switchyard Modifications (Short)**
- **Zebra Mussel Initiative (Hamilton)**
- **Training Accreditation Renewal & Operator Hot License (Westcott)**

	Project Plan is developed and on schedule.	White	Project is generally on schedule; however some milestones have been missed or rescheduled.
Yellow	Project Plan has not been developed and is not overdue or the project is behind schedule.		No project plan has been developed to date and is overdue.

Note:

Analysis provided for each high visibility item listed.

White **Manager** **Sudesh Gambhir**

INITIATIVES AND HIGH VISIBILITY ISSUES

	Resolution of INPO findings	Frans
Two action requests (26939 and 26944) have been issued to FCS management to provide descriptions of the action plans, status of implementation of the action plans, and any results-to-date for each of the 19 INPO 1999 plant evaluation findings. The due dates for these action requests are 6/25/99, for AR 26939, to allow the action plans, status, and results to be presented at the 7/23/99 SARC meeting, and 8/20/99, for AR 26944, to provide the 6 month status to INPO due on or before 9/17/99.		

White	Rams Project	Chamberlain
Progress is being made on resolving RAMs issues. Some of the biggest open issues include; building proficiency in use of RAMs; report writing continues to be a concern although progress has been made; and resolution of some of the items is behind schedule, like PQD.		

White	Work Management Process	Wylie
An action plan to address INPO finding WM.1-1 on work management during the 1999 evaluation, has been reviewed and approved. A total of seven action items are included in the plan with one action completed, four in progress and one with no progress. The action plan is scheduled to complete by December of 1999 and will result in an overall reduction in corrective and non-corrective maintenance backlog and improvement in the plant's material condition and reliability. Therefore, performance on this issue will remain white until the remaining items on the action plan are completed and effectiveness is monitored.		

White	Improvements in Preventive Maintenance and Predictive Maintenance Programs	Swearngin
The Predictive Maintenance Improvement Action Plan is proceeding well, a de-brief on the EPRI assessment and E&T Matrix was conducted this week (5-20-99). The window is white due to continued problems in the Preventive Maintenance area due to the impact of RAMs on processes and resources. A review by NSRG was requested by System Engineering and has affirmed many of the issues already identified by a team organized by the Manager-Planning & Scheduling. An action plan has been developed, and is proceeding; however, it is too early to assess its effectiveness at addressing the problems.		

	1999 Graded Exercise	Simmons
Exercise scenario submitted 3 days ahead of schedule to NRC and FEMA on June 8, 1999. Dress rehearsal scheduled for June 29, 1999. One deficiency and several weaknesses were identified during May 6, 1999, dress rehearsal. Type B root cause by NSRG is in progress for the deficiency.		

White	1999 Refueling Outage Milestones	Wylie
During the second quarter of 1999, four pre-outage milestone dates were met. Previously, the milestone date for requesting parts on the frozen maintenance work was met. However, recent parts tracking reports indicate that a considerable number of contingency parts have been ordered since the May 29, 1999 milestone date. In addition, the milestone date (August 21, 1999) for all RFO parts on site will not be met based on current delivery dates for six items. However, the delivery date for these items is currently before the start of the RFO. A condition report was identified to document this decline in performance. The impact of these parts requests and subsequent delivery dates is in the process of being evaluated for effect on the related RFO work scope. Therefore, for the month of June the performance of this activitity will remain white since a milestone date was missed.		

INITIATIVES AND HIGH VISIBILITY ISSUES

Green	Switchyard Modifications	Short
Enhanced processes and controls put in place following the January 21, 1999, fast transfer event continue to be effective as no challenges to the plant have occurred since January 21, 1999. The project is on schedule to be completed June 28, 1999.		

Green	Zebra Mussel Control Initiative	Hamilton
Chemistry is currently on track with the Zebra Mussel action plan that was approved in 1995. It was reviewed and considered appropriate. The plan will be updated and reissued with editorial changes. The determinations of EAR 95-059 are considered valid. Chemistry intends to provide recognition training to personnel who frequently work in the intake structure.		

White	Training Accreditation Renewal & Operator Hot License	Westcott
Operator programs were successfully reaccredited in March 1999. Efforts are underway to prepare for reaccreditation of the remaining programs (ESP, Chem, RP, Maintenance) under the improved accreditation process in 4th quarter 2000.		

White	Y2K	Henry
Efforts continue to complete software detailed assessments with three assessments remaining to be for reviewed. Mission critical component testing and remediation work continues to meet the June 30 date for submittal of our response to Generic Letter 98-01. An initial draft of the integrated Y2K contingency plan has been completed and is being reviewed.		

CORRECTIVE ACTIONS ARE BROAD AND LASTING

Strategic Objective: To proactively identify, evaluate, take corrective action and monitor results of problems, potential problems and non-consequential events. To identify the root causes, the generic implications and the appropriate corrective actions to prevent a recurrence. To address the fundamental causes of problems rather than the symptoms.

Performance Indicators:

- **Recurring or Repetitive Condition Reports**
- **In Progress Condition Reports (Level 1-4), Total and >6 Months Old**
- **Open Action Items (Level 1-4), Total and >6 Months Old**
- **Number of Repeat Maintenance Activities**

Key Actions Taken to date:

Development of a "Graded" RCA process.

Philosophy and procedural changes to Corrective Action program implementation. Completed Site-training for personnel, INPO just-in-time OE web page.

Organizational & Programmatic/Root Cause Analysis (O&P/RCA) training was completed for a select group of personnel.

Training was provided to CR owners/responders on CA development.

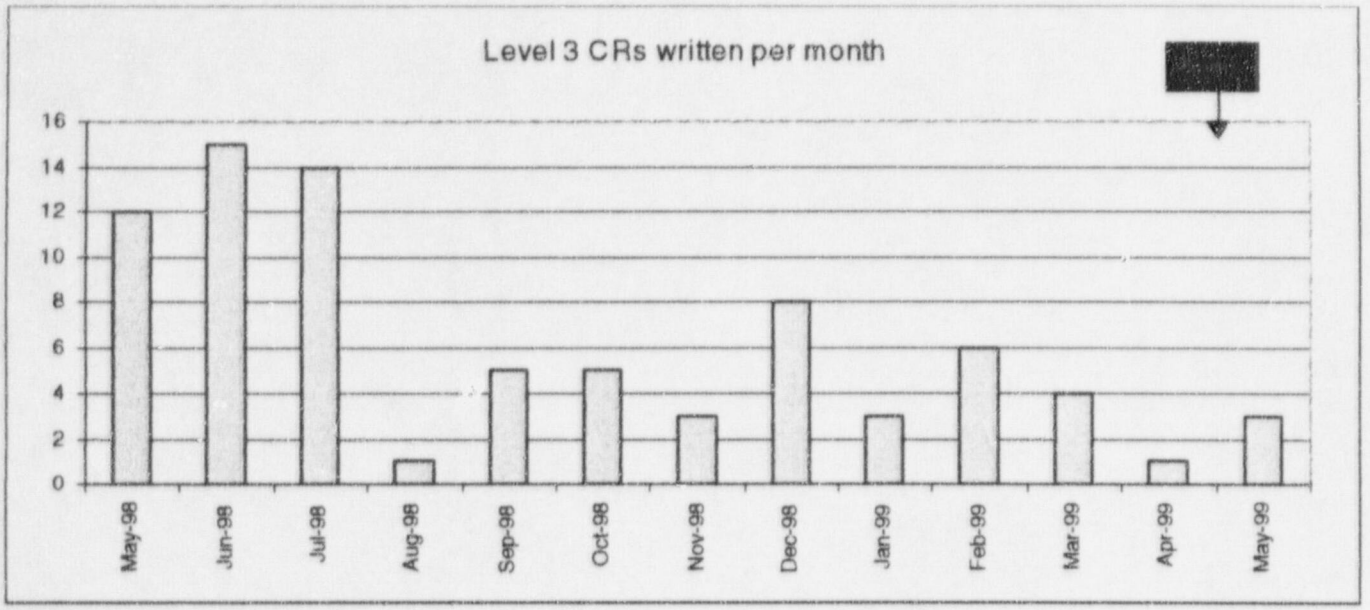
Development of a methodogy for use at CR system for post-job critiques.

Analysis:

Although a number of performance indicators have been developed, they don't adequately reflect the organization's ability to document and fix identified problems. Most people do not realize that the fundamental activity required of them is to find and fix problems. The CR system is our focus, although three are often systems that track problems. A clear definition of what is an excellent corrective action program needs to be developed.

Yellow **Manager** **Joe Solymossy**

RECURRING OR REPETITIVE CONDITION REPORTS



Definition:

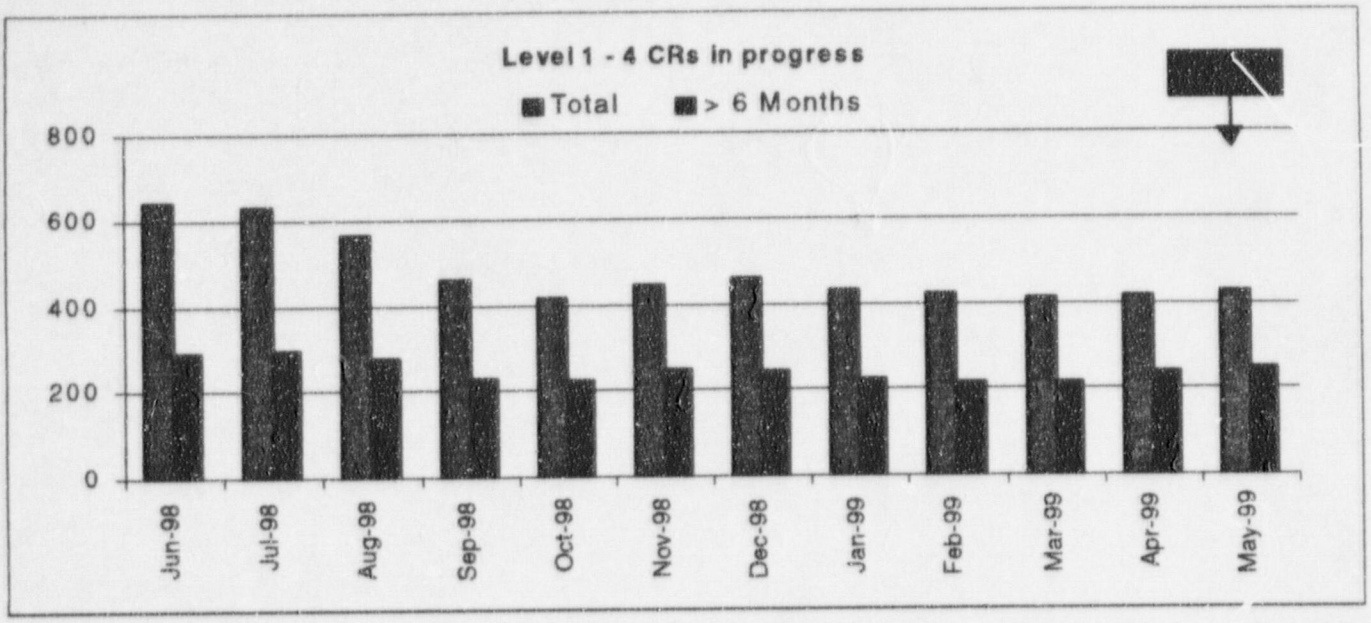
The number of repeat or similar events as indicated in the CR database. These are identified as Level 3 Condition Reports (CRs).

Analysis:

A change in management philosophy caused a significant reduction of level 3 CRs in August 1998. The trend has been relatively steady since. In April 1999, another philosophy and procedural change occurred which also has the potential to limit the number of level 3 CRs. The criteria for a level 3 CR is more selective, but also requires the performance of a Root Cause Analysis for prevention of recurrence. No target goal has yet been defined for this indicator.

White **Manager** **Joe Solymossy** **Data Source** **Mike Burggraf**

IN PROGRESS CONDITION REPORTS (LEVEL 1-4)
TOTAL AND > 6 MONTHS OLD



Definition:

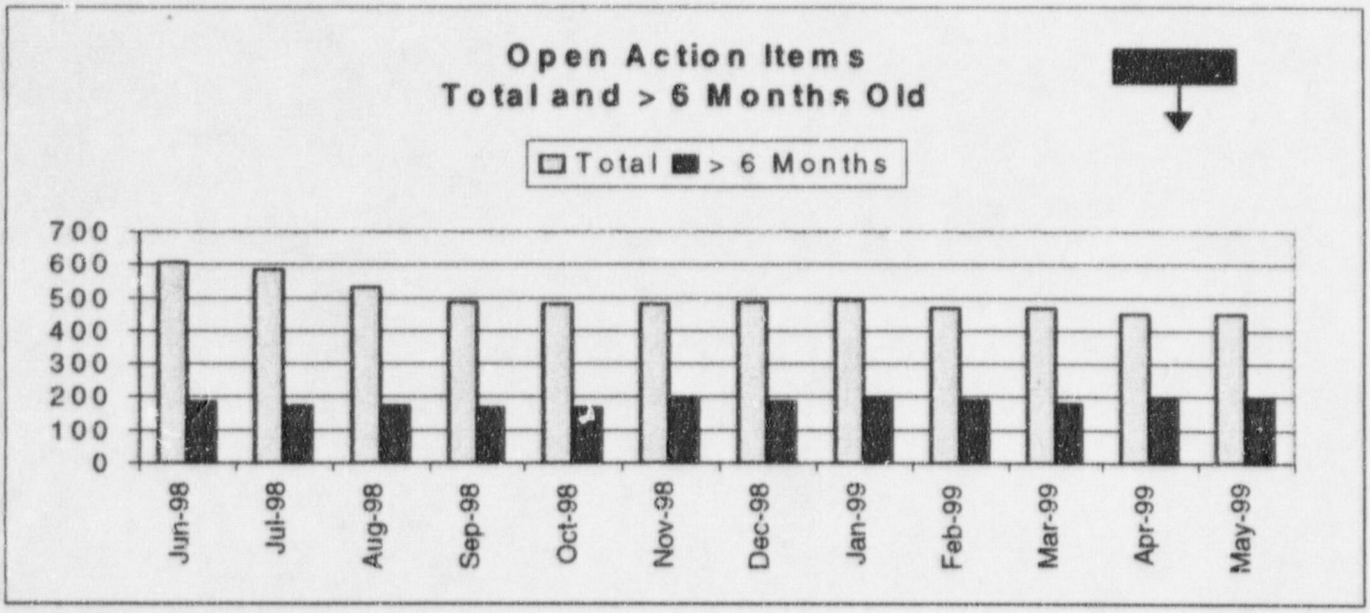
This indicator shows the total number of In-Progress Condition Reports (Level 1-4) and the total number of In-Progress Condition Reports (Level 1-4) greater than 6 months old.

Analysis:

A concerted effort was made in mid 1998 to reduce the CR backlog. Most actions were essentially done. The documentation had just not been completed. Since that time, the trend for CRs and Action Items has been steady. Target goals have not yet been defined for this indicator.

White **Manager** **Joe Solymossy** **Data Source** **Mike Burggraf**

OPEN ACTION ITEMS (LEVEL 1-4)
TOTAL AND > 6 MONTHS OLD



Definition:

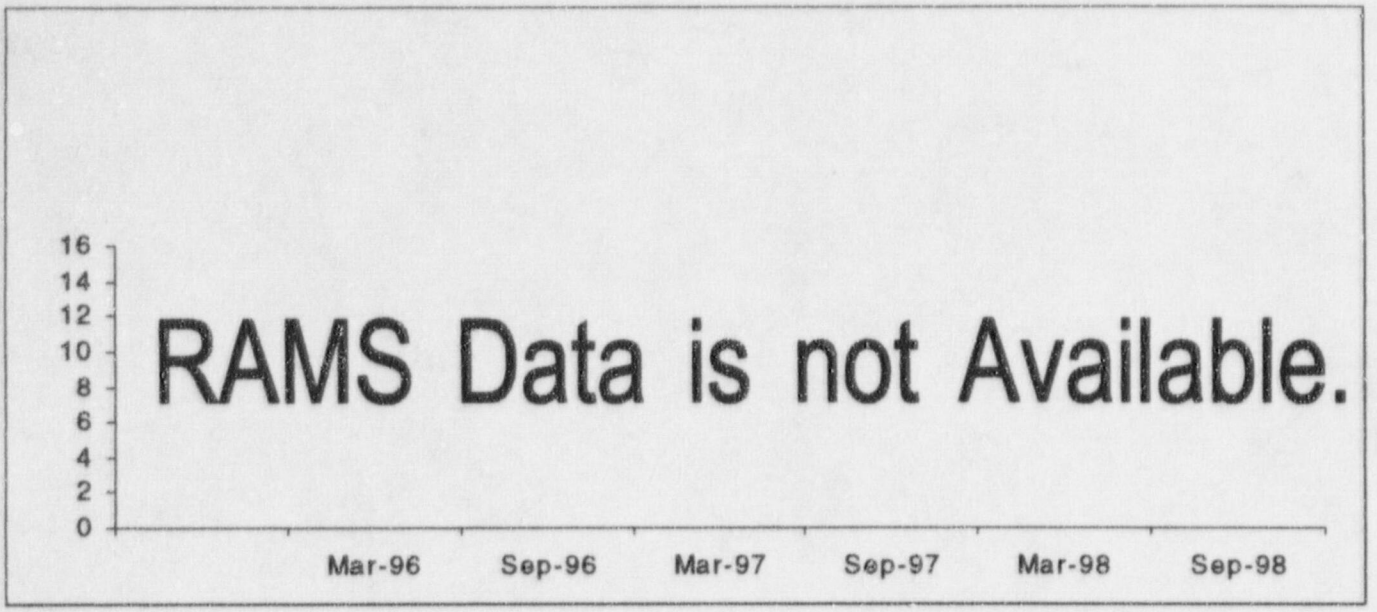
This indicator shows the number of Open Action Items on Level 1-4 Condition Reports, and the number of Open Action Items greater than 6 months old on Level 1-4 Condition Reports .

Analysis:

A concerted effort was made in mid 1998 to reduce the CR backlog. Most actions were essentially done. The documentation had just not been completed. Since that time, the trend for CRs and Action Items has been steady. Target goals have not yet been established for this indicator.

White **Manager** **Joe Solymossy** **Data Source** **Mike Burggraf**

NUMBER OF REPEAT MAINTENANCE ACTIVITIES



Definition:

The number of corrective maintenance activities that were re-performed (i.e., repeated) within 12 months of the initial performance of the task. Indicator is being changed from 12 months to 60 days.

Analysis:

RAMS data is not yet available. **Data will be available in June.**

White	**Manager**	**Rich Clemens**	**Data Source**	**Mark Ellis**

EXCELLENCE ACHIEVED IN PLANT MATERIEL CONDITION

Strategic Objective: To review existing programs and policies, along with equipment histories and provide process improvement and equipment repairs/upgrades that will assure excellent materiel condition through decommissioning and beyond.

Performance Indicators:

- **Number of Plant Transients > 20% Caused by Equipment Performance**
- **Number of Temporary Modifications Caused by Materiel Condition Problems, greater then 1 fuel cycle.**
- **Number of Open Condition Reports (Levels 1-3) Caused by Equipment Problems**
- **Number of Operator Work Arounds Caused by Materiel Condition Problems**
- **Number of On-Line Control Room Deficiencies**
- **Non-Outage Maintenance Backlog**
- **WANO Performance Indicators (UCLF/HPSI/EACP/FRI/CHEM) pages 10,12,14,16,17**
- **Thermal Performance**

Key Actions Taken to date:

Formed Reliability Engineering Dept. to focus on preventive maintenance, predictive maintenance and Maintenance Rule programs.

Developed action plan under Maintenance Rule.

Reviewed Preventive Maintenance processes.

Results Achieved:

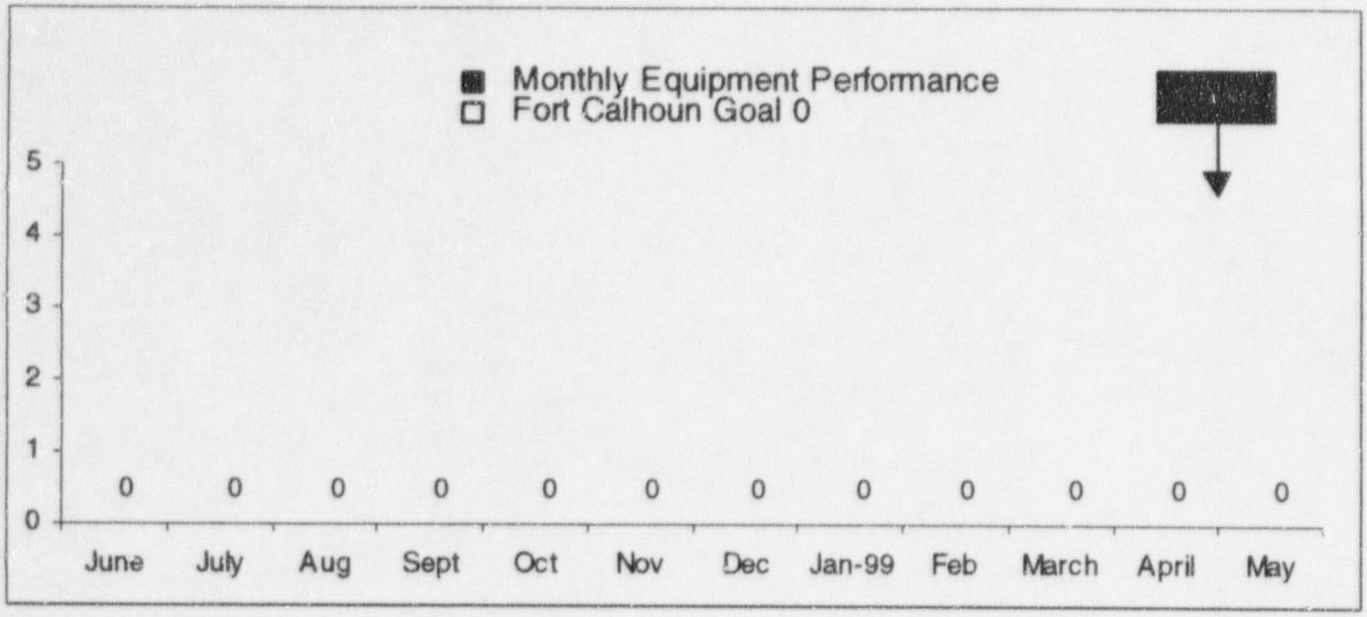
Improved reliability and availability of diesel driven AFW pump and Instrument Air compressors.
No Maintenance or operational unavailability of equipment during 1998 which resulted in exceeding Maintenance Rule performance criteria.
Maintenance Rule (a)(1) list of equipment exceeding performance criteria reduced from 16 at the beginning of 1998 to 6 items awaiting corrective action completion.
Implementation of new process to review preventive maintenance programs established for plant systems.

Analysis:

Although general plant material condition continues to be good, concerns continue due to maintenance backlog and plant thermal performance.

White **Manager** **Meri Core**

NUMBER OF PLANT TRANSIENTS >20% CAUSED BY EQUIPMENT PERFORMANCE



Definition:

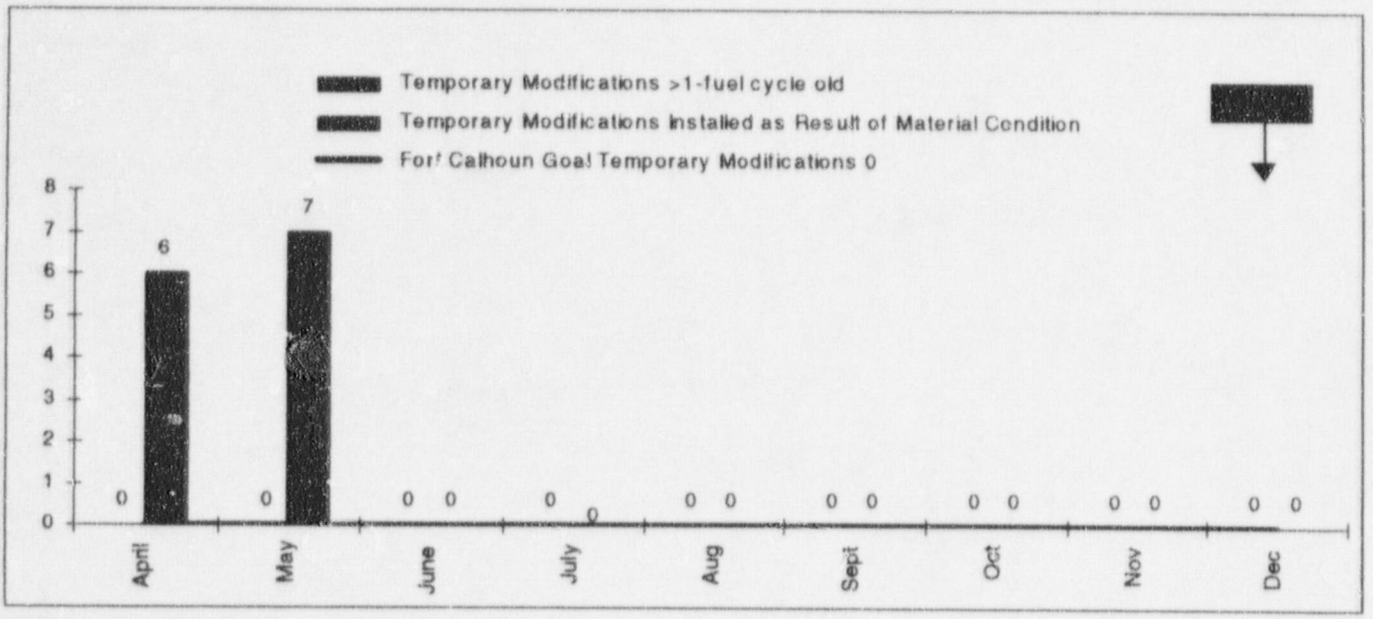
Number of Plant Transients > 20% Caused by Equipment Performance is defined as any down-power > 20% power caused by equipment materiel condition problems. Not included in this indicator are down-powers >20% due to human performance errors.

Analysis:

Equipment has not caused a down-power > 20% over the past 12 months. The last down-power of 20% power was on February 2, 1999, and was attributed to a human performance error. Additionally, there are no significant equipment outages or concerns at this time that challenge this indicator.

Green **Manager** **Meri Core** **Data Source** **Russ Plott**

NUMBER OF TEMPORARY MODIFICATIONS CAUSED BY MATERIEL CONDITION PROBLEMS GREATER THAN 1 FUEL CYCLE



Definition:

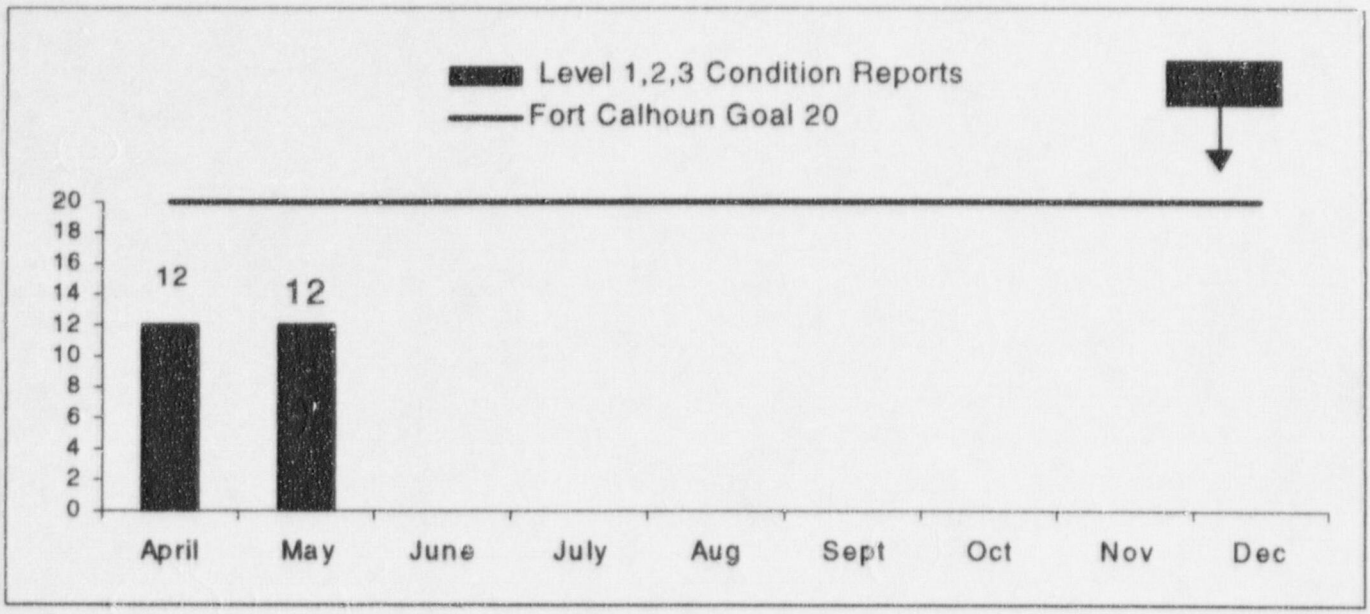
Any Temporary Modification installed due to equipment deficiencies. Not included in this indicator are procedural temporary modifications that are installed due to equipment calibration, weather conditions, design deficiencies,etc.

Analysis:

The goal for this indicator is 0 temporary modifications installed for greater than one fuel cycle. Currently there are seven temporary modifications installed due to equipment problems. These include, LT-106/LT-101X cross-tie, TIP bypass on security x-ray machine, TE3123 RTD Jumper, FW-161 pin retainer, FW-468 Furmanite, Rubber patch on C/RP building drain header, and removed flow element FE-417.

Green **Manager** **Merl Core** **Data Source** **Russ Plott**

NUMBER OF OPEN CONDITION REPORTS (LEVEL 1,2,3) CAUSED BY EQUIPMENT PROBLEMS



Definition:

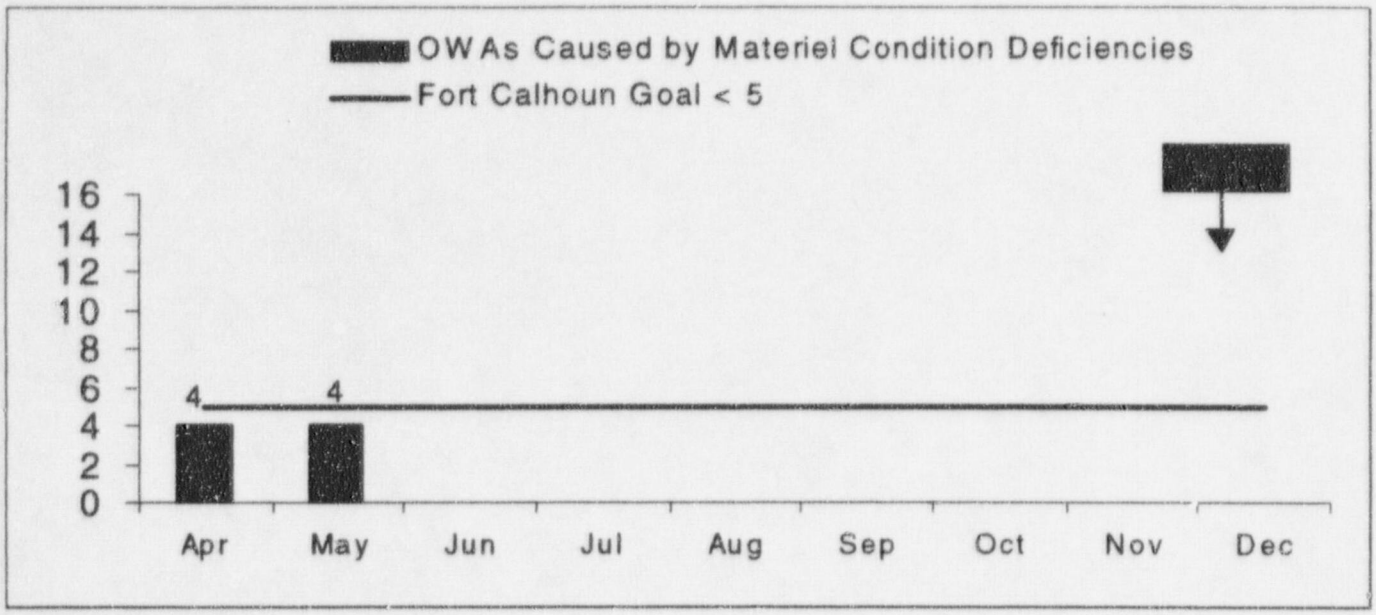
The indicator is intended to trend open level 1, 2, or 3 condition reports that have RS (Reliability) or UF (Unexpected failures) in the "Cause" field. Not included in this indicator are maintenance rule condition reports as they are separately trended. Goal for this indicator is less than 20.

Analysis:

There are currently 12 open Level 1, 2, or 3 condition reports caused by materiel condition deficiencies. There were no condition reports added to the list during the month of May 1999. Many of the condition reports are historical in nature and reflect equipment problems from many months past and are close to being closed out. Many of these older condition reports are waiting on one action item to close.

Green **Manager** **Merl Core** **Data Source** **Russ Plott**

NUMBER OF OPERATOR WORK AROUNDS CAUSED BY MATERIEL CONDITION PROBLEMS



Definition:

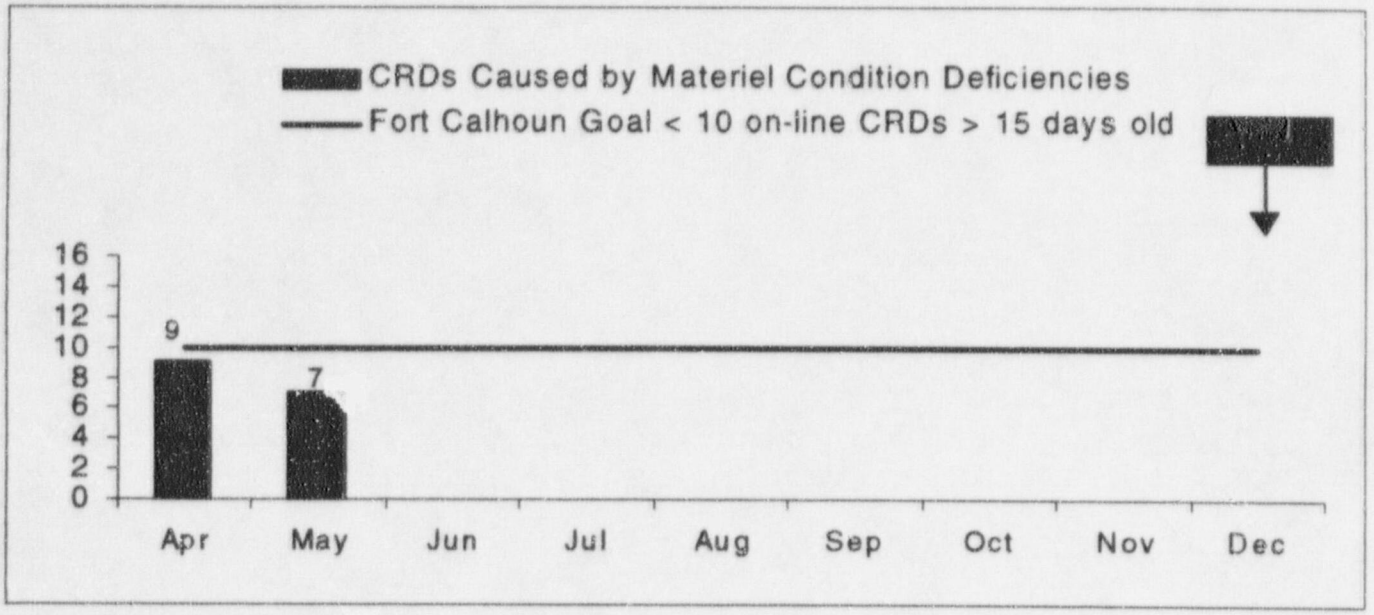
An equipment materiel condition deficiency that requires compensatory operator actions or complicates plant operations. This is a subset of the established OWA list maintained by the Operations Department. Not included in this indicator are design deficiencies or other OWAs not directly caused by equipment deficiencies.

Analysis:

There are currently 4 OWAs caused by materiel condition deficiencies. The four OWAs include 98-08, draining leakage past deluge valves; 98-06, CH-208 leaks by; 99-08, P.C.-827 controller;99-17, East upper electrical penetration A/C not cooling. During this month, OWA 99-16,AC-7 resin, was removed as an OWA.

Green **Manager** **Merl Core** **Data Source** **Russ Plott**

NUMBER OF ON-LINE CONTROL ROOM DEFICIENCIES



Definition:

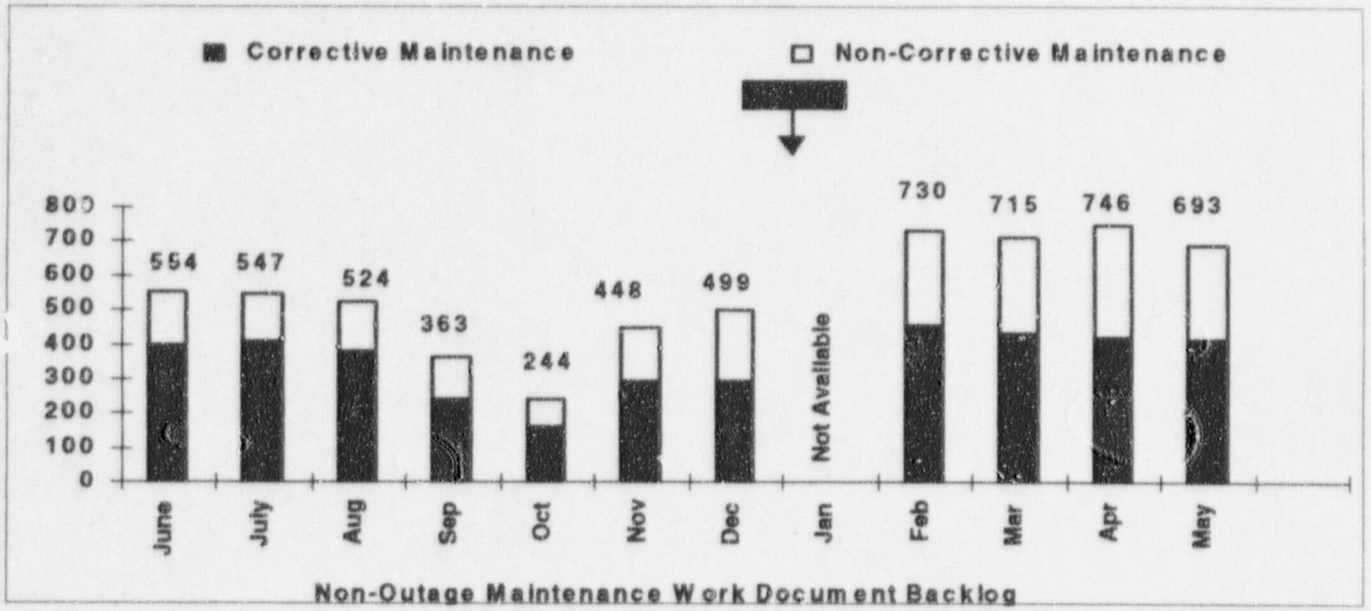
The number of control room deficiencies, as indicated on the Operations Department CRD list that are caused by materiel condition problems. This is a subset of the established CRD list maintained by the Operations Department. Not included in this indicator are design deficiencies or other CRDs not directly caused by equipment deficiencies.

Analysis:

There are currently 7 CRDs greater than 15 days old caused by a materiel condition deficiency. The goal for this indicator is 10 or less on-line CRDs that are greater than 15 days old. Of the 7 CRDs three are ready to work, two need configuration changes, one is waiting on ABB/CE for circuit board repair, and one is awaiting disposition. This indicator definition may change due to program enhancements being considered by the Operations Department.

Green **Manager** **Meri Core** **Data Source** **Russ Plott**

NON-OUTAGE MAINTENANCE BACKLOG



Definition:

This indicator shows how effective and how timely we are at keeping our plant equipment in excellent working condition. The data represents the number of backlogged activities at any one time and includes all work requests and work orders.

Analysis:

The goal for this backlog is 200. The actual unplanned back log (not ready) is 387 since 299 documents are ready to print or ready to validate. The backlog is high relative to industry standards and is resource (planner) dependent in most cases. Refueling outage work planning is currently a high priority. The goal is to have the RFO backlog addressed by June and then resources will focus on the on-line backlog.

White **Manager** **Rick Wylie** **Data Source** **Martin Johnson**

Fort Calhoun Station Operating Cycles and Refueling Outage Dates

OUTAGE YTD	DATE RANGE	PRODUCTION	CUMULATIVE
Cycle 7	12/21/81-12/03/82	3,561,866	24,330,034
Cycle 8	04/06/83-03/03/84	3,406,371	27,736,405
Cycle 9	07/12/84-09/28/85	4,741,488	32,477,893
Cycle 10	01/16/86-03/07/87	4,356,753	36,834,646
Cycle 11	06/08/87-09/27/88	4,936,859	41,771,505
Cycle 12	01/31/89-02/17/90	3,817,954	45,589,459
Cycle 13	05/29/90-02/01/92	5,451,069	51,040,528
Cycle 14	05/03/92-09/25/93	4,981,485	56,022,013
Cycle 15	11/26/93-02/20/95	5,043,887	61,065,900
Cycle 16	04/14/95-10/05/96	5,566,108	66,632,007
Cycle 17	11/25/96-04/01/98	5,183,108	71,815,678
Cycle 18	06/04/98-10/02/99		

CURRENT PRODUCTION AND OPERATIONS "RECORDS"

First Sustained Reaction	August 5, 1973 (5:47 p.m.)
First Electricity Supplied to the System	August 25, 1973
Commercial Operation (180,000 KWH)	September 26, 1973
Achieved Full Power (100%)	May 4, 1974
Longest Run (477 Days)	June 8, 1987-September 27, 1988
Highest Monthly Net Generation (364,468,800 KWH)	October 1987
Most Productive Fuel Cycle (5,451,069 MWH-Cycle 13)	May 29, 1990-February 1, 1992
Shortest Refueling Outage (53 days)	February 20, 1995-April 14, 1995
	October 4, 1996-November 27,1996