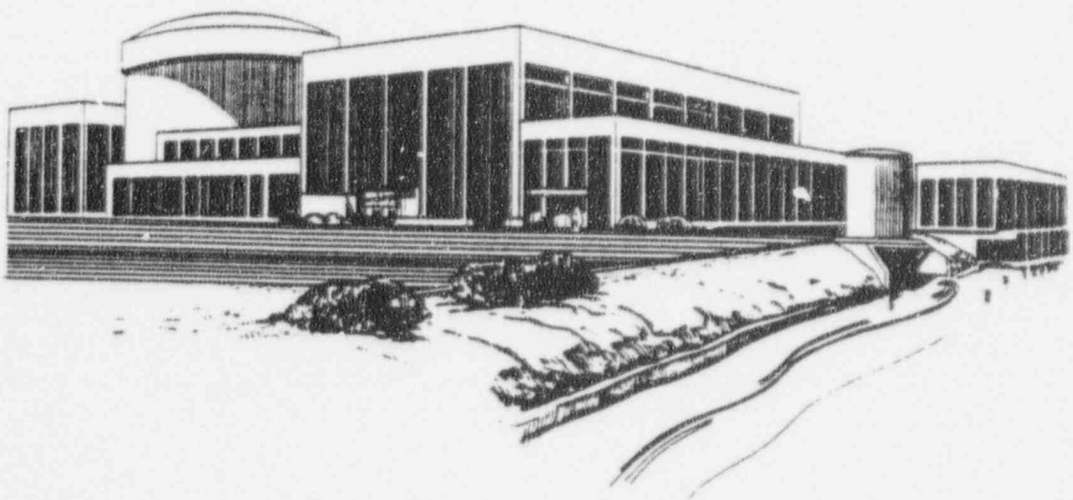
FORT CALHOUN STATION
PERFORMANCE INDICATORS



MAY 1994

SAFE OPERATIONS
PERFORMANCE EXCELLENCE
COST EFFECTIVENESS

Pursuit of excellence is an attitude...
it involves wisdom and sound judgment...
it is a lifetime, career-long commitment...
it is a way of life...it is doing the job
right the first time, every time. It is
inner-directed, not the result of external
pressure, it is our own self worth-who
we are and the pride and satisfaction
that comes from being the right kind of
person, not just in doing the right things.

James J. O'Connor

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN STATION
PERFORMANCE INDICATORS REPORT

Prepared By:
Production Engineering Division
System Engineering
Test and Performance Group

MAY 1994

FORT CALHOUN STATION
MAY 1994 MONTHLY OPERATING REPORT

OPERATIONS SUMMARY

During the month of May, the station operated at a nominal 100% power level. The spent fuel pool reracking project continued.

The condensate cooler was cleaned and returned to service.

Technical Specification (TS) 2.19 on fire protection has been removed from the TSs. Fire protection requirements are now contained within Standing Orders G-102, "Fire Protection Program Plan" and G-103, "Fire Protection Operability Criteria and Surveillance Requirements".

New setpoints were put into the Power Operated Relief Valve (PORV)/Low Temperature Overpressure Protection (LTOP) circuitry to allow plant operation through 20 Effective Full Power Years (EFPY) of operation.

On May 16, Reactor Protection System (RPS) Channel A Thermal Margin/Low Pressure (TM/LP) and Axial Power Distribution (APD) trip units failed to the tripped condition. A 48 hour Limiting Condition for Operation (LCO) was entered per Technical Specification 2.15 (1) and trip units for Channel A high power, TM/LP, and APD were bypassed. The problem was traced to a loose connection in the APD calculator and was repaired. The affected trip units were declared operable and the LCO was exited the same day.

On May 26, a Swagelok outlet fitting from the secondary system hydrazine tote to the suction of the transfer pump was found to be not fully engaged and leaking. Access to the area was controlled and the spill was cleaned up by Hazardous Material personnel. A notification was made to the State of Nebraska with a follow-up 4-hour notification made to the NRC due to the spill of hazardous material.

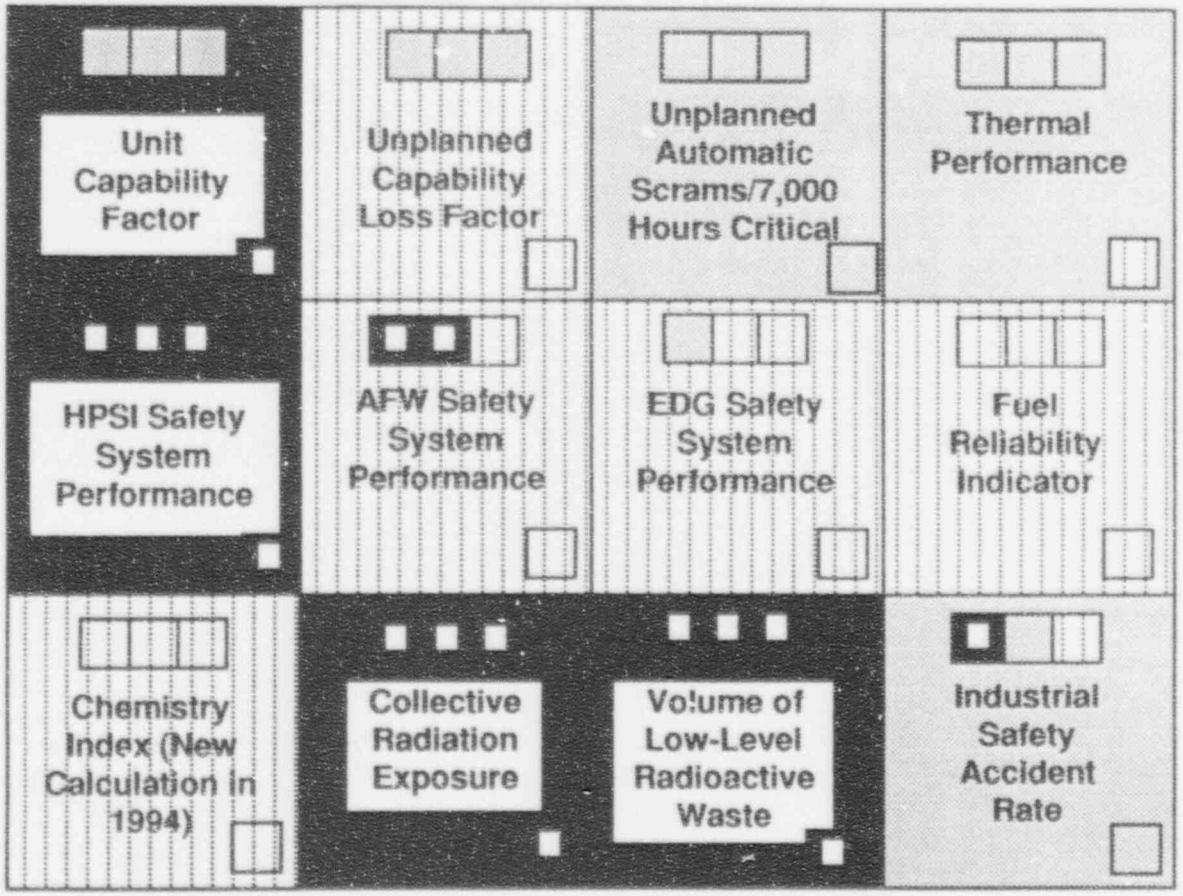
The following NRC inspections were completed during this reporting period:

IER No.	Description
94-12	Monthly Resident Inspection
94-15	Engineering/Safety Assessment & Quality Verification/SALP Cycle Closeout Team Inspection

The following Licensee Event Reports were submitted during this reporting period:

LER No.	Description
94-004	Inoperability of Halon Gas Fire Suppression System Due to Inoperable Fire Damper
94-005	Failure to Appropriately Address Out-of-Tolerance Test Results for Snubbers

Source: Nuclear Licensing & Industry Affairs



Year-To-Date Value Performance Categories

- Performance in Industry Upper 10% and better than 1994 OPPD goal
- Performance Better Than 1994 OPPD Goal
- Performance Not Meeting 1994 OPPD Goal

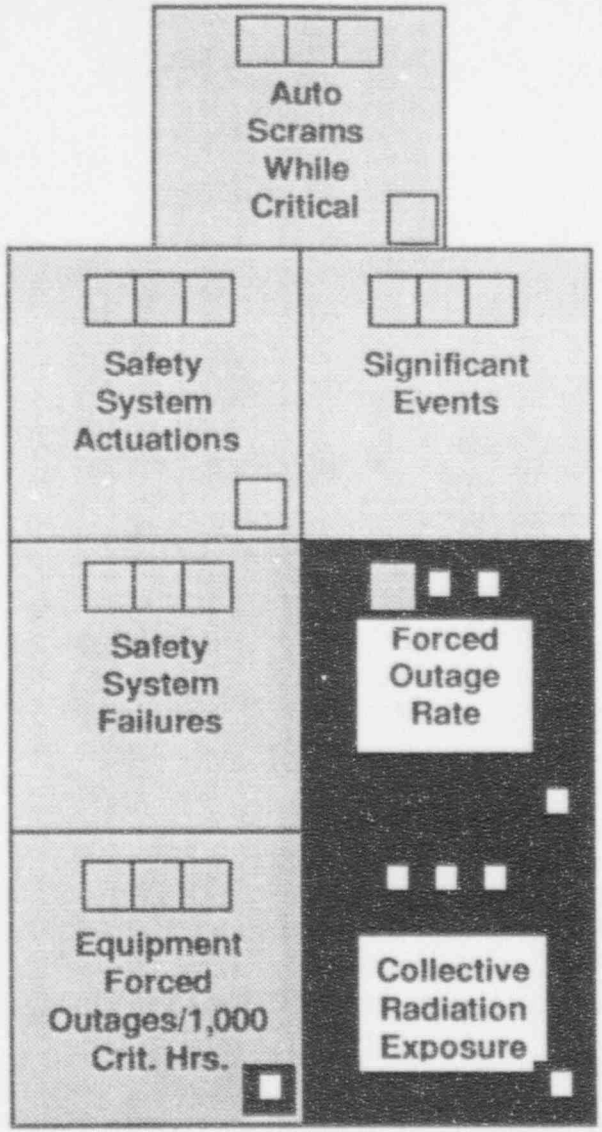
February '94	March '94	April '94

May 1994 Year-To-Date Value Performance

Best Possible 1994 Year-End Performance

INPO PERFORMANCE INDICATORS

(Performance for the months of January through May 1994)

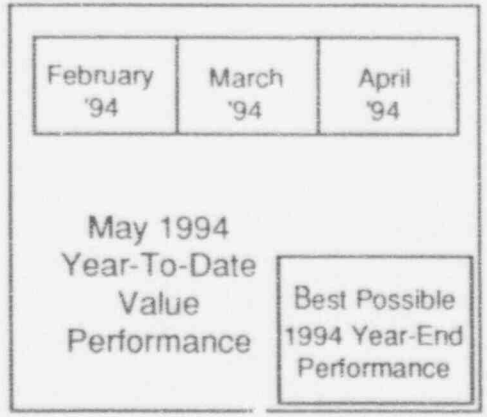


Year-To-Date Value Performance Categories

Performance Better Than Industry Average Trend

Performance Better Than 1994 OPPD Goal

Performance Not Meeting 1994 OPPD Goal or Industry Average Trend



NRC PERFORMANCE INDICATORS

(Safety System Failures and Significant Events ratings are averages for October 1990 through September 1993. Predictor blocks cannot be generated for these performance indicators because they are based on NRC biannual reports.
All other indicator values are for the months of January through May 1994.)

FORT CALHOUN STATION PERFORMANCE INDICATORS REPORT
MAY 1994 - SUMMARY

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:

Recordable Injury Illness Rate
(Page 4)

High Pressure Safety Injection System Safety System Performance
(Page 8)

Auxiliary Feedwater System Safety System Performance
(Page 9)

Emergency Diesel Generator Reliability
(Page 11)

Diesel Generator Reliability (25 Demands)
(Page 12)

Emergency Diesel Generator Unreliability
(Page 13)

Fuel Reliability Indicator
(Page 14)

Number of Missed Surveillance Tests Resulting in Licensee Event Reports
(Page 20)

Forced Outage Rate
(Page 23)

Secondary System Chemistry
(Page 39)

Maintenance Overtime
(Page 48)

In-Line Chemistry Instruments Out-of-Service
(Page 51)

Hazardous Waste Produced
(Page 52)

Contaminated Radiation Controlled Area
(Page 53)

End of Positive Trend Report.

ADVERSE TREND REPORT

A Performance Indicator with data representing 3 consecutive months of declining performance; or four or more consecutive months of performance that is trending towards declining as determined by the Manager - Station Engineering, constitutes an adverse trend per NOD-QP-37. A supervisor 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.

There were no performance indicators exhibiting adverse trends for the reporting month.

End of Adverse Trend Report.

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 are cited as needing increased management attention for the reporting month:

Industrial Safety Accident Rate - INPO
(Page 2)
The year-to-date industrial accident rate value of 1.29 exceeds the 1994 Fort Calhoun year-end goal of ≤0.50.

Disabling Injury/Illness Frequency Rate
(Page 3)
The year-to-date disabling injury/illness rate value of 0.644 exceeds the 1994 Fort Calhoun year-end goal of ≤0.50.

Clean Controlled Area Contaminations ≥1,000 Disintegrations/Minute Per Probe Area
(Page 5)
Based on the rate of increase in the number of contamination events reported year-to-date, it is anticipated that the 1994 year-end goal of ≤54 will be exceeded.

Number of Control Room Equipment Deficiencies
(Page 15)
The total number of control room equipment deficiencies has been above the Fort Calhoun goal since September 1993.

INDICATORS NEEDING INCREASED MANAGEMENT ATTENTION REPORT (continued)

Violations Per 1,000 Inspection Hours
(Page 18)
The number of violations per 1,000 inspection hours has exceeded the Fort Calhoun goal of a ≤1.4 for the months of March and April 1994.

Unplanned Automatic Reactor Scrams Per 7,000 Hours Critical
(Page 27)
The number of unplanned automatic scrams per 7,000 hours critical has exceeded the Fort Calhoun goal of 0 since February 1994.

Unplanned Safety System Actuations - (INPO Definition)
(Page 28)
The number of INPO unplanned safety system actuations has exceeded the Fort Calhoun goal of 0 since February 1994.

Unplanned Safety System Actuations - (NRC Definition)
(Page 29)
The number of NRC unplanned safety system actuations has exceeded the Fort Calhoun goal of 0 since February 1994.

Thermal Performance
(Page 31)
The year-to-date average monthly thermal performance value has been below the 1994 Fort Calhoun goal of ≥99.5% since January 1994.

Equipment Forced Outages Per 1,000 Critical Hours
(Page 33)
The equipment forced outage rate has exceeded the 1994 Fort Calhoun year-end goal of ≤0.20 since February 1994.

Maintenance Workload Backlogs
(Page 45)
The backlog on non-outage MWOs for corrective maintenance has exceeded the 1994 monthly goal of a maximum of 400 since March 1994.

Percent of Completed Scheduled Maintenance Activities (All Maintenance Crafts)
(Page 50)
The percent of the number of completed scheduled maintenance activities as compared to the number of scheduled maintenance activities for the reporting month was less than the 1994 Fort Calhoun monthly goal of ≥80%.

Temporary Modifications
(Page 57)
The number of temporary modifications >1 cycle old has exceeded the 1994 Fort Calhoun goal of 0 since April. The number of temporary modifications >6 months old has exceeded the goal of 0 since January 1994.

End of Management Attention Report.

PERFORMANCE INDICATOR REPORT IMPROVEMENTS/CHANGES

This section lists significant changes made to the report and to specific indicators within the report since the previous month.

Primary System Chemistry
(Page 38)
This indicator has been revised to include only the percent of hours out of limit for lithium.

Staffing Level
(Page 42)
This indicator has been revised to show past data (e.g., January 1991 and 1992 values), and will be updated on a quarterly basis in the future.

Maintenance Workload Backlogs
(Page 45)
The 1994 Fort Calhoun goal for this indicator has been revised from 325 to 400.

End of Performance Indicator Report Improvements/ Changes Report

Table of Contents/Summary

PERFORMANCE (continued) PAGE

COST PAGE

DIVISION AND DEPARTMENT PERFORMANCE INDICATORS PAGE

DIVISION AND DEPARTMENT PERFORMANCE INDICATORS (continued) PAGE

OPPD NUCLEAR ORGANIZATION GOALS

Vice President - 1994 Priorities

MISSION

The safe, reliable and cost effective generation of electricity for OPPD customers through the professional use of nuclear technology. The Company shall conduct these operations prudently, efficiently and effectively to assure the health, safety and protection of all personnel, the general public and the environment.

GOALS

Goal 1: SAFE OPERATIONS

To ensure the continuation of a "safety culture" in the OPPD Nuclear Program and to provide a professional working environment, in the control room and throughout the OPPD nuclear organization, that assures safe operation so that Fort Calhoun Station is recognized as a nuclear industry leader.

1994 Priorities:
Improve SALP ratings.
Improve INPO rating.
Reduce NRC violations with no violations more severe than level 4.
No unplanned automatic reactor scrams or safety system actuations.

Goal 2: PERFORMANCE

To strive for Excellence in Operations utilizing the highest standards of performance at Fort Calhoun Station that result in safe, reliable plant operation in power production.

1994 Priorities:
Improve Quality, Professionalism, and Teamwork.
Improve Plant Reliability.
Meet or exceed INPO key parameters and outage performance goals.
Reduce the number of human performance errors.
Identify programmatic performance problems through effective self assessment.

Goal 3: COSTS

Operate Fort Calhoun Station in a manner that cost effectively maintains nuclear generation as a viable source of electricity.

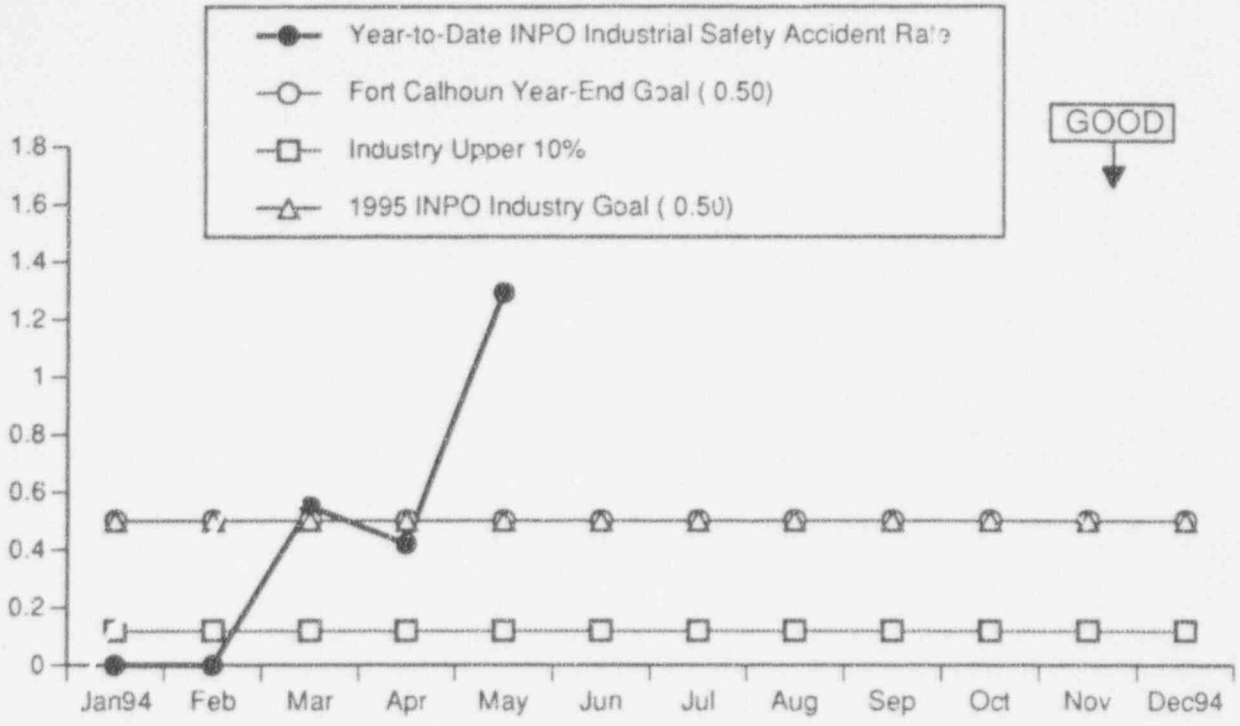
1994 Priorities:
Maintain total O & M and Capital expenditures within budget.
Streamline work processes to improve cost effectiveness.

Goals Source: Scofield (Manager)

x

SAFE OPERATIONS

Goal: To ensure the continuation of a "safety culture" in the OPPD Nuclear Program and to provide a professional working environment in the control room and throughout the OPPD Nuclear Organization that assures safe operation so that Fort Calhoun Station is recognized as a nuclear industry leader.



INDUSTRIAL SAFETY ACCIDENT RATE - INPO

As stated in INPO's December 1993 publication 'Detailed Descriptions of World Association of Nuclear Operators (WANO) Performance Indicators and Other Indicators for Use at U.S. Nuclear Power Plants': "The purpose of this indicator is monitor progress in improving industrial safety performance for utility personnel permanently assigned to the station."

The INPO industrial safety accident rate value year-to-date was 1.29 at the end of May 1994. The value for the 12 months from June 1, 1993 through May 31, 1994 was 1.01.

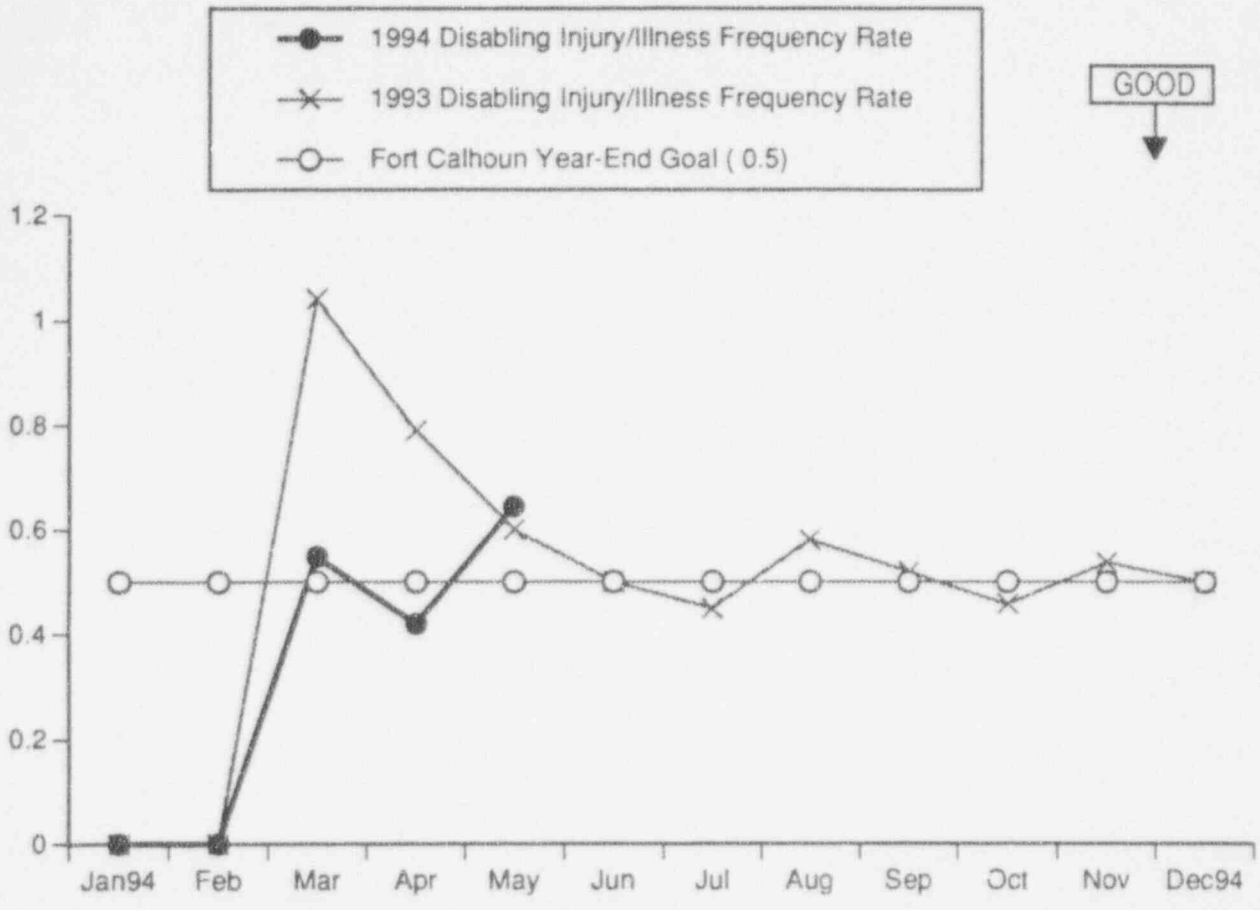
There were 2 restricted-time accidents (foot and back sprains due to falls from chairs) and 1 lost-time accident (back injury that occurred when a spool of wire rope was lifted from a rack) in May. There have been 2 restricted-time accidents and 2 lost-time accidents in 1994.

The values for this indicator are determined as follows:

$$\frac{\text{(number of restricted-time + lost-time accidents + fatalities) X 200,000}}{\text{(number of station person-hours worked)}}$$

The 1994 Fort Calhoun year-end goal is ≤0.50. The 1995 INPO industry goal is ≤0.50. The approximate industry upper ten percentile value (for the period from 1/93 through 12/93) is 0.12.

Data Source: Sorensen/Skaggs (Manager/Source)
Chase/Booth (Manager/Source)
Accountability: Chase/Conner
Adverse Trend: None



DISABLING INJURY/ILLNESS FREQUENCY RATE (LOST TIME ACCIDENT RATE)

This indicator shows the 1994 disabling injury/illness frequency rate. The 1993 disabling injury/illness frequency rate is also shown.

The disabling injury/illness frequency rate year-to-date was 0.644 at the end of May 1994. There was 1 lost-time accident, a back injury that occurred when a spool of wire rope was lifted from a rack, reported for the month. There have been 2 lost-time accidents in 1994.

The disabling injury/illness frequency rate for the 12 months from June 1, 1993 through May 31, 1994 was 0.38.

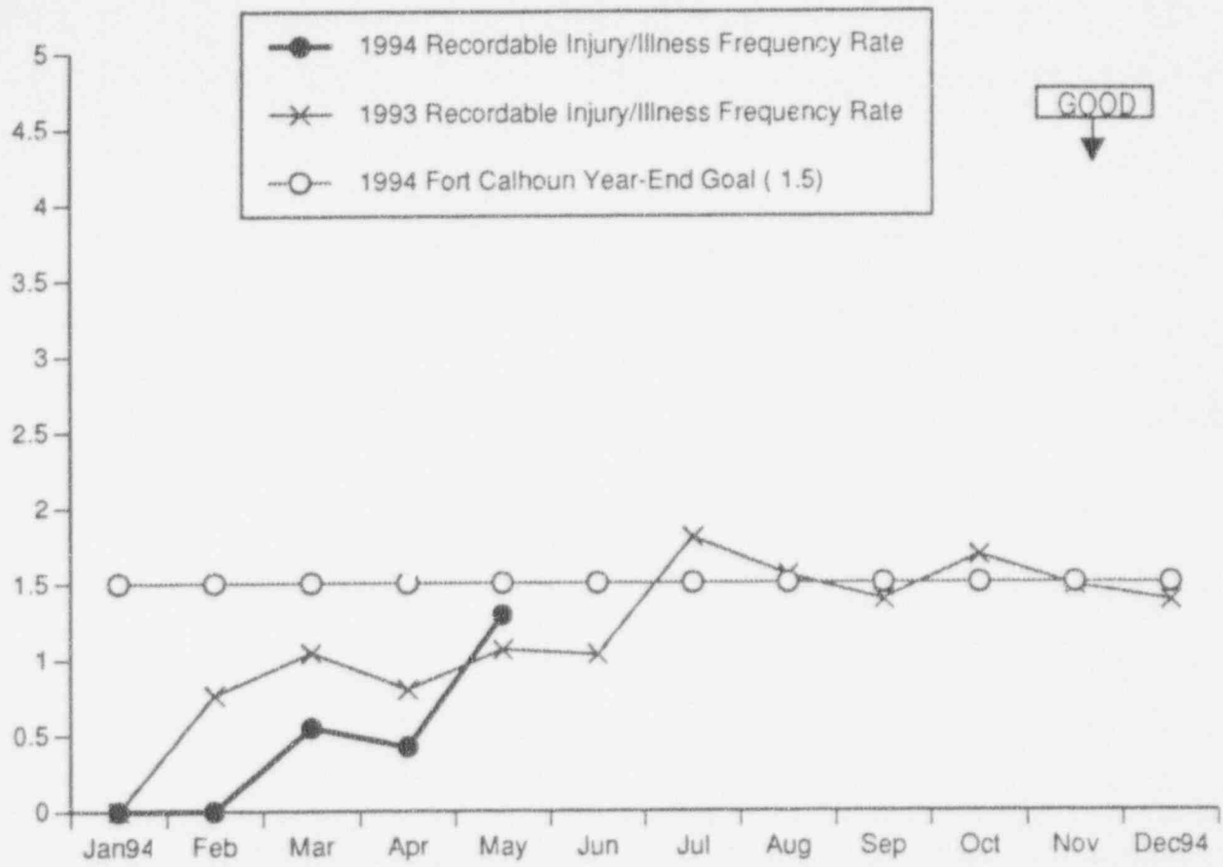
The 1994 Fort Calhoun year-end goal for this indicator is a maximum value of 0.5.

Data Source: Sorenson/Skaggs (Manager/Source)

Accountability: Chase/Conner

Adverse Trend: None

SEP 25, 26 & 27



RECORDABLE INJURY/ILLNESS CASES FREQUENCY RATE

This indicator shows the 1994 recordable injury/illness cases frequency rate. The 1993 recordable injury/illness cases frequency rate is also shown.

A recordable injury/illness case is reported if personnel from any of the Nuclear Divisions are injured on the job and require corrective medical treatment beyond first aid. The recordable injury/illness cases frequency rate is computed on a year-to-date basis.

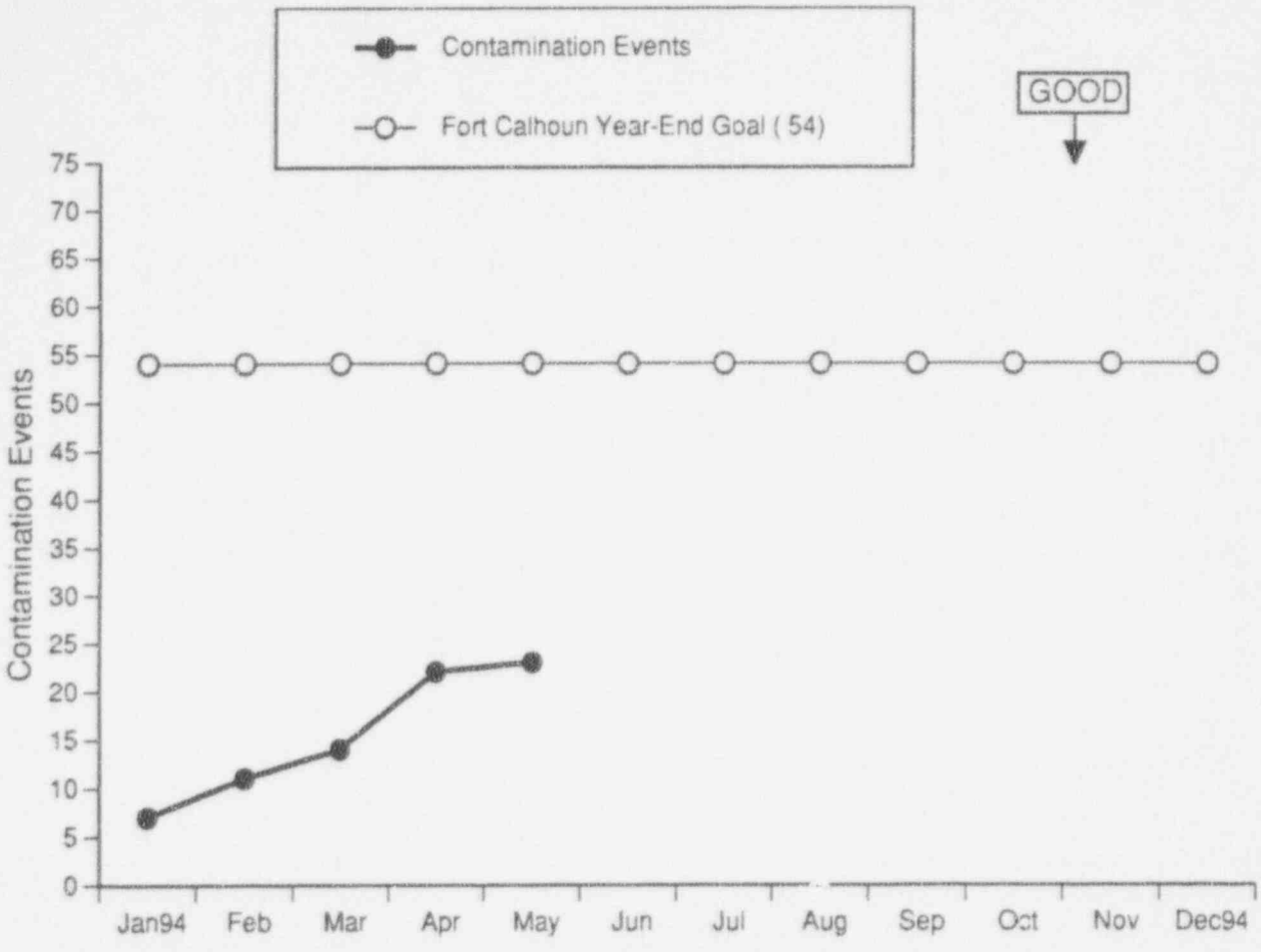
The recordable injury/illness rate year-to-date was 1.29 at the end of May 1994. There were 3 recordable injury/illness cases, 2 back injuries and 1 back and foot injury, reported for the month of May. There have been 4 recordable injury/illness cases in 1994.

The recordable injury/illness rate for the 12 months from June 1, 1993 through May 31, 1994 was 1.52.

The 1994 Fort Calhoun year-end goal for this indicator is a maximum value of 1.5.

Data Source: Sorenson/Skaggs (Manager/Source)
Accountability: Conner
Positive Trend

SEP 15, 25, 26 & 27



CLEAN CONTROLLED AREA CONTAMINATIONS ≥1,000 DISINTEGRATIONS/ MINUTE PER PROBE AREA

This indicator shows the Personnel Contamination Events in the Clean Controlled Area for contaminations ≥1,000 disintegrations/minute per probe area for the reporting month.

There was 1 contamination event in May 1994. There has been a total of 23 contamination events in 1994.

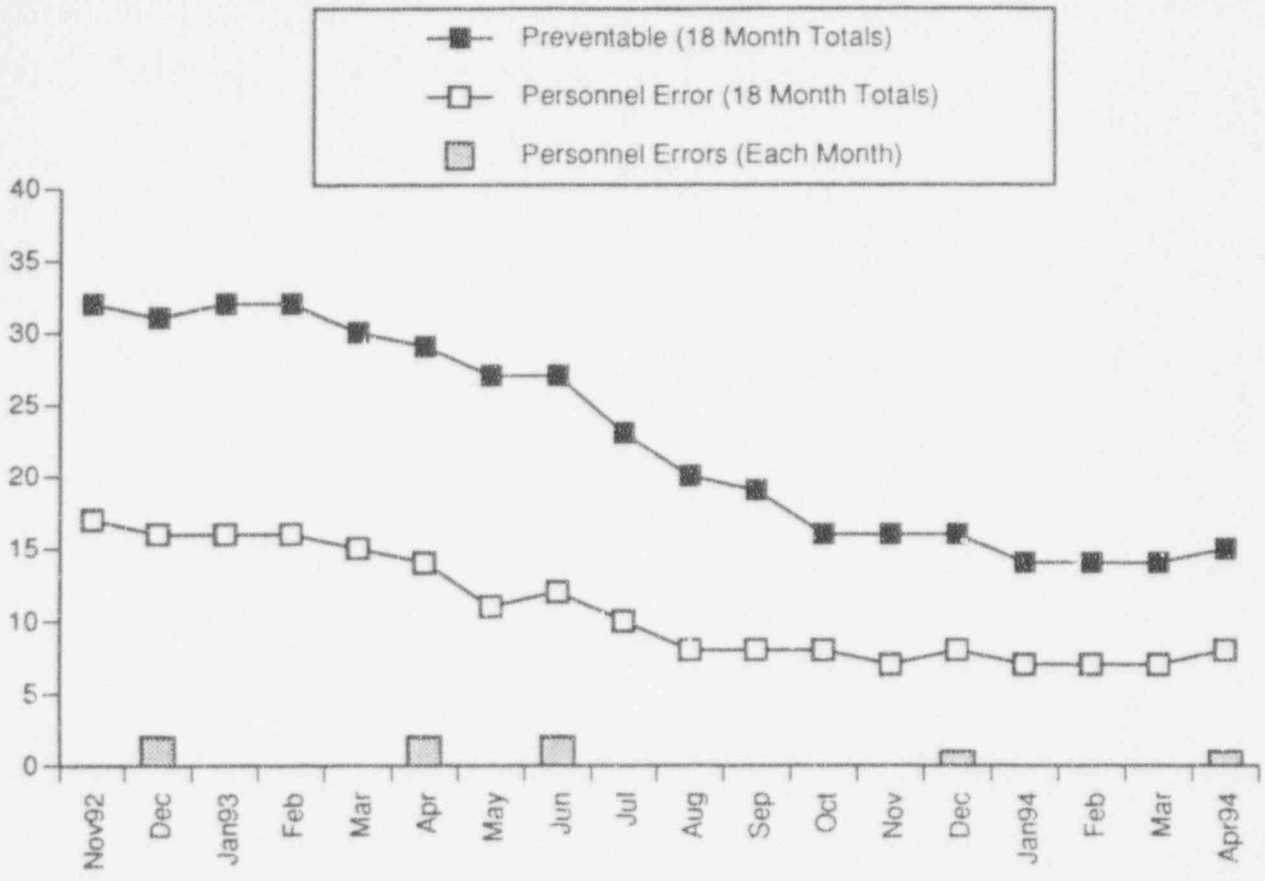
The 1994 year-end goal for this indicator is a maximum of 54 contamination events.

Data Source: Chase/Little (Manager/Source)

Accountability: Chase/Lovett

Adverse Trend: None

SEP 15 & 54



PREVENTABLE/PERSONNEL ERROR LERs

This indicator depicts 18 month totals for numbers of "Preventable" and "Personnel Error" LERs.

The graph shows the 18 month totals for preventable LERs, the 18 month totals for Personnel Error LERs and the Personnel Error totals for each month. The LERs are trended based on the LER event date as opposed to the LER report date.

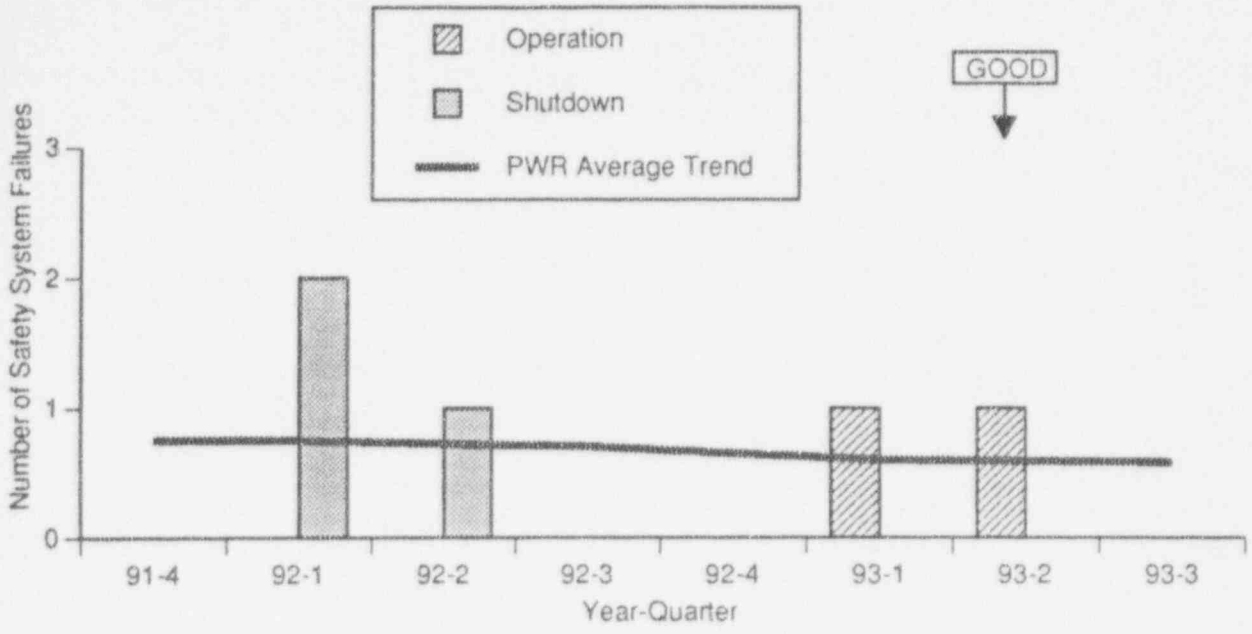
In April 1994, there were 2 events that were subsequently reported as an LER. 1 LER was categorized as Preventable and a Personnel Error.

The total LERs for the year 1994 (through April 30, 1994) is 5. The total Personnel Error LERs for the year 1994 is 1.

The 1994 goals for this indicator are that the year-end values for the 18 month totals be no more than 12 Preventable and 5 Personnel Error LERs. (Note: Because this indicator is based on an 18 month period, the 1994 year-end totals will include LERs occurring in 1994 and the last 6 months of 1993.)

Data Source: Short/Cavanaugh (Manager/Source)
Accountability: Chase
Adverse Trend: None

SEP 15



SAFETY SYSTEM FAILURES

This indicator illustrates the number of NRC Safety System Failures as reported by the Nuclear Regulatory Commission's Office for Analysis and Evaluation of Operational Data in the biannual "Performance Indicators for Operating Commercial Nuclear Power Reactors" report.

The following NRC safety system failures occurred between the fourth quarter of 1991 and the third quarter of 1993:

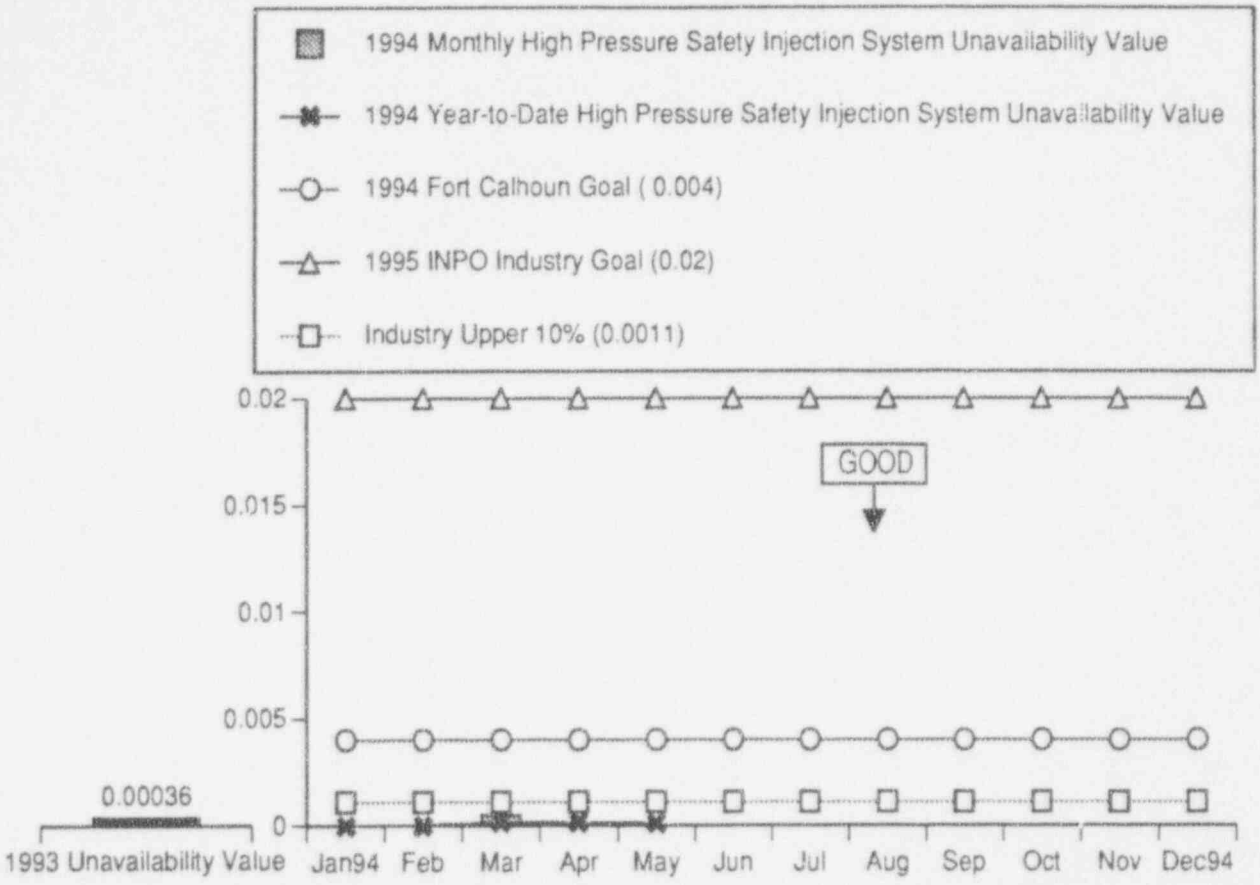
First Quarter 1992: 1) Defective control switches in the 4KV switchgear could have rendered safety equipment inoperable; 2) All 4 channels of the SG DP trip for RPS had been calibrated nonconservatively. This occurred due to an incorrect procedure which specified a tolerance band that was too wide.

Second Quarter 1992: Fuse and breaker coordination problems for the DC buses could cause a loss of the entire bus if a fault occurred on one of the loads.

First Quarter 1993: The SG low pressure scram signal block reset values, for all 4 channels of both SGs, were greater than the allowed limits, rendering this scram input inoperable during certain operating conditions.

Second Quarter 1993: A section of the piping configuration for the borated water source of the safety injection system was not seismically qualified. This could have resulted in a failure of the system to meet design requirements during a seismic event.

Data Source: Nuclear Regulatory Commission
Accountability: Chase
Adverse Trend: None



HIGH PRESSURE SAFETY INJECTION SYSTEM
SAFETY SYSTEM PERFORMANCE

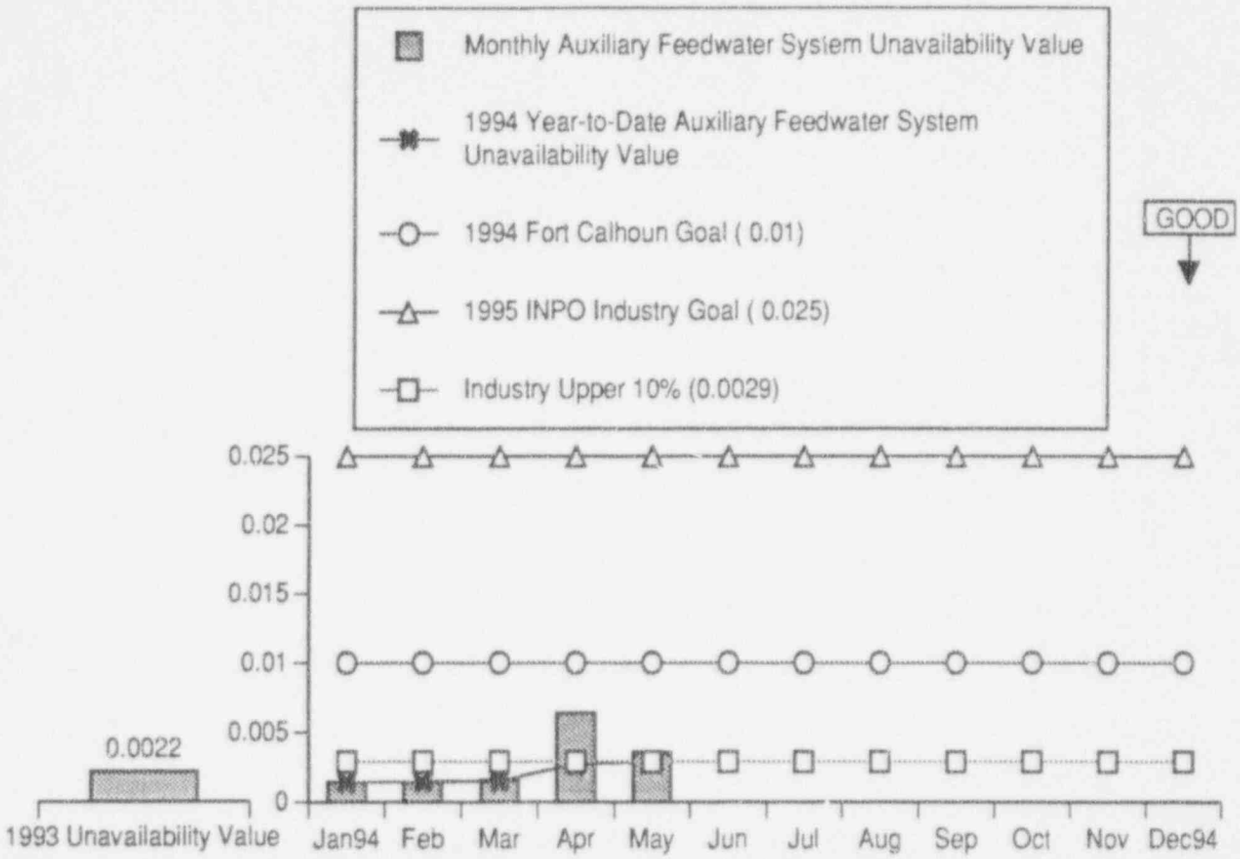
This indicator shows the High Pressure Safety Injection System unavailability value, as defined by INPO in the Safety System Performance Indicator Definitions, for the reporting month.

The High Pressure Safety Injection System unavailability value for the month of May 1994 was 0.0. There were no hours of planned or unplanned unavailability during the month. The 1994 year-to-date HPSI unavailability value was 0.0001 at the end of the month. The unavailability value for the last 12 months was 0.00027.

There has been 1.1 hour of planned unavailability (for surveillance tests) and 0.0 hours of unplanned unavailability for the HPSI system in 1994.

The 1994 Fort Calhoun year-end goal for this indicator is a maximum value of 0.004. The 1995 INPO industry goal is 0.02 and the industry upper ten percentile value (for the three year period from 1/91 through 12/93) is approximately 0.0011.

Data Source: Jaworski/Schaffer
Accountability: Jaworski/Schaffer
Positive Trend



AUXILIARY FEEDWATER SYSTEM
SAFETY SYSTEM PERFORMANCE

This indicator shows the Auxiliary Feedwater System Unavailability value, as defined by INPO in the Safety System Performance Indicator Definitions, for the reporting month.

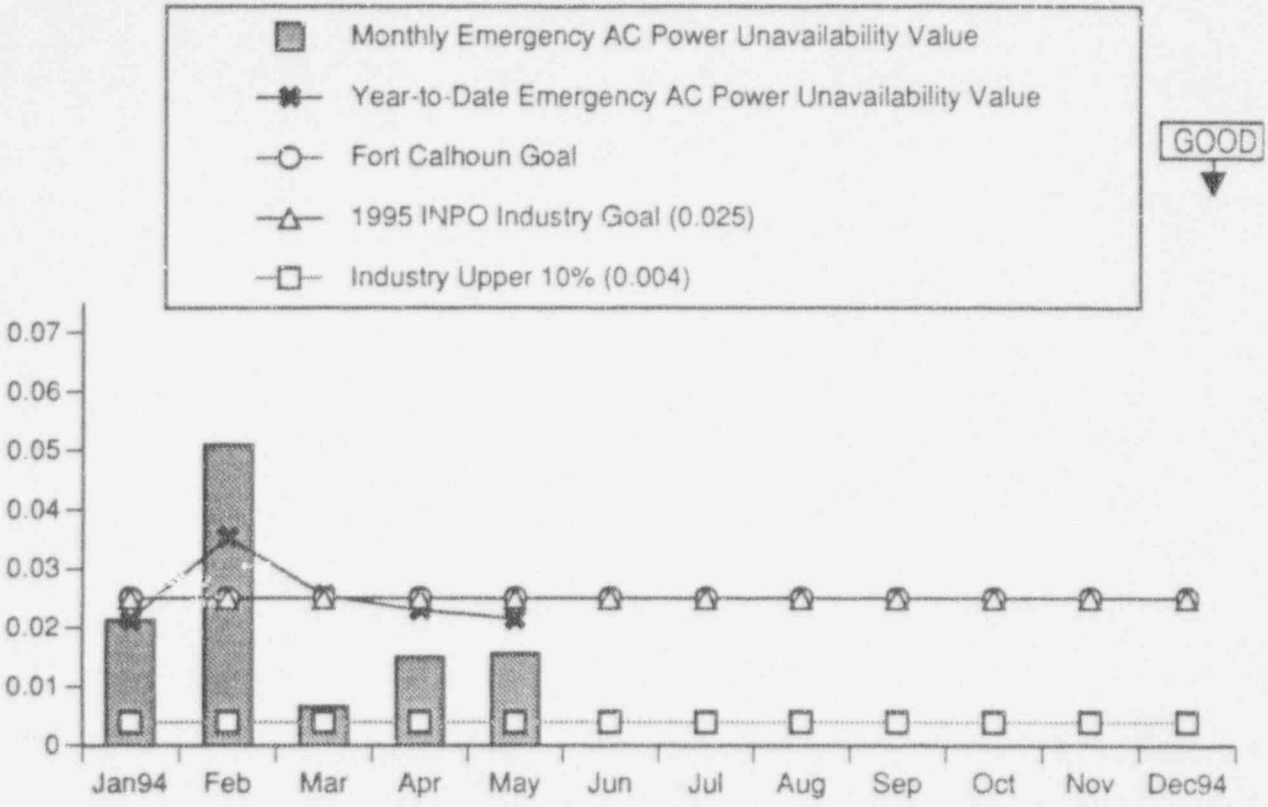
The Auxiliary Feedwater System Unavailability Value for May 1994 was 0.00357. During the month, there were 0 hours of planned unavailability and 5.32 hours of unplanned unavailability for FW-10 relay maintenance. The year-to-date unavailability value was 0.00292, and the value for the last 12 months was 0.00282 at the end of the month.

There has been a total of 3.7 hours of planned unavailability and 17.26 hours of unplanned unavailability for the auxiliary feedwater system in 1994.

The 1994 Fort Calhoun year-end goal for this indicator is a maximum value of 0.01.

The 1995 INPO industry goal is 0.025 and the industry upper ten percentile value (for the three year period from 1/91 through 12/93) is approximately 0.002.

Data Source: Jaworski/Nay
Accountability: Jaworski/Nay
Positive Trend



EMERGENCY AC POWER SYSTEM
SAFETY SYSTEM PERFORMANCE

This indicator shows the Emergency AC Power System unavailability value, as defined by INPO in the Safety System Performance Indicator Definitions, for the reporting month.

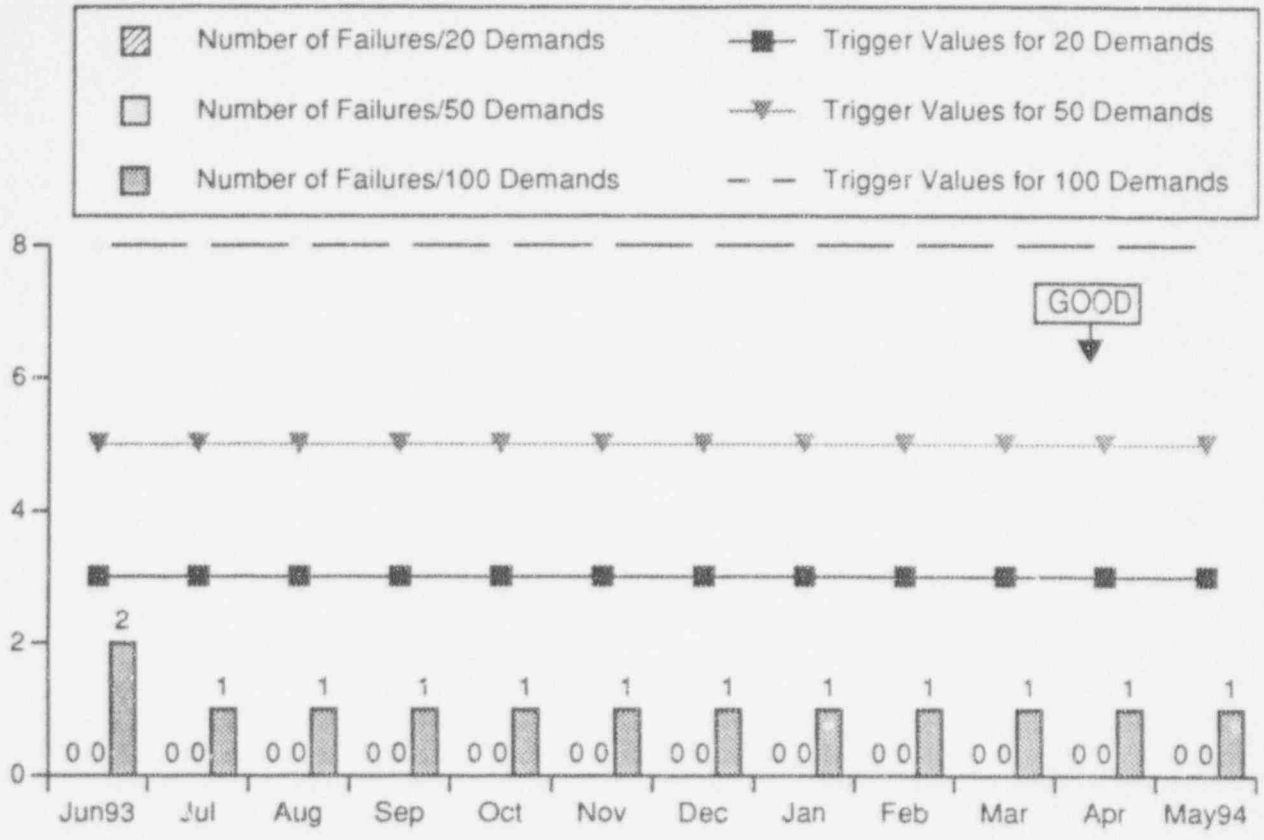
The Emergency AC Power System unavailability value for May 1994 was 0.0157. During the month, there were 23.42 hours of planned unavailability for maintenance and testing, and no hours of unplanned unavailability. The Emergency AC Power System unavailability value year-to-date was 0.0215 and the value for the last 12 months was 0.0096 at the end of the month. The large unavailability value for February is due to maintenance outages on both diesel generators.

There has been a total of 144.27 hours of planned unavailability and 11.25 hours of unplanned unavailability for the emergency AC power system in 1994.

The 1994 Fort Calhoun year-end goal for this indicator is a maximum value of 0.025.

The 1995 INPO industry goal is 0.025 and the industry upper ten percentile value (for the three year period from 1/91 through 12/93) is approximately 0.004.

Data Source: Jaworski/Ronning
Accountability: Jaworski/Ronning
Adverse Trend: None

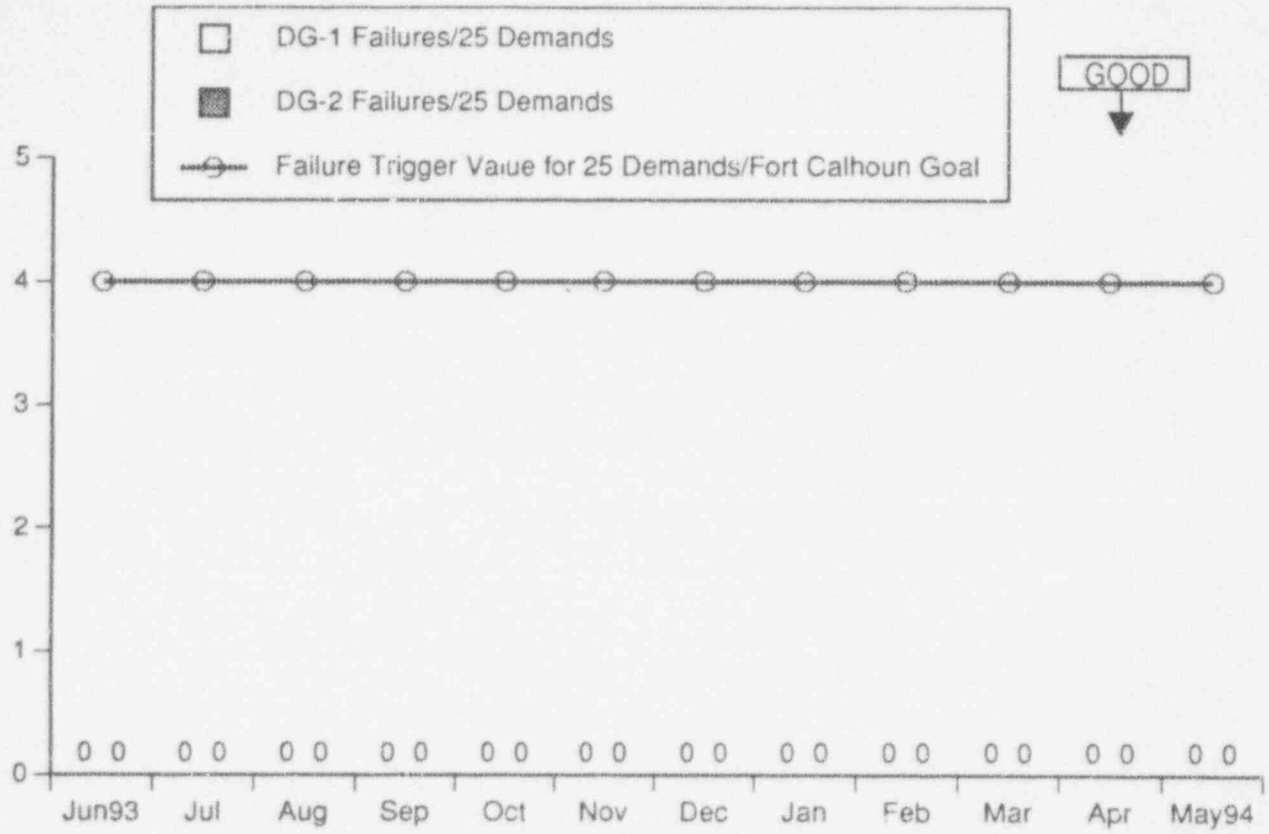


EMERGENCY DIESEL GENERATOR UNIT RELIABILITY

This bar graph shows three monthly indicators pertaining to the number of failures that were reported during the last 20, 50, and 100 emergency diesel generator demands at the Fort Calhoun Station. Also shown are trigger values which correspond to a high level of confidence that a unit's diesel generators have obtained a reliability of greater than or equal to 95% when the failure values are below the corresponding trigger values. The Fort Calhoun 1994 goal is to have fewer failures than these trigger values.

The demands counted for this indicator include the respective number of starts and the respective number of load-runs for both Diesel Generators combined. The number of start demands includes all valid and inadvertent starts, including all start-only demands and all start demands that are followed by load-run demands, whether by automatic or manual initiation. Load-run demands must follow successful starts and meet at least one of the following criteria: a load-run that is a result of a real load signal, a load-run test expected to carry the plant's load and duration as stated in the test specifications, and a special test in which a diesel generator was expected to be operated for a minimum of one hour and to be loaded with at least 50% of design load (see exceptions and other demand criteria in the Definition Section of this report).

Data Source: Jaworski/Ronning (Manager/Source)
Accountability: Jaworski/Ronning
Positive Trend



DIESEL GENERATOR RELIABILITY (25 DEMANDS)

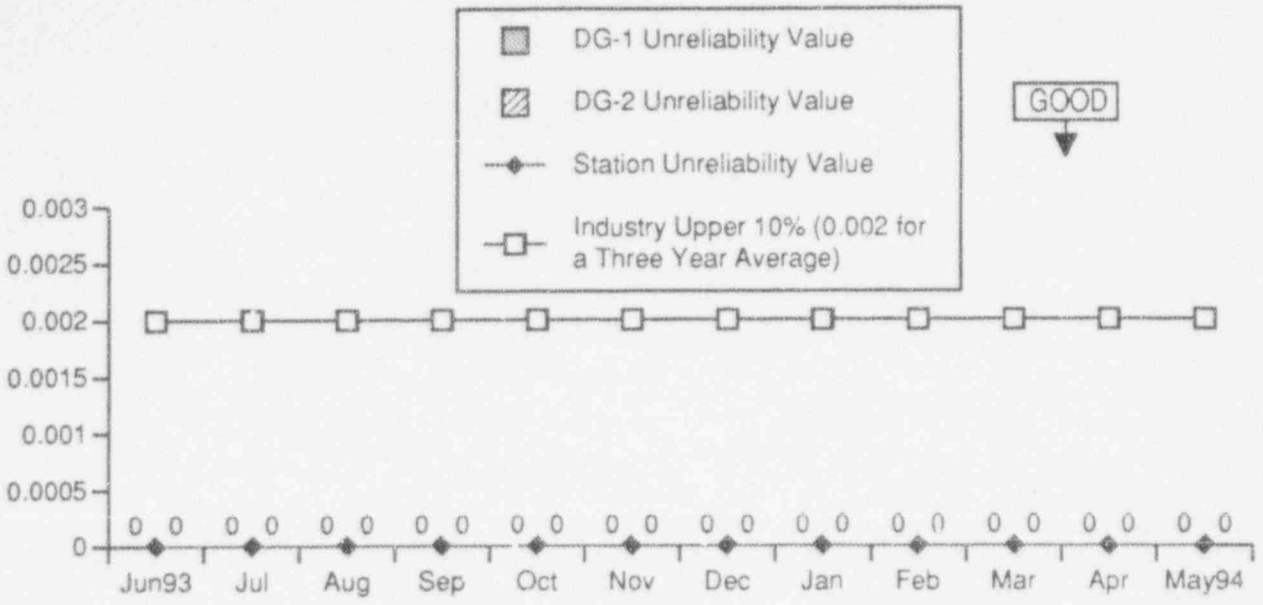
This indicator shows the number of failures experienced by each emergency diesel generator during the last 25 start demands and the last 25 load-run demands. A trigger value of 4 failures within the last 25 demands is also shown. This trigger value of 4 failures within 25 demands is the Fort Calhoun goal for 1994.

It must be emphasized that, in accordance with NUMARC criteria, certain actions will take place in the event that any one emergency diesel generator experiences 4 or more failures within the last 25 demands on the unit. These actions are described in the Definitions Section of this report. A System Engineering Instruction has been approved for the Fort Calhoun Station to institutionalize and formally approve/adopt the required NUMARC actions.

Diesel Generator DG-1 has not experienced any failures during the last 25 demands on the unit.

Diesel Generator DG-2 has not experienced any failures during the last 25 demands on the unit.

Data Source: Jaworski/Ronning (Manager/Source)
Accountability: Jaworski/Ronning
Positive Trend



EMERGENCY DIESEL GENERATOR UNRELIABILITY

The purpose of this indicator is to monitor the likelihood that emergency AC power generators will respond to off-normal events or accidents. It also provides an indication of the effectiveness of maintenance, operation and test practices in controlling generator unreliability.

The year-to-date station EDG unreliability value at the end of May 1994 was 0.0. The 1994 goal for this indicator is a maximum value of 0.05.

For DG-1: There was 1 start demand for the reporting month without failure.
In addition, there was 1 load-run demand without failure.

For DG-2: There was 1 start demand for the reporting month without failure.
In addition, there was 1 load-run demand without failure.

Emergency diesel generator unreliability is calculated as follows:

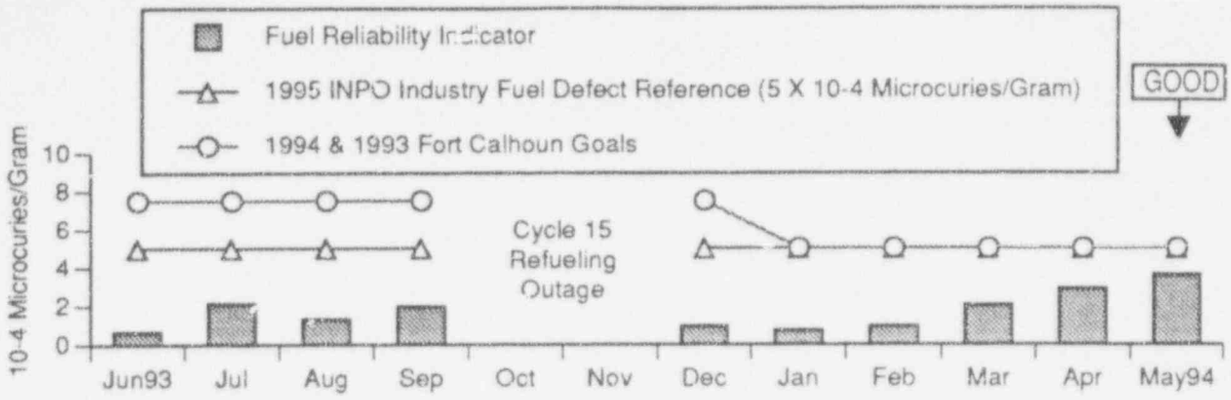
value per DG = SU + LU - (SU x LU)

where SU = Start Unreliability = $\frac{\text{number of unsuccessful starts}}{\text{number of valid start demands}}$

LU = Load-run Unreliability = $\frac{\text{number of unsuccessful load-runs}}{\text{number of valid load-run demands}}$

Station Value = average of DG-1 and DG-2 values

Data Source: Jaworski/Ronning (Manager/Source)
Accountability: Jaworski/Ronning
Positive Trend



FUEL RELIABILITY INDICATOR

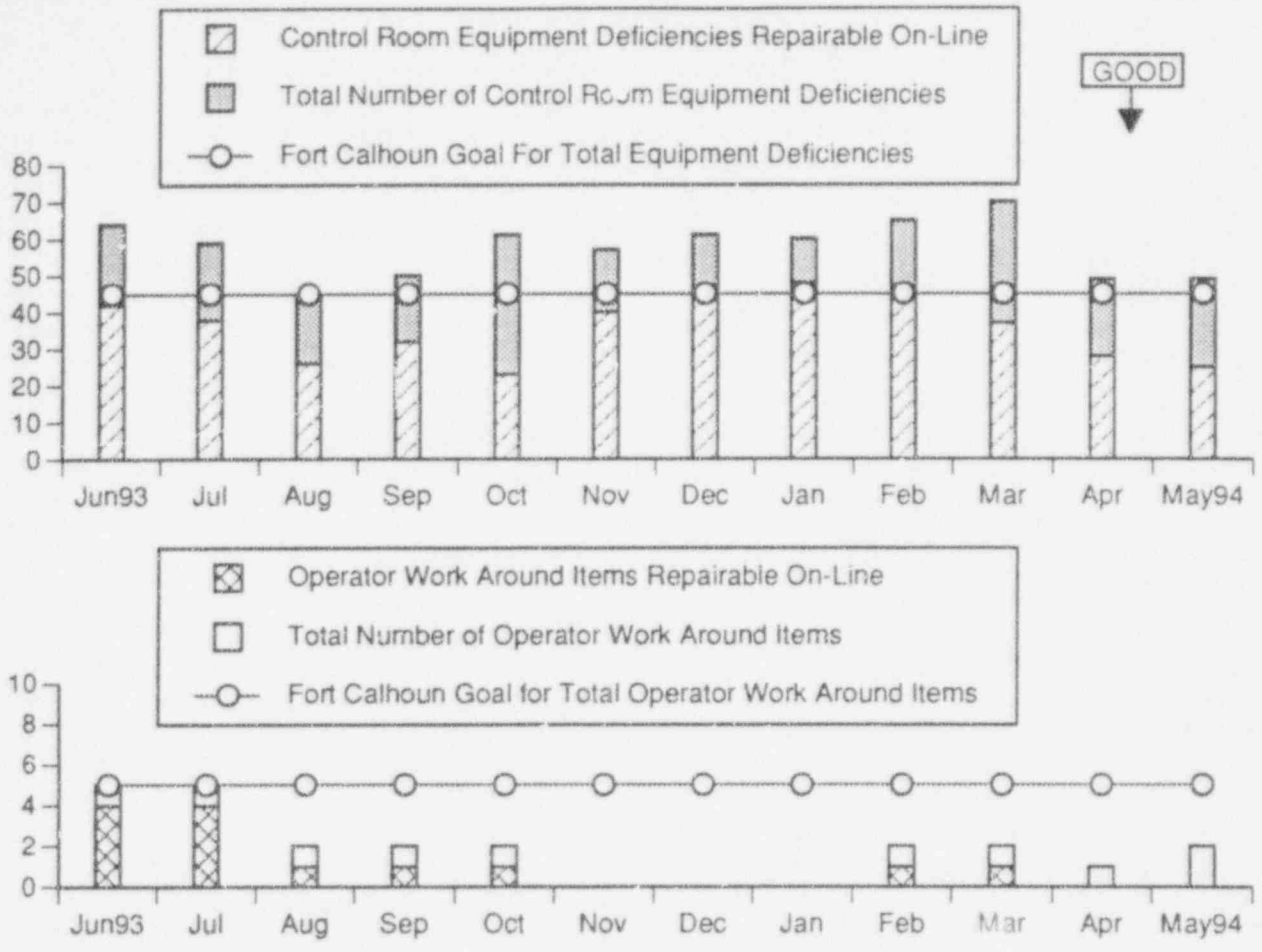
The Fuel Reliability Indicator (FRI) value for May 1994 was 3.6 X 10-4 microcuries/gram. The purpose of the FRI is to monitor industry progress in achieving and maintaining a high level of fuel integrity. The plant operated at full power during the entire month. The May FRI was calculated based on the average fission product activities present in the reactor coolant during the steady state full power operation days, May 1 through 31.

The May FRI value of 3.6 X 10^{-4} microcuries/gram is comparable to the April value of 2.89 X 10^{-4} microcuries/gram. The increase can be attributed to the small change in the I-131 and I-134 values. The very low FRI value will see a wide range of values due to many outside factors or small isotopic differences.

Fission product activity data from May full power operation showed a Xenon-133 activity increase early in the month and no Iodine spiking or increase. The Westinghouse technical expert has determined that there is a potential for a defective fuel rod in the Cycle 15 core. This prediction is based on a change in the Xe-133 to I-131 ratio. The ratio has a 50% correlation rate with known defects. A more definitive disposition will be possible when a significant power change is made and specific chemistry data (i.e. Cesium, Iodine and Xenon) can be collated. The presence or lack of Xenon and Iodine spikes during the power change would confirm or disprove the fuel failure assumption. The last detected fuel failure was during Cycle 13.

The INPO September 1992 Report "Performance Indicators for U.S. Nuclear Utility Industry" (INPO No. 92-011) states that "...the 1995 industry goal for fuel reliability is that units should strive to operate with zero fuel defects. A value larger than 5.0 X 10^{-4} microcuries/gram indicates a high probability of unit operation with one or more fuel defects. The determination of current defect-free operation requires more sophisticated analysis by utility reactor engineers." The value of 5.0 X 10^{-4} microcuries/gram is defined as a "Fuel Defect Reference" number or a "Zero Leaker Threshold". Each utility will calculate whether the core is defect free or not. The 1994 Fort Calhoun Station FRI performance indicator goal will be to maintain a monthly FRI below 5.0 X 10-4 microcuries/gram.

Data Source: Holthaus/Guliani
Accountability: Chase/Spilker
Positive Trend



NUMBER OF CONTROL ROOM EQUIPMENT DEFICIENCIES

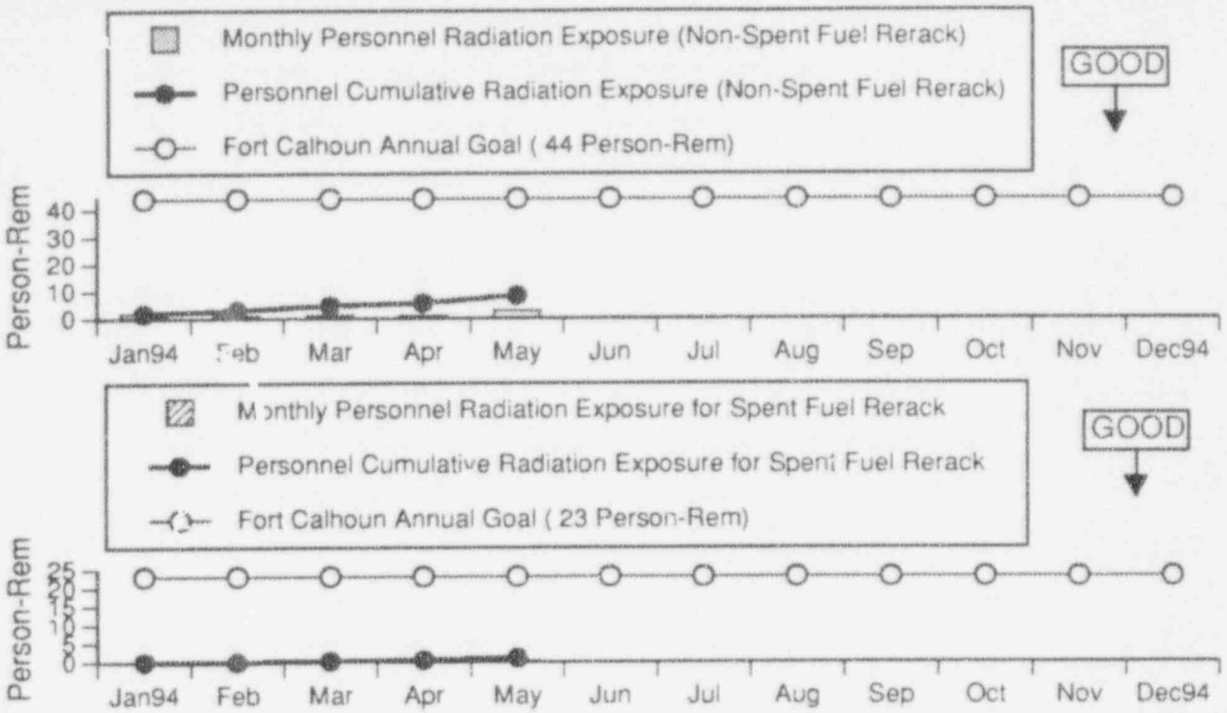
This indicator shows the number of control room equipment deficiencies that are repairable during plant operations (on-line), the number of outstanding control room equipment deficiencies, the number of Operator Work Around (OWA) Items repairable on-line, the number of outstanding OWAs and the Fort Calhoun goals.

There was a total of 49 control room equipment deficiencies at the end of May 1994. 25 of these deficiencies are repairable on-line and 24 require a plant outage to repair. There were 21 deficiencies added and 21 deficiencies closed during the month.

There were 2 identified Operator Work Around Items at the end of the month. The OWAs were on equipment tag CH-208, C/R panels CB-1/2/3, and on equipment tag MOV-D1. Both OWAs require an outage to repair.

The 1994 Fort Calhoun monthly goal for this indicator is a maximum of 45 deficiencies and 5 OWAs.

Data Source: Chase/Tills (Manager/Source)
Accountability: Chase/Faulhaber
Adverse Trend: None



COLLECTIVE RADIATION EXPOSURE

The 1994 Fort Calhoun goal for collective radiation exposure, excluding the spent fuel rerack, is less than 44 person-Rem.

The exposure for May 1994 was 2.858 person-Rem.
The year-to-date exposure was 8.370 person-Rem at the end of May.

The Fort Calhoun goal for collective radiation exposure to complete the Spent Fuel Rerack is less than 23 person-Rem.

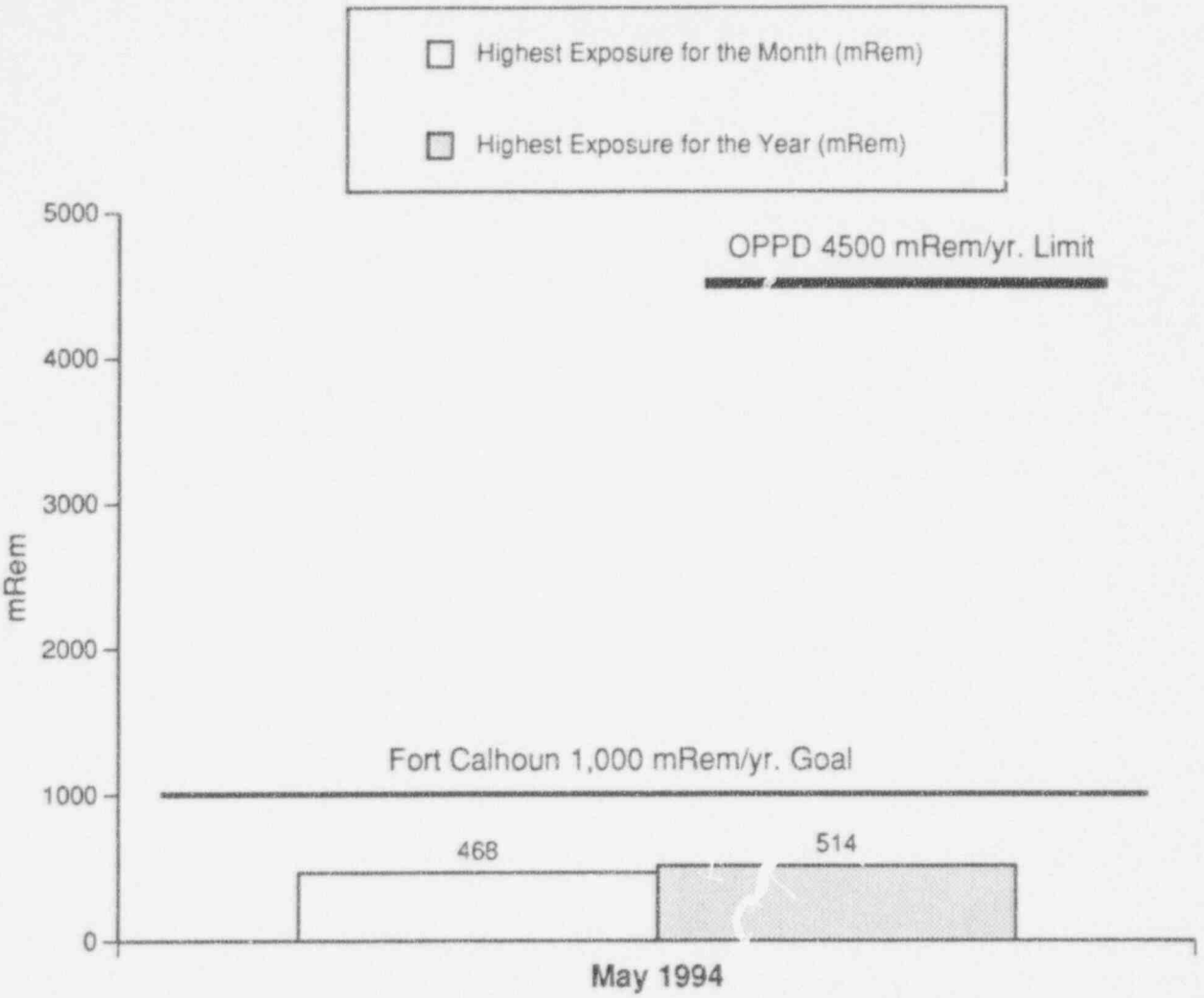
The Spent Fuel Rerack exposure for May was 0.373 person-Rem.
The Spent Fuel Rerack exposure year-to-date was 0.957 person-Rem at the end of May.

The collective radiation exposure at the end of May (i.e., the sum of non-spent fuel rerack exposure and spent fuel rerack exposure) was 9.327 person-Rem. The collective radiation exposure for the last 12 months was 156.465 person-Rem at the end of the month.

The 1995 INPO industry goal for collective radiation exposure is 185 person-rem per year. The industry upper ten percentile value (for the three year period from 1/91 through 12/93) is approximately 110.5 person-rem per year. The yearly average for Fort Calhoun Station for the three years from 6/91 through 5/94 was 150.6 person-rem per year.

Data Source: Chase/Little (Manager/Source)
Accountability: Chase/Lovett
Adverse Trend: None

SEP 54



MAXIMUM INDIVIDUAL RADIATION EXPOSURE

During May 1994, an individual accumulated 468 mRem, which was the highest individual exposure for the month. This exposure was accumulated during preparation of radwaste for shipping.

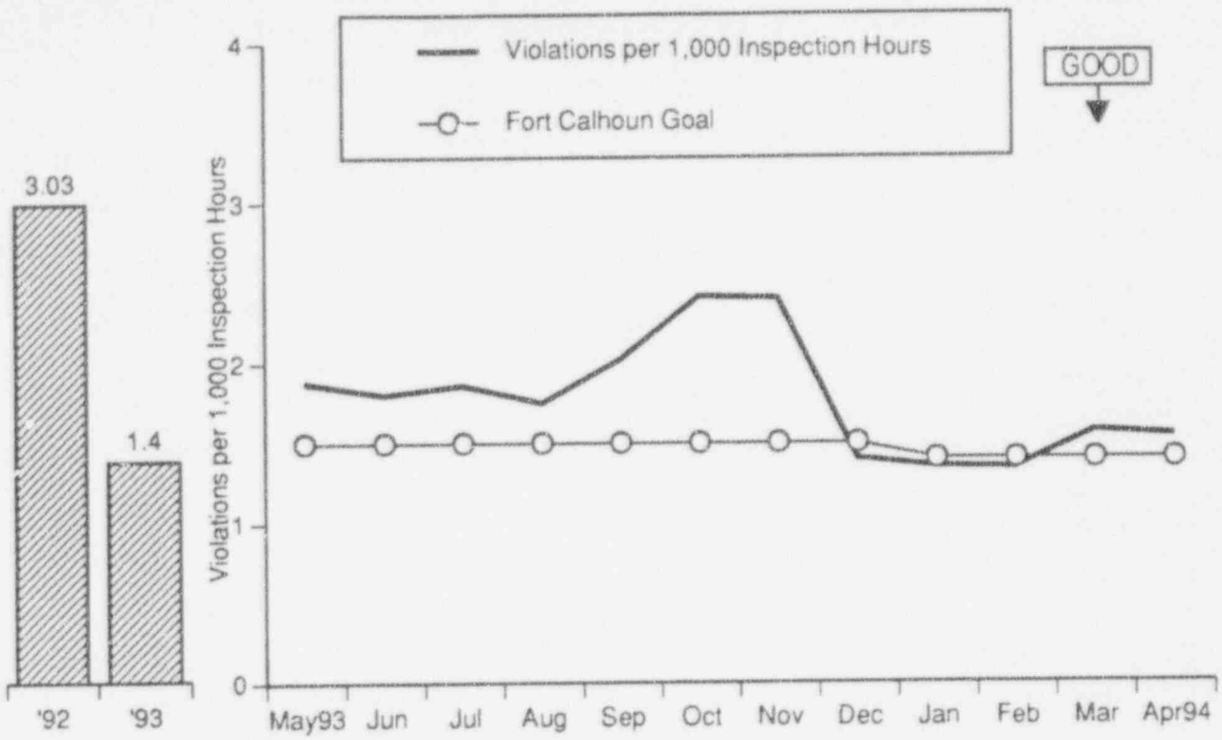
The maximum individual exposure for the year was 514 mRem at the end of May.

The OPPD limit for the maximum yearly individual radiation exposure is 4,500 mRem/year. The 1994 Fort Calhoun year-end goal is a maximum of 1,000 mRem.

Date Source: Chase/Little (Manager/Source)

Accountability: Chase/Lovett

Adverse Trend: None



VIOLATIONS PER 1,000 INSPECTION HOURS

This indicator displays the number of NRC violations cited in inspection reports per 1,000 NRC inspection hours. This indicator is one month behind the reporting month due to the time involved with collecting and processing the data.

The violations per 1,000 inspection hours indicator was reported as 1.54 for the twelve months from May 1, 1993 through April 30, 1994.

The following inspections ended during this reporting period:

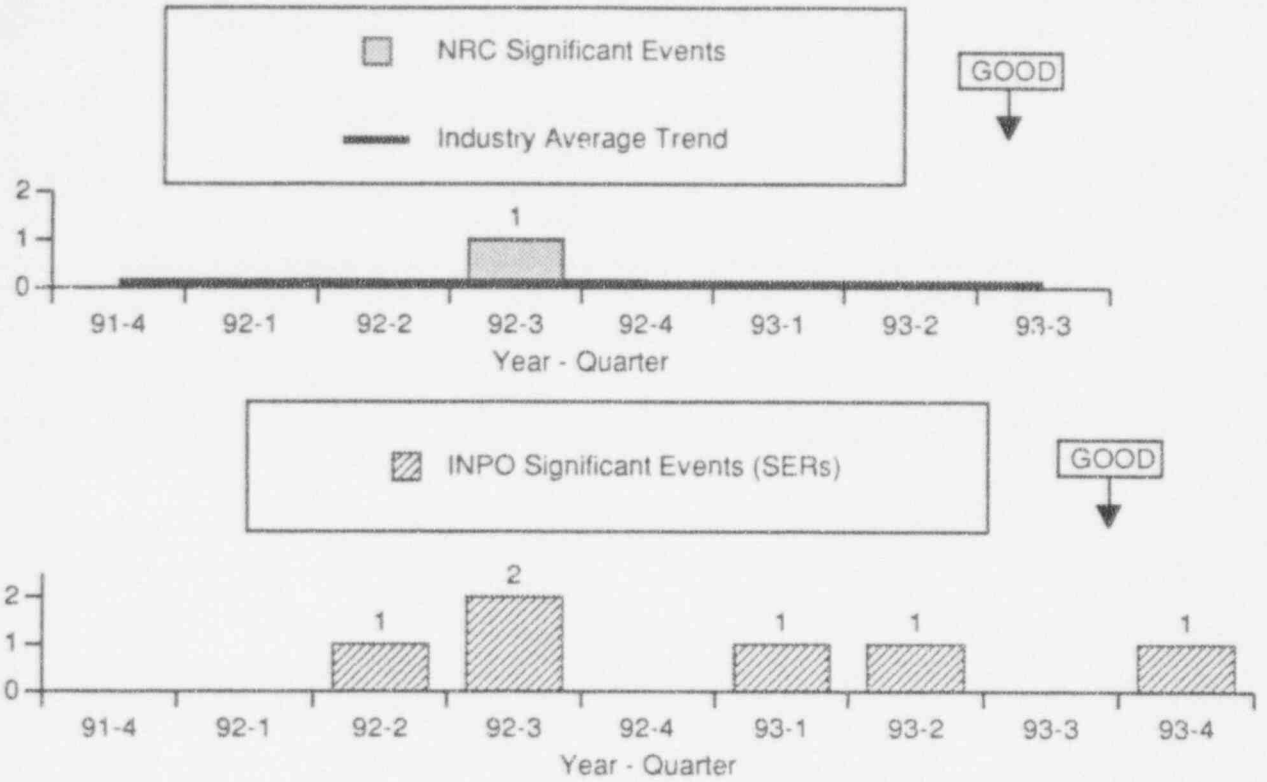
IER No.	Title	No. of Hours
94-11	Emergency Plan Walkdown Inspection	80
94-13	Solid Radwaste and Transportation Programs	80

To date, OPPD has received 4 violations for inspections conducted in 1994:

Level III Violations	(1)
Level IV Violations	(3)
Level V Violations	(0)
Non-Cited Violations (NCV)	(0)

The 1994 Fort Calhoun goal for this indicator is a maximum of 1.4 violations per 1,000 inspection hours.

Data Source: Short/Cavanaugh (Manager/Source)
Accountability: Short
Adverse Trend: None



SIGNIFICANT EVENTS

This indicator illustrates the number of NRC and INPO Significant Events for Fort Calhoun Station as reported by the Nuclear Regulatory Commission's Office for Analysis and Evaluation of Operational Data in the biannual "Performance Indicators for Operating Commercial Nuclear Power Reactors" report and INPO's Nuclear Network.

The following NRC significant events occurred between the fourth quarter of 1991 and the third quarter of 1993:

Third Quarter 1992: The failure of a Pressurizer Code safety valve to reseat initiated a LOCA with the potential to degrade the reactor coolant pressure boundary.

The following INPO significant events, as reported in Significant Event Reports (SERs), occurred between the fourth quarter of 1991 and the fourth quarter of 1993:

Second Quarter 1992: Intake of Transuranics during Letdown Filter Change-out.

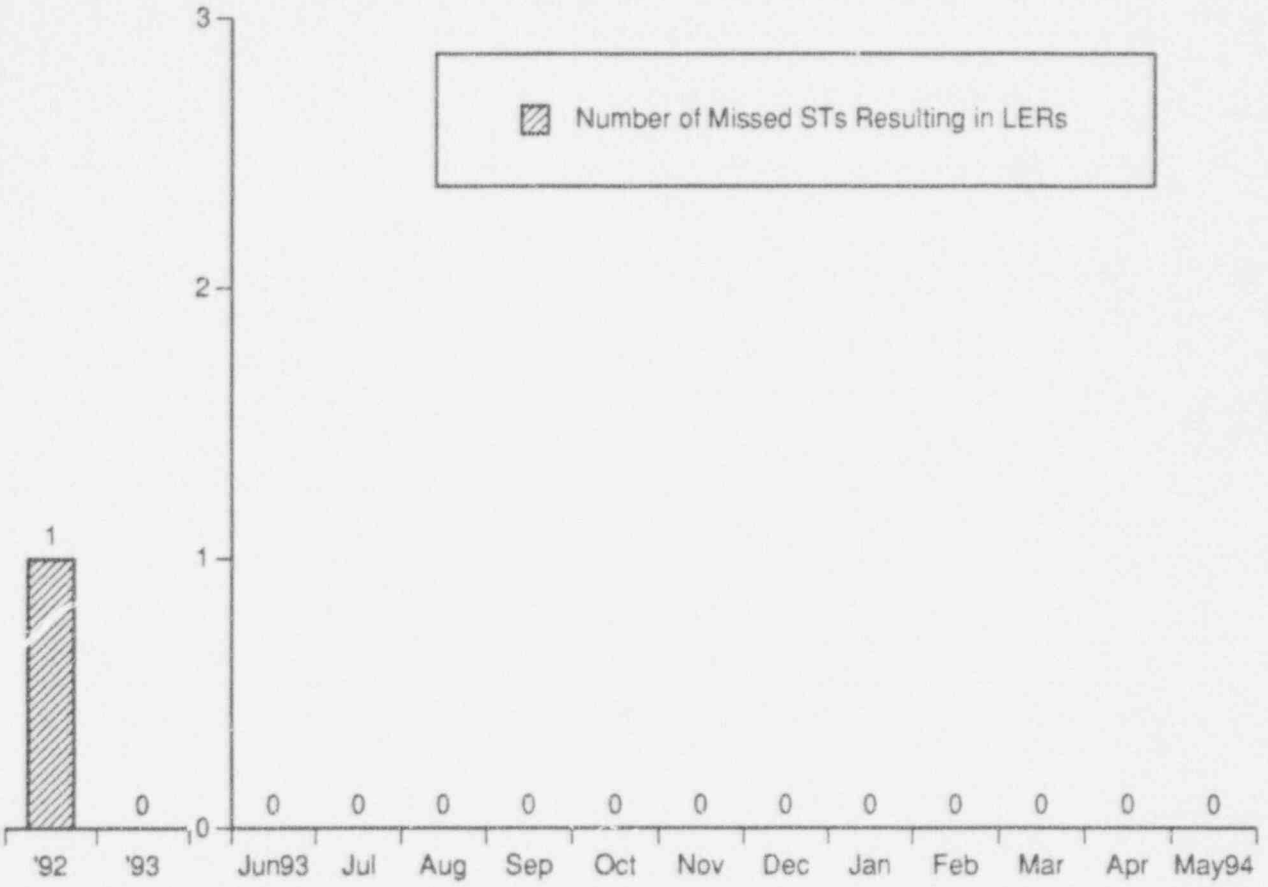
Third Quarter 1992: 1) RC-. 2 LOCA; and 2) Premature Lift of RC-142.

First Quarter 1993: Inoperability of Power Range Nuclear Instrumentation Safety Channel D.

Second Quarter 1993: SBFU Breaker Relay (Switchyard) Plant Trip

Fourth Quarter 1993: Unexpected CEA Withdrawal.

Data Source: Nuclear Regulatory Commission & INPO
Accountability: Chase
Adverse Trend: None



NUMBER OF MISSED SURVEILLANCE TESTS RESULTING IN LICENSEE EVENT REPORTS

This indicator shows the number of missed Surveillance Tests (STs) that result in Licensee Event Reports (LERs) during the reporting month. The graph on the left shows the yearly totals for the indicated years.

There were no missed surveillance tests resulting in LERs during May 1994.

During the month of January 1993 it was discovered that during December 1992 an ASME Section XI Code required surveillance was not completed nor corrective maintenance performed as a result of AC-10A falling into the "Alert Range" (LER 93-003 Failure to Satisfy Inservice Testing Requirements for Raw Water Pump).

The 1994 Fort Calhoun monthly goal for this indicator is 0.

Data Source: Monthly Operating Report & Plant Licensee Event Reports (LERs)

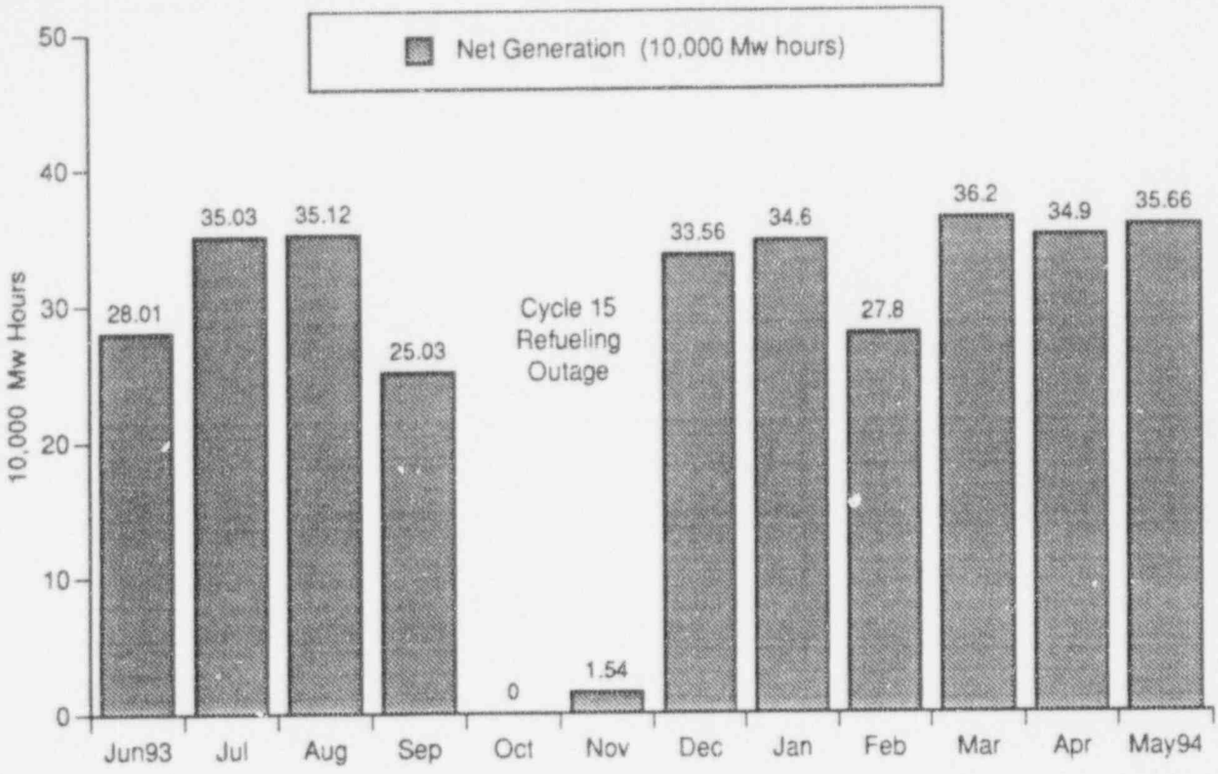
Accountability: Chase/Jaworski

Positive Trend

SEP 60 & 61

PERFORMANCE

Goal: To strive for Excellence in Operations utilizing the highest standards of performance at Fort Calhoun Station that result in safe, reliable plant operation in power production.



STATION NET GENERATION

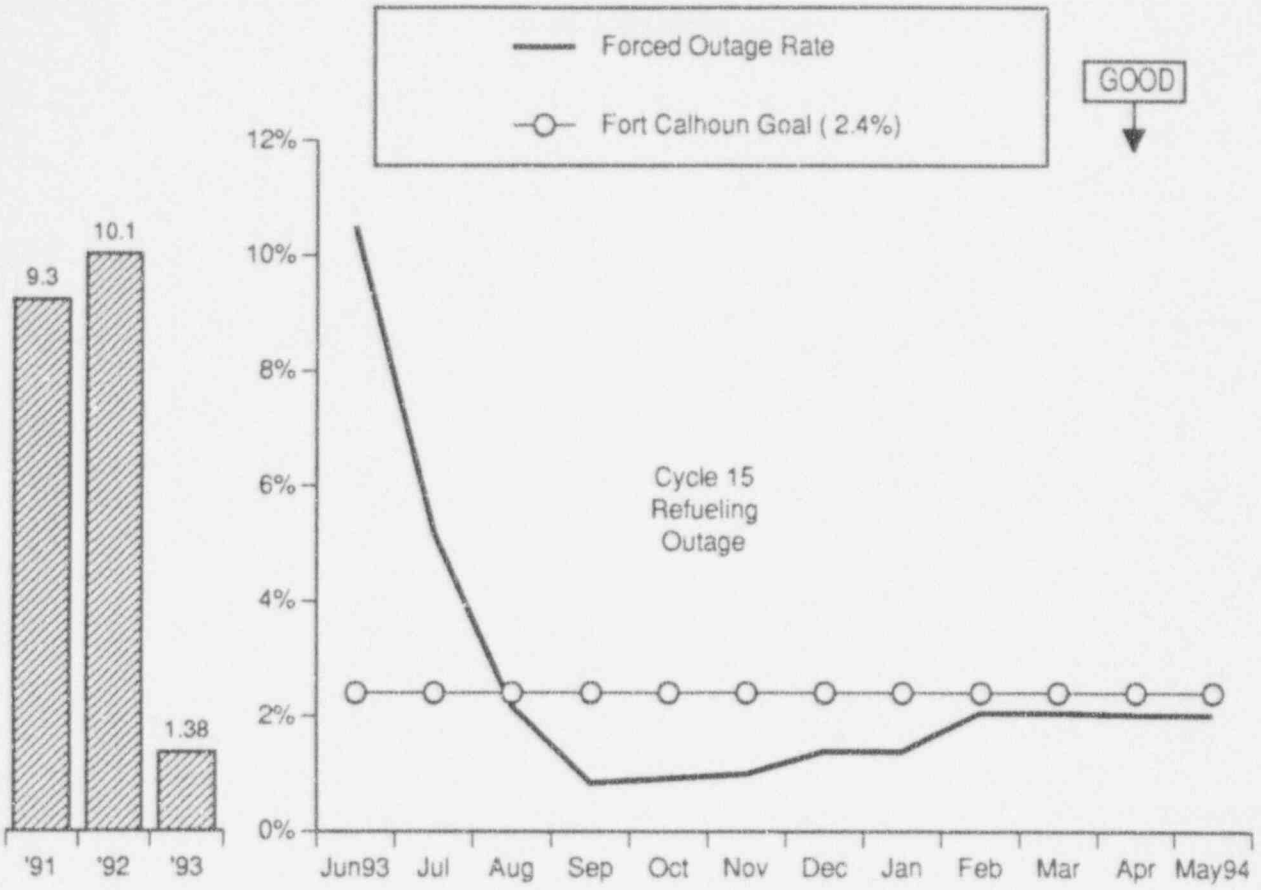
During the month of May 1994 a net total of 356,578 MWH was generated by the Fort Calhoun Station. Cumulative net generation for Cycle 15 was 2,042,960 MWH at the end of the month.

Energy losses for the month of February 1994 were attributable to a generator and reactor trip that occurred following the failure of the relay for the Containment High Pressure Signal Supervisory Circuit. Energy losses for the month of January 1994 were attributable to derates to repair condenser tubes and a failed level control valve on a heater drain tank.

Energy losses for the month of December 1993 were a result of a forced outage that began on December 6 and ended on December 7. The outage was caused by an EHC test failure. Energy losses for September, October and November 1993 were attributable to the shutdown for the Cycle 15 refueling outage, which began on September 25 and ended on November 26.

Unplanned energy losses for the months of June and July 1993 were attributable to a forced outage that began on June 24 when the inadvertent jarring of a 345 KV fault relay in the switchyard caused a turbine and reactor trip. The plant returned to 100% power on July 2nd.

Data Source: Station Generation Report
Accountability: Chase
Adverse Trend: None



FORCED OUTAGE RATE

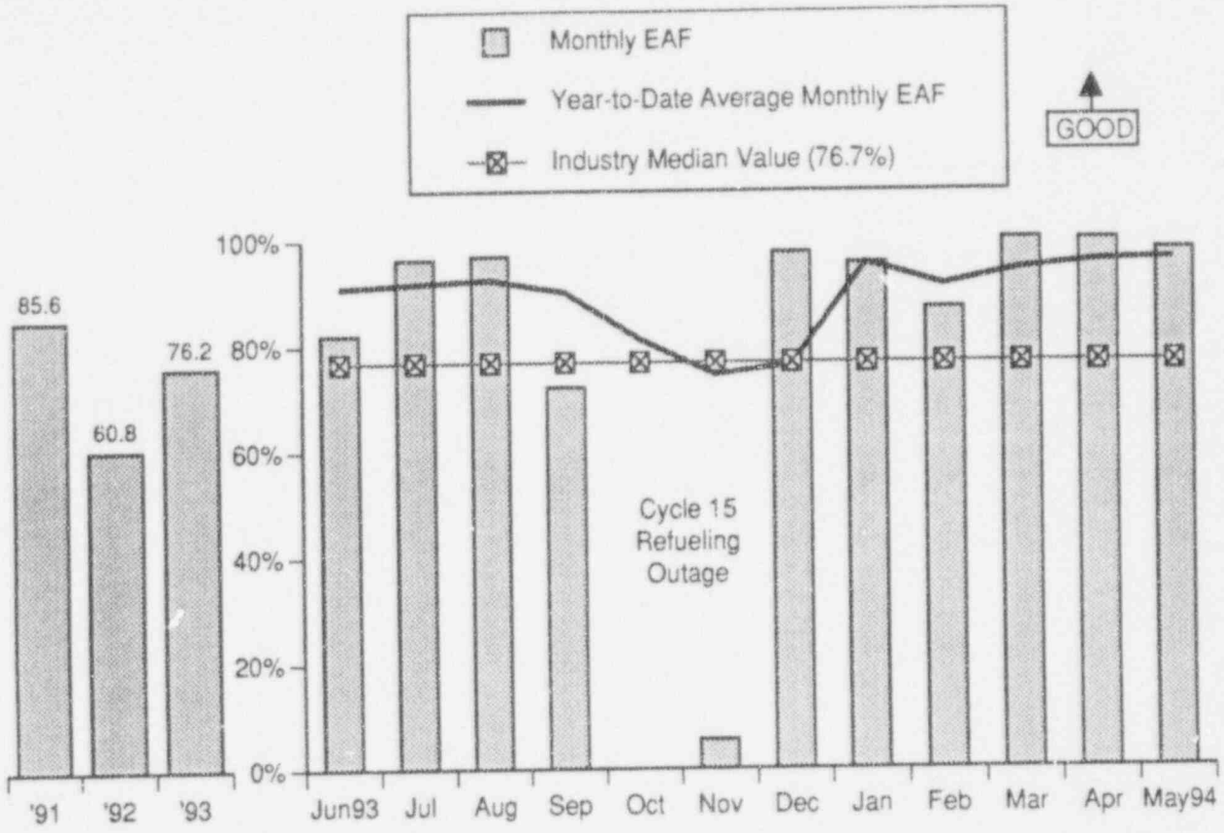
The forced outage rate (FOR) was reported as 2.02% for the twelve months from June 1, 1993 to May 31, 1994. The 1994 year-to-date FOR was 1.35% at the end of May.

A forced outage occurred on February 11 due to a generator and reactor trip that occurred following the failure of the relay for the Containment High Pressure Signal Supervisory Circuit. The generator was off-line for 48.9 hours.

A forced outage occurred on December 6, 1993 when the plant tripped during weekly testing of the turbine EHC system. The generator was off-line for 27.1 hours. There was one forced outage during the month of June 1993. This outage, which occurred when the inadvertent jarring of a 345 KV fault relay in the switchyard caused a turbine and reactor trip, lasted 70.6 hours.

The 1994 Fort Calhoun year-end goal for this indicator is a maximum value of 2.4%. The 1993 Fort Calhoun year-end goal was a maximum value of 2.4%.

Data Source: Monthly Operations Report & NERC GAD Forms
Accountability: Chase
Positive Trend



EQUIVALENT AVAILABILITY FACTOR

This indicator shows the plant monthly Equivalent Availability Factor (EAF), the year-to-date average monthly EAF, and the year-end average monthly EAF for the previous 3 years.

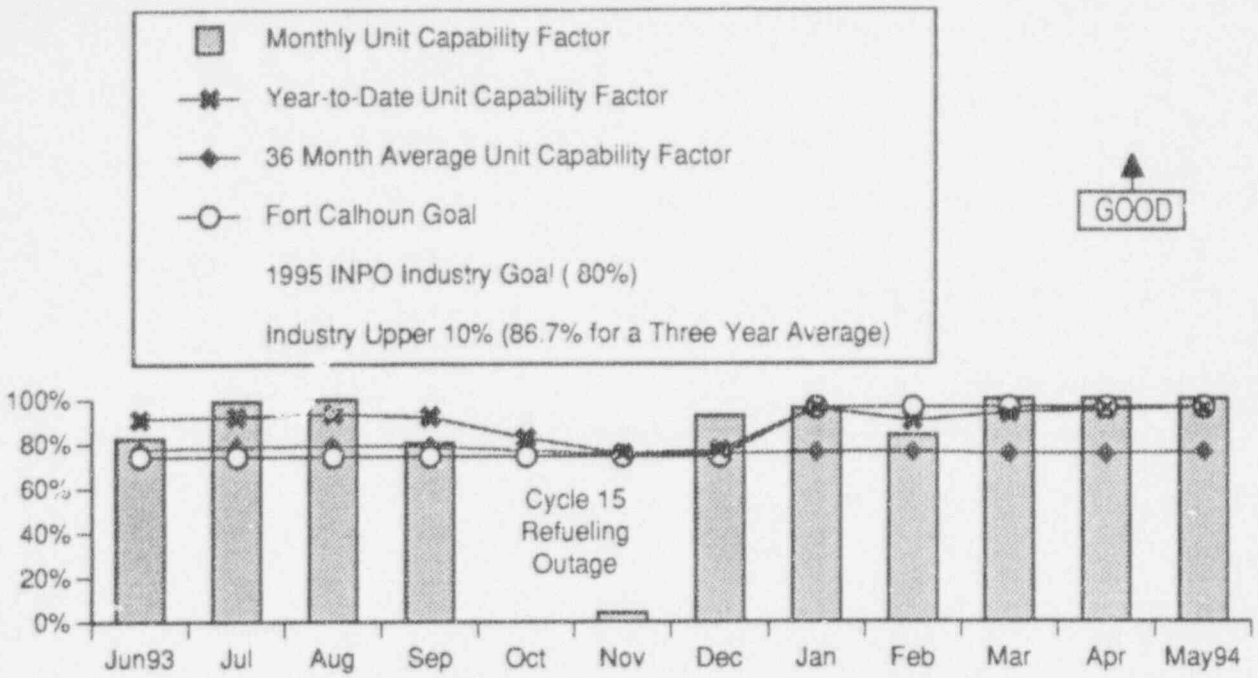
The EAF for May 1994 was reported as 97.76%. The year-to-date monthly average EAF was 96.02% at the end of the month.

Energy losses for the month of February were due to a generator and reactor trip that occurred following the failure of the relay for the Containment High Pressure Signal Supervisory Circuit. Energy losses for the month of January were due to derates for condenser tube repair and a failed level control valve on a heater drain tank.

The April, May and June 1993 EAF values are the result of a maintenance outage and a forced outage that occurred when the inadvertent jarring of a 345 KV fault relay in the switchyard caused a turbine and reactor trip.

The industry median EAF value for the three year period from 7/90 through 6/93 was 76.7%. The Fort Calhoun average monthly EAF for the three years prior to this report was 75.24%.

Data Source: Dietz/Parra (Manager/Source)
Accountability: Chase
Adverse Trend: None



UNIT CAPABILITY FACTOR

This indicator shows the plant monthly Unit Capability Factor (UCF) value, the 1994 and 1993 year-to-date UCFs, the goals, the 36 month average UCFs, the 1995 INPO industry goal and the approximate industry upper ten percentile value. UCF is defined as the ratio of the available energy generation over a given period of time to the reference energy generation (the energy that could be produced if the unit were operated continuously at full power under reference ambient conditions) over the same time period, expressed as a percentage.

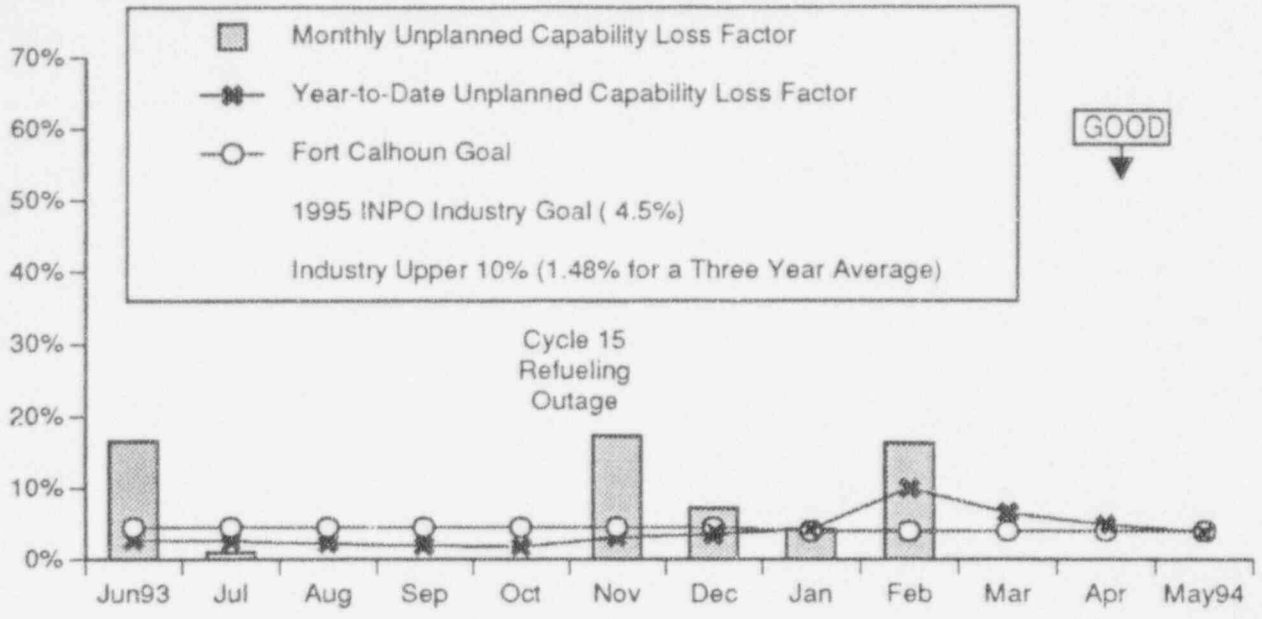
The UCF for May 1994 was reported as 100%. The year-to-date UCF was 96.1%, the UCF for the last 12 months was 78.2%, and the 36 month average UCF was reported as 76.0% at the end of the month.

Energy losses for the month of February 1994 were due to a generator and reactor trip that occurred following the failure of the relay for the Containment High Pressure Signal Supervisory Circuit. Energy losses for the month of January were due to derates to repair condenser tubes and a failed level control valve on a heater drain tank.

Energy losses for the month December 1993 were due to rampup from the Cycle 15 Refueling Outage and a plant trip that occurred on December 6 during testing of the EHC system. Energy losses for the month of June 1993 were due to Moderator Coefficient Testing and a forced outage from June 24 through June 27.

The 1995 INPO industry goal is 80% and the industry upper ten percentile value (for the three year period from 1/91 through 12/93) is approximately 86.7%. The 1994 Fort Calhoun year-end goal for this indicator is a minimum of 96.03%.

Data Source: Generation Totals Report & Monthly Operating Report
Accountability: Chase
Adverse Trend: None



UNPLANNED CAPABILITY LOSS FACTOR

This indicator shows the plant monthly Unplanned Capability Loss Factor (UCLF), the year-to-date UCLF, the goal, the 1995 INPO industry goal and the approximate industry upper ten percentile value. UCLF is defined as the ratio of the unplanned energy losses during a given period of time, to the reference energy generation (the energy that could be produced if the unit were operated continuously at full power under reference ambient conditions), expressed as a percentage.

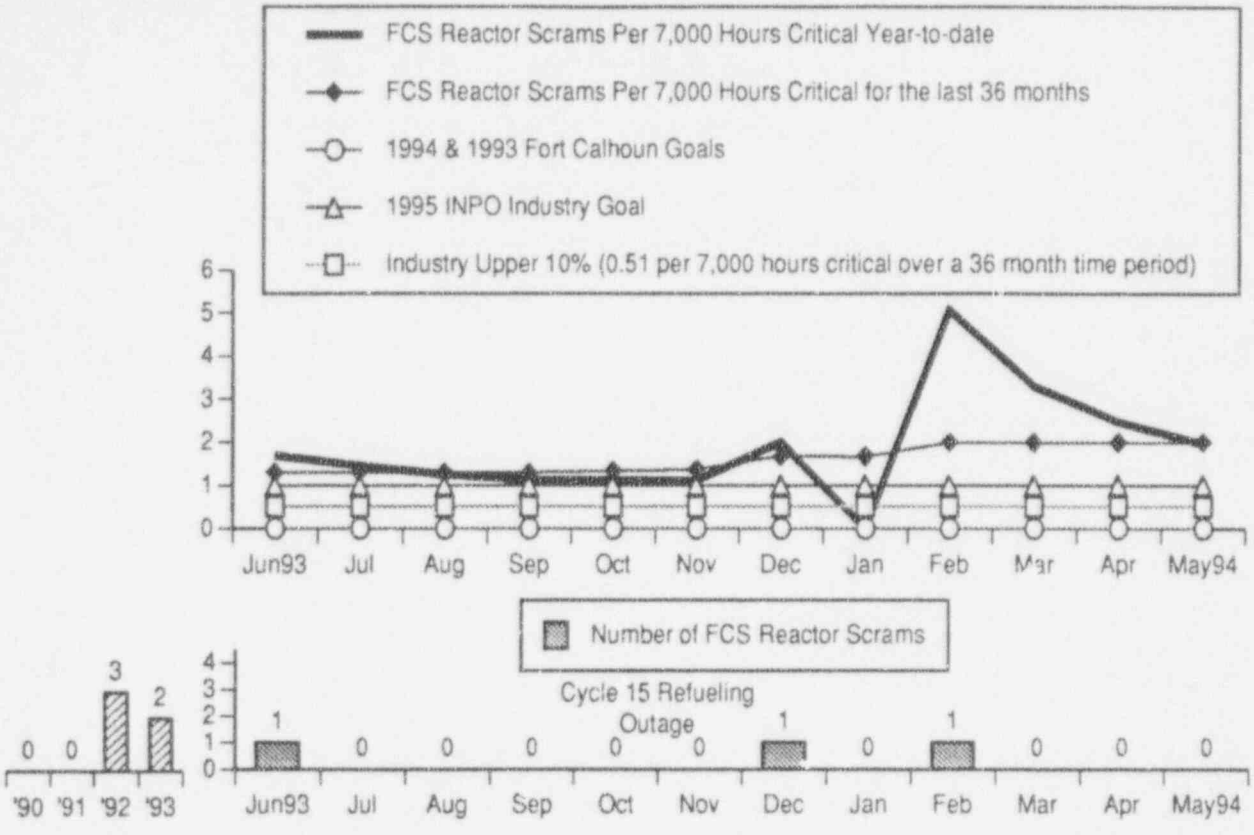
The UCLF for the month of May 1994 was reported as 0.0%. The year-to-date UCLF was 3.9%, the UCLF for the last 12 months was 5.1%, and the 36 month average UCLF was reported as 8.2% at the end of the month.

Unplanned energy losses for the month of February 1994 were due to a generator and reactor trip that occurred following the failure of the relay for the Containment High Pressure Signal Supervisory Circuit. Unplanned energy losses for the month of January were due to derates to repair condenser tubes and a failed level control valve on a heater drain tank.

Unplanned energy losses for the month of December 1993 were the result of a plant trip that occurred during EHC testing. Unplanned energy losses for the month of June 1993 were the result of a forced outage that occurred as a result of the inadvertent jarring of a 345 KV fault relay in the switchyard.

The 1995 INPO industry goal is 4.5% and the industry upper ten percentile value (for the three year period from 1/91 through 12/93) is approximately 1.48%. The 1994 Fort Calhoun year-end goal for this indicator is a maximum value of 3.97%.

Data Source: Generation Totals Report & Monthly Operating Report
Accountability: Chase
Adverse Trend: None



UNPLANNED AUTOMATIC REACTOR SCRAMS PER 7,000 HOURS CRITICAL

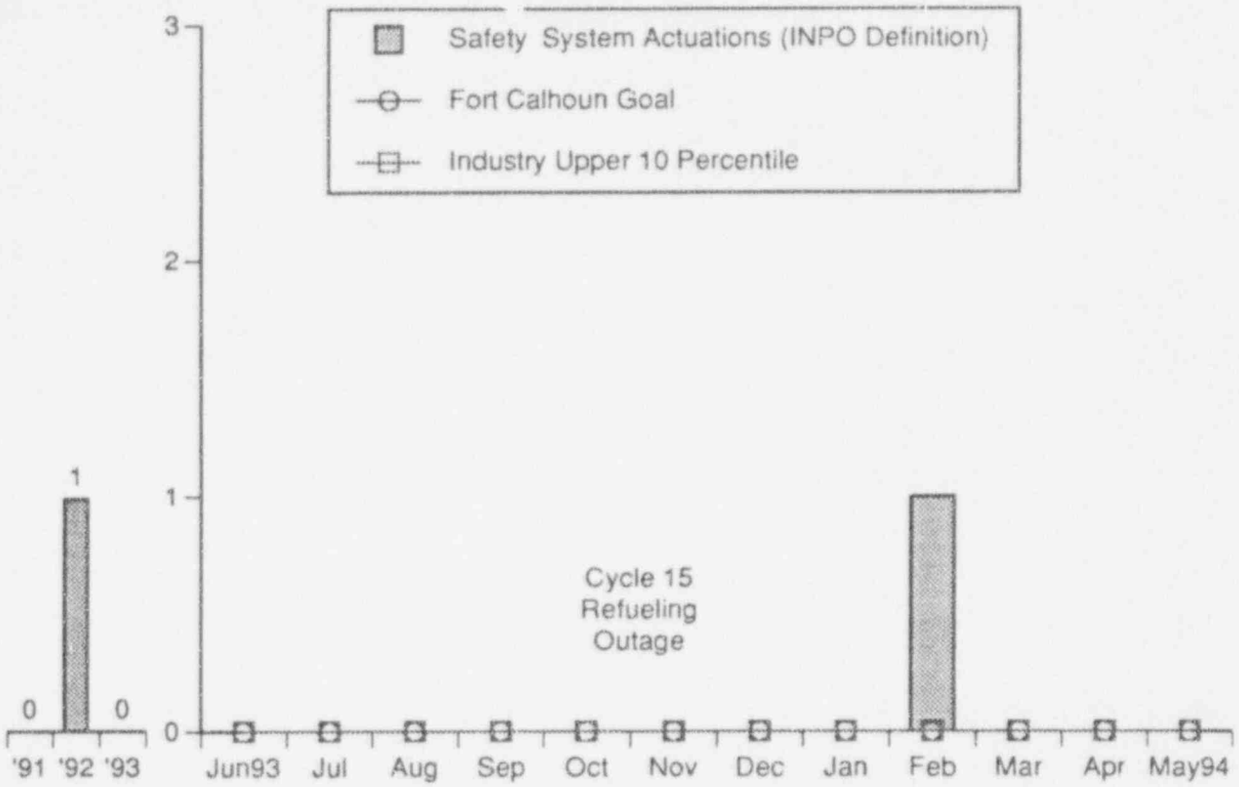
The upper graph shows the number of unplanned automatic reactor scrams per 7,000 hours critical (as defined in INPO's 12/93 publication "Detailed Descriptions of International Nuclear Power Plant Performance Indicators and Other Indicators") for Fort Calhoun Station. The lower graph shows the number of unplanned automatic reactor scrams that occurred during each month for the last twelve months.

The 1994 station value is 1.95 at the end of May 1994. The value for the 12 months from June 1, 1993 through May 31, 1994 is 2.91. The value for the last 36 months is 1.99.

An unplanned automatic reactor scram occurred on February 11, 1994 when supervisory relay 86B/CPHSS failed. An unplanned automatic reactor scram occurred on December 6, 1993 during EHC testing. An unplanned automatic reactor scram occurred on June 24, 1993 when the inadvertent jarring of a 345 KV fault relay in the switchyard caused a turbine and reactor trip.

The 1994 Fort Calhoun goal for this indicator is 0. The 1995 INPO industry goal is a maximum of 1 unplanned automatic reactor scram per 7,000 hours critical. The industry upper ten percentile value is approximately 0.51 scrams per 7,000 hours critical for the 36 month time period from 1/91 through 12/93.

Data Source: Monthly Operations Report & Plant Licensee Event Reports (LERs)
Accountability: Chase
Adverse Trend: None



UNPLANNED SAFETY SYSTEM ACTUATIONS - (INPO DEFINITION)

There were no INPO unplanned safety system actuations during the month of May 1994.

There was 1 INPO unplanned safety system actuation during the month of February 1994. It occurred on February 11 when supervisory relay 86B/CPHSS failed, which resulted in tripping relay 86B/CPHS. The CPHS relay trip actuated the Safety Injection Actuation Signal, Containment Isolation Actuation Signal, Ventilation Isolation Actuation Signal and Steam Generator Isolation Signal. The Steam Generator Isolation Signal automatically closed both main steam isolation valves, which resulted in a concurrent turbine and reactor trip.

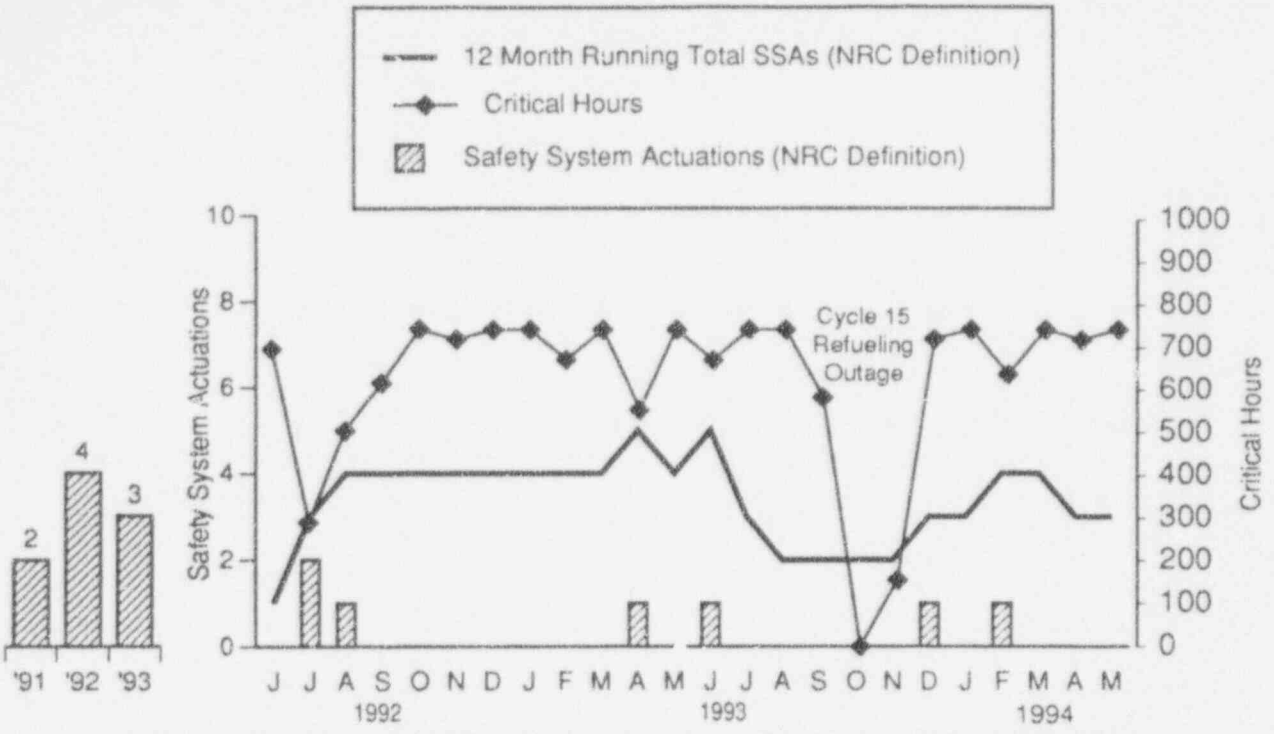
An INPO unplanned safety system actuation occurred during the month of July 1992. It was due to the loss of an inverter and the subsequent reactor trip on 7/3/92.

The 1994 Fort Calhoun goal for this indicator is 0.

Data Source: Monthly Operations Report & Plant Licensee Event Reports (LERs)

Accountability: Jaworski/Foley/Ronning

Adverse Trend: None



UNPLANNED SAFETY SYSTEM ACTUATIONS - (NRC DEFINITION)

This indicator shows the number of unplanned safety system actuations (SSAs), which includes the High and Low Pressure Safety Injection Systems, the Safety Injection Tanks, and the Emergency Diesel Generators. The NRC classification of SSAs includes actuations when major equipment is operated and when the logic systems for these safety systems are challenged.

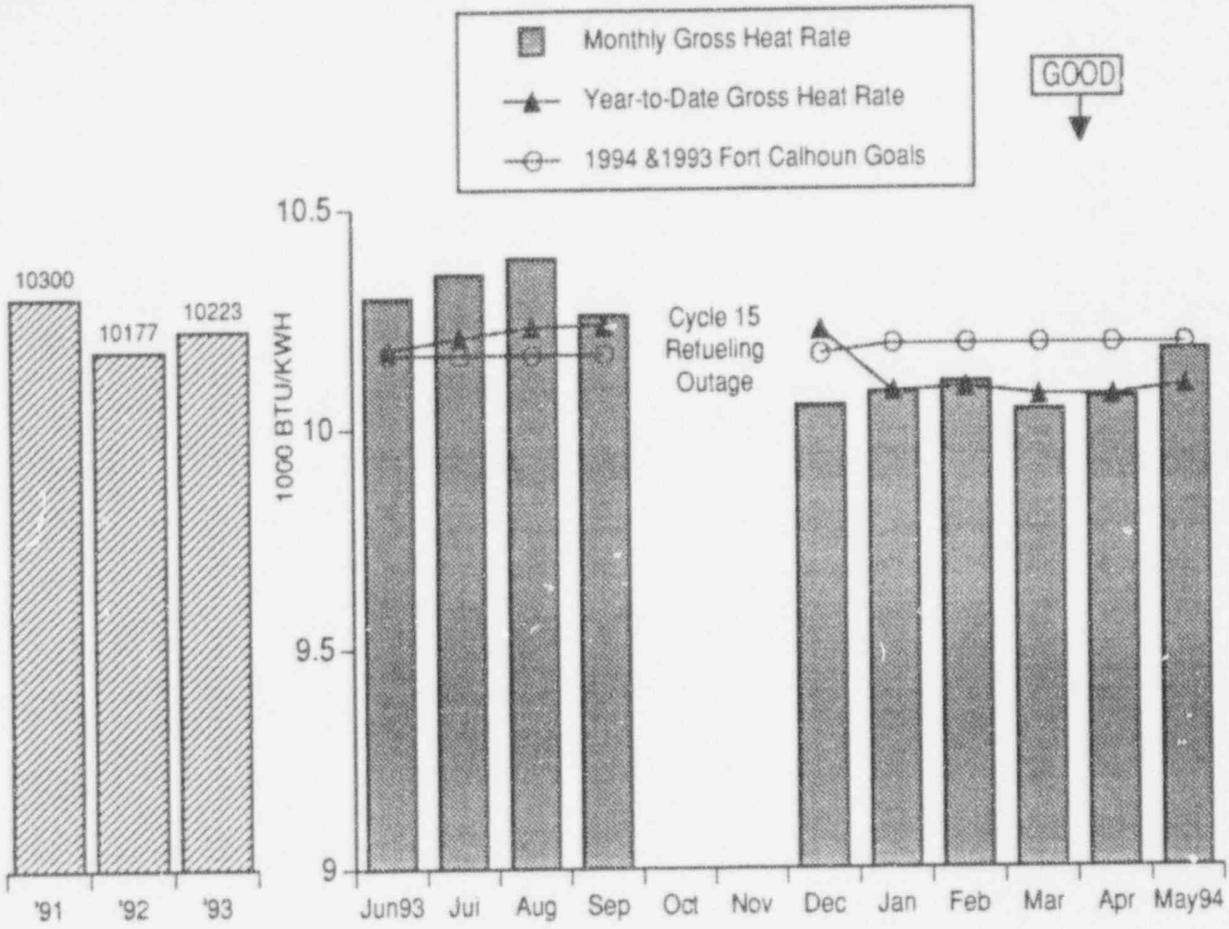
There was 1 NRC unplanned safety system actuation during the month of February 1994. It occurred on February 11 when supervisory relay 86B/CPHSS failed, which resulted in a concurrent turbine and reactor trip.

There were 3 NRC unplanned safety system actuations in 1993: 1) In December 1993 the main turbine and reactor tripped during Electro-Hydraulic Control pump start testing; 2) In June 1993 the inadvertent jarring of a 345 KV fault relay in the switchyard caused a turbine and reactor trip; and 3) In April 1993 a non-licensed operator mistakenly opened the wrong potential fuse drawer, causing a low voltage alarm on bus 1A1, a loadshed on bus 1A1 and an auto start of an EDG.

There were 4 unplanned safety system actuations in 1992: 1) In August, due to the failure of an AC/DC converter in the Turbine Electro Hydraulic Control system, pressurizer safety valve RC-142 opened prior to reaching design pressure during a plant transient and trip; 2) On July 3 there was an inverter failure and the subsequent reactor trip; 3) On July 23 there was an unplanned diesel generator start when an operator performing a surveillance test inadvertently pushed the normal start button instead of the alarm acknowledge button; and 4) In May the turbine generator tripped on a false high level moisture separator trip signal which caused a simultaneous reactor trip and subsequent anticipatory start signal to both diesel generators.

There have been 3 unplanned safety system actuations in the last 12 months. The 1994 Fort Calhoun goal for this indicator is 0.

Data Source: Monthly Operations Report & Plant Licensee Event Reports (LERs)
Accountability: Jaworski/Foley/Ronning
Adverse Trend: None



GROSS HEAT RATE

This indicator shows the Gross Heat Rate (GHR) for the reporting month, the year-to-date GHR, the goals and the year-end GHR for the previous 3 years.

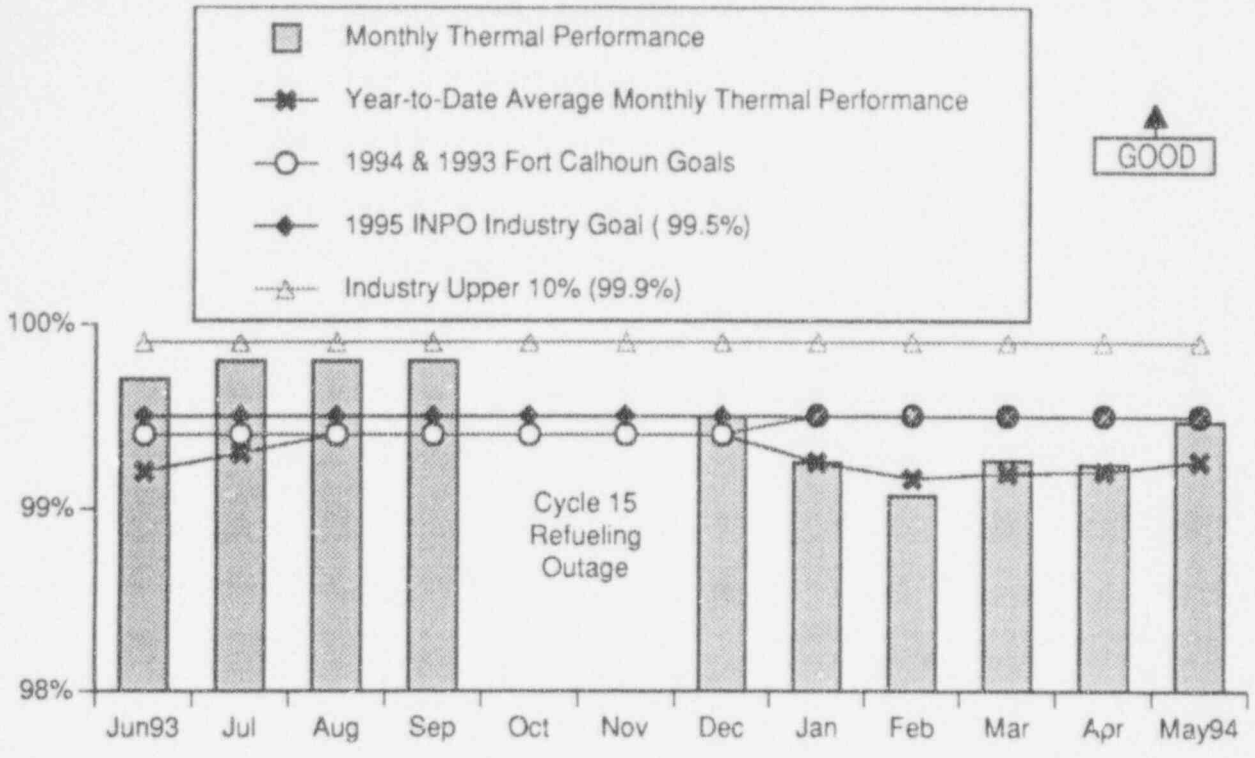
The gross heat rate for Fort Calhoun Station was 10,176 for the month of May 1994. The 1994 year-to-date GHR was 10,093 at the end of the month.

The GHR was not calculated for the months of October and November 1993 because of the Cycle 15 Refueling Outage.

The GHR varies with fluctuations in river water temperature. In general, the GHR improves during the winter months and degrades during the summer. This is because the gross heat rate is not normalized to the design river water temperature of 60 degrees Fahrenheit.

The 1994 Fort Calhoun year-end goal for this indicator is ≤10,190.

Data Source: Holthaus/Gray (Manager/Source)
Accountability: Chase/Jaworski
Adverse Trend: None



THERMAL PERFORMANCE

This indicator shows the Thermal Performance value for the reporting month, the year-to-date average thermal performance value, the 1994 and 1993 Fort Calhoun goals, the 1995 INPO industry goal and the approximate industry upper ten percentile value.

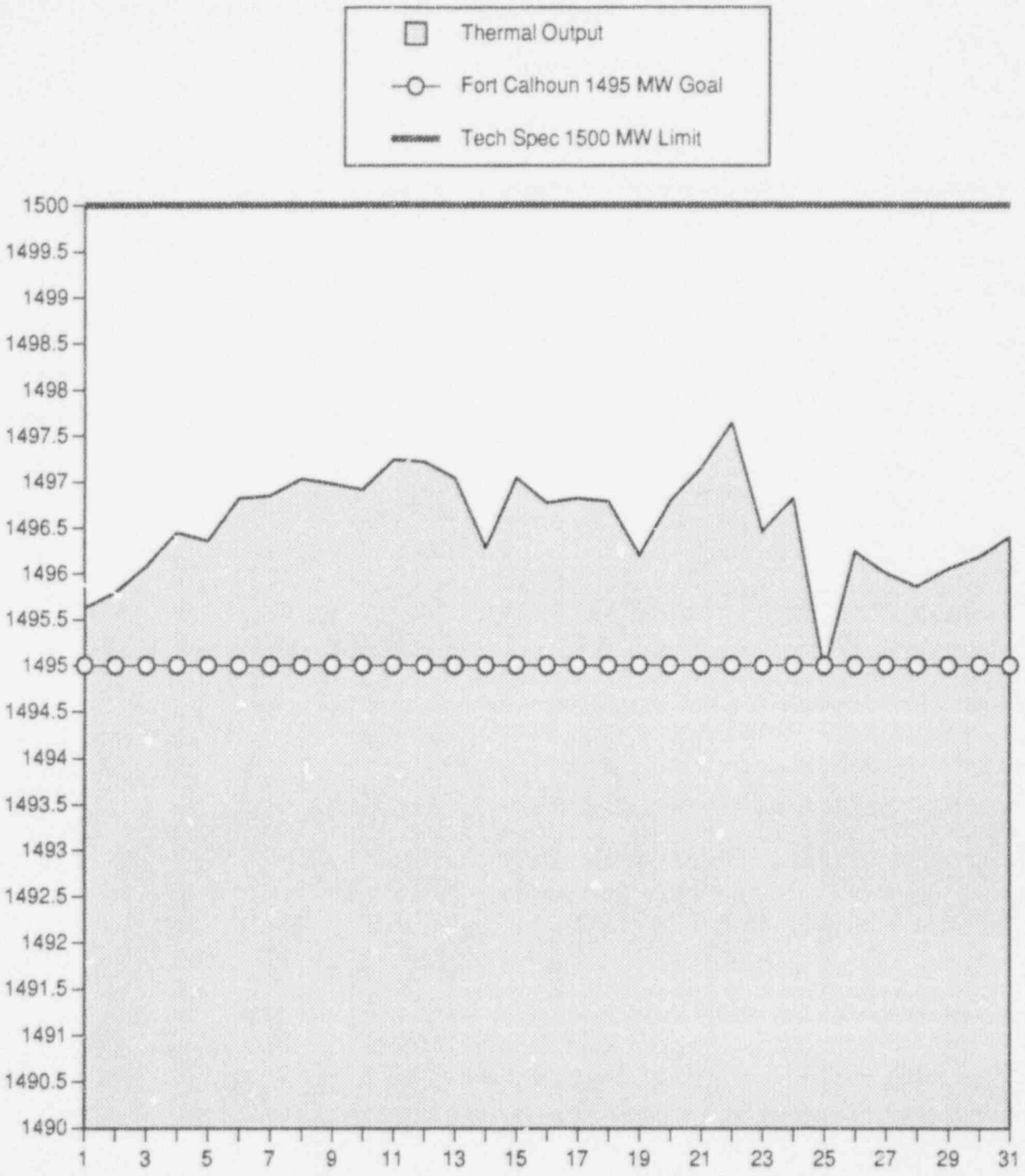
The thermal performance value for May 1994 was 99.47%. The year-to-date average monthly thermal performance value was 99.26% at the end of the month. The average monthly value for the 12 months from June 1, 1993 through May 31, 1994 was 99.5%.

Thermal Performance improved in May as a result of the backwash valve adjustments on "A" Condenser and improvements in Heater 2A level control.

The low thermal performance value for February 1994 is attributable to level control problems on heaters 3A and 5B, and to spring runoff resulting in screen carry-over and condenser fouling. Improvements made during the month of March were: warm water recirc. was taken off-line; some recovery in condenser performance was achieved due to backwashing at regular intervals; and the level control problems for heater 3A were corrected.

The 1994 Fort Calhoun year-end goal for this indicator is 99.5%. The 1993 Fort Calhoun Goal was a minimum of 99.4%. The 1995 INPO industry goal is 99.5% and the industry upper ten percentile value (for the one year period from 1/93 through 12/93) is approximately 99.9%.

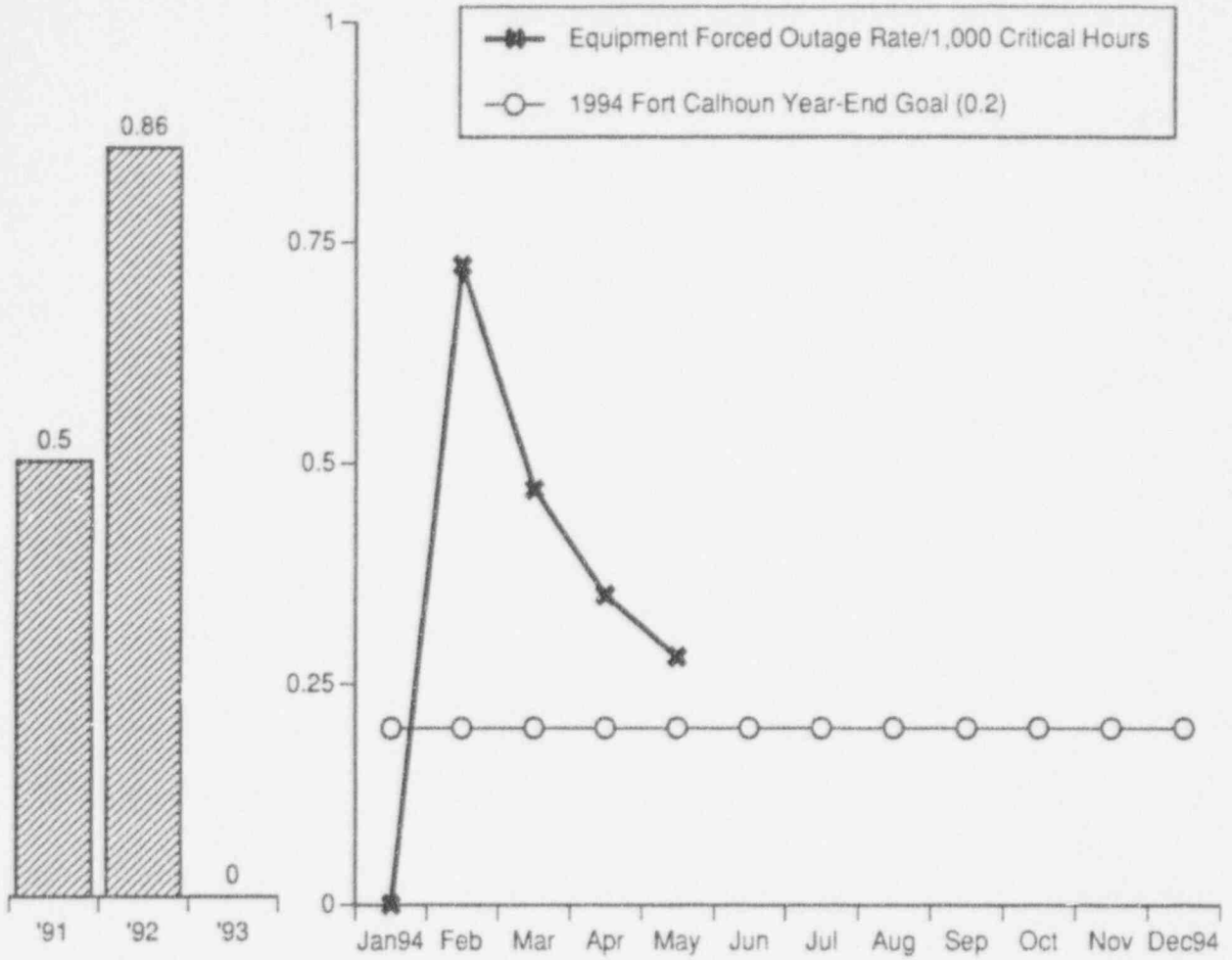
Data Source: Jaworski/Popek
Accountability: Jaworski/Popek
Adverse Trend: None



DAILY THERMAL OUTPUT

The thermal output graph displays the daily operating power level during April 1994, the 1500 thermal megawatt average technical specification limit, and the 1495 thermal megawatt Fort Calhoun goal.

Data Source: Holthaus/Gray (Manager/Source)
Accountability: Chase/Tills
Adverse Trend: None



EQUIPMENT FORCED OUTAGES PER 1,000 CRITICAL HOURS

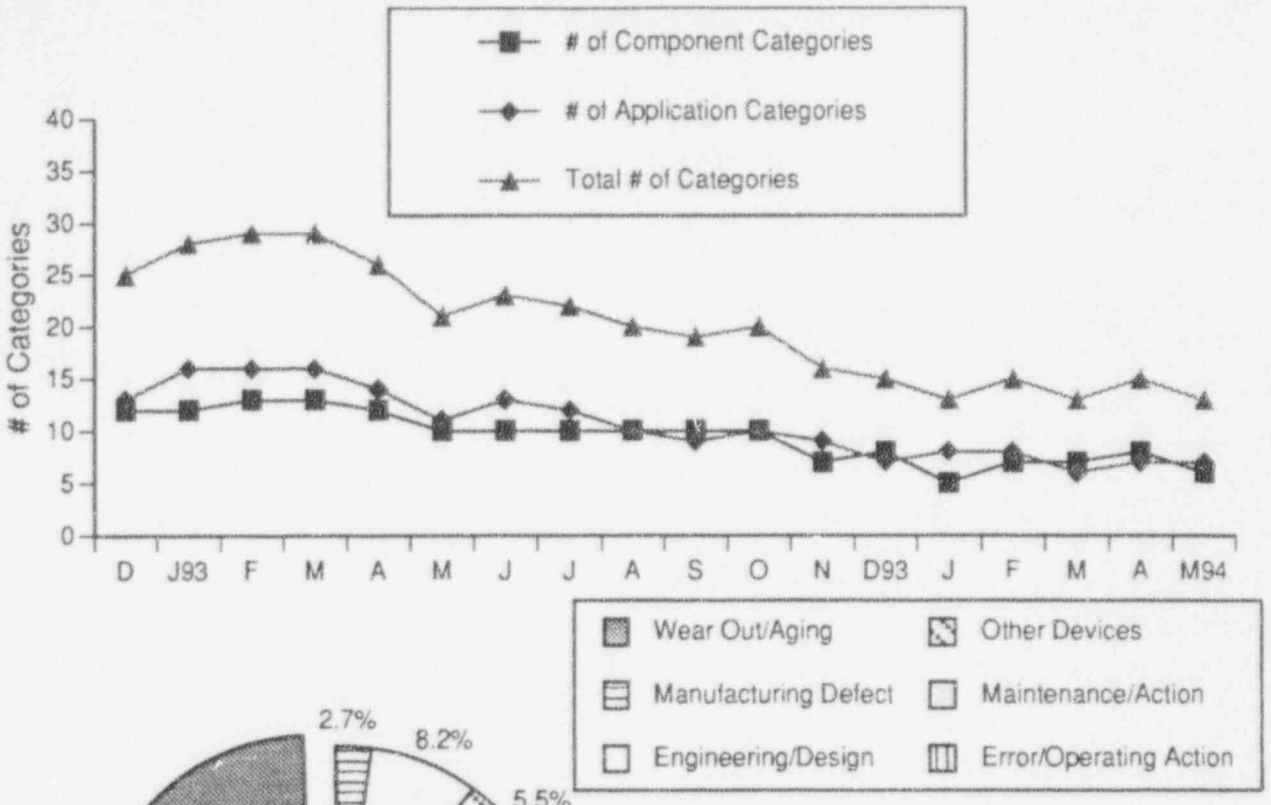
The equipment forced outage rate per 1,000 critical hours was 0.28 for the months from January through May 1994. The value for the 12 months from June 1, 1993 through May 31, 1994 is 0.14.

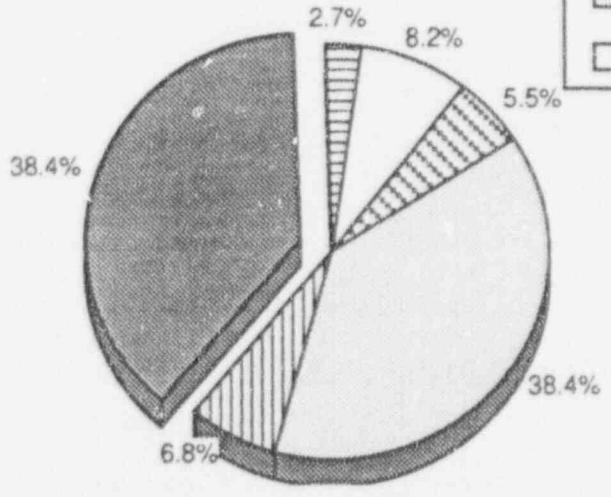
An equipment forced outage occurred on February 11, 1994 when the plant experienced an unplanned automatic reactor trip as a result of the failure of the relay for the Containment High Pressure Signal Supervisory Circuit.

An equipment forced outage occurred in August 1992 and continued through September. It was due to the failure of an AC/DC converter in the Turbine Electro Hydraulic Control System.

The 1994 Fort Calhoun year-end goal for this indicator is a maximum value of 0.20.

Data Source: Monthly Operations Report & Plant Licensee Event Reports (LERs)
Accountability: Chase/Jaworski
Adverse Trend: None





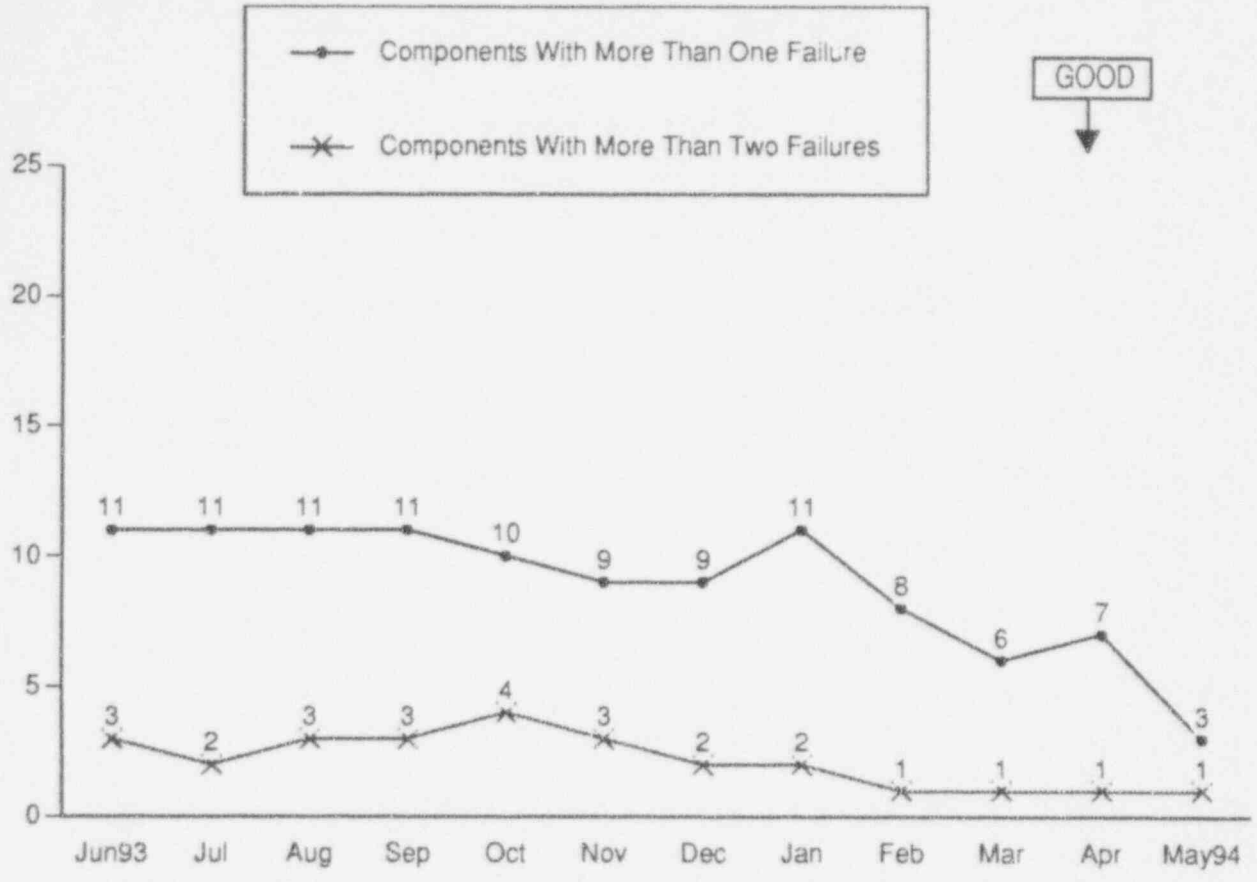
Percent of Total Failures During the Past 18 Months

COMPONENT FAILURE ANALYSIS REPORT (CFAR) SUMMARY

The top chart illustrates the number of component categories, application categories and total categories in which the Fort Calhoun Station has significantly higher (1.645 standard deviations) failure rates than the industry failure rates during the past 18 months (from August 1992 through January 1994). Fort Calhoun Station reported a higher failure rate in 6 of the 87 component categories (valves, pumps, motors, etc.) during the past 18 months. The station reported a higher failure rate in 7 of the 173 application categories (main steam stop valves, auxiliary/ emergency feedwater pumps, control element drive motors, etc.) during the past 18 months.

The pie chart depicts the breakdown by INPO cause categories (see the "Definitions" section of this report for descriptions of these categories) for the 87 failure reports that were submitted to INPO by Fort Calhoun Station during the past 18 months. Of these, the failure cause was known for 73. The pie chart reflects known failure causes.

Data Source: Jaworski/Edwards (Manager/Source)
Accountability: Jaworski/Edwards
Adverse Trend: None



REPEAT FAILURES

The Repeat Failures Indicator (formerly called the "Maintenance Effectiveness" performance indicator) was developed in response to guidelines set forth by the Nuclear Regulatory Commission's Office for Analysis and Evaluation of Operational Data (NRC/AEOD). The NRC requirement for a Maintenance Effectiveness Performance Indicator has been dropped, but station management considers it useful to continue to track repetitive component failures using the Nuclear Plant Reliability Data System (NPRDS).

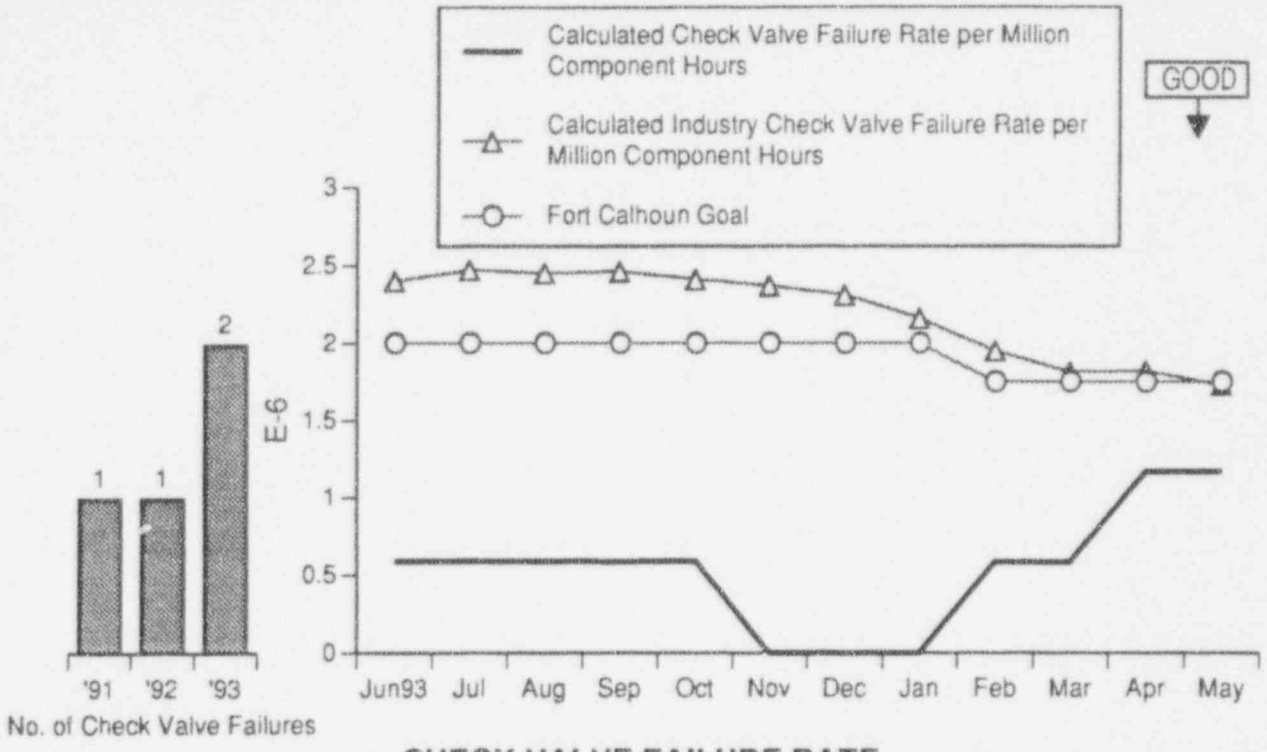
This indicator shows the number of NPRDS components with more than 1 failure during the last eighteen months and the number of NPRDS components with more than 2 failures during the last eighteen months.

During the last 18 reporting months there were 3 NPRDS components with more than 1 failure. 1 of the 3 had more than 2 failures. The tag number of the component with more than 2 failures is AC-10C. Recommendations and actions to correct these repeat component failures are listed in the quarterly Component Failure Analysis Report.

Data Source: Jaworski/Edwards (Manager/Source)

Accountability: Chase

Adverse Trend: None



CHECK VALVE FAILURE RATE

This indicator shows the calculated Fort Calhoun check valve failure rate, the Fort Calhoun goal and the industry check valve failure rate average. The failure rates are based on submitted failure reports for an 18 month time interval. They do not include failure reports outside of the 18 month time interval. The interval starts 21 months prior to the current month and ends 3 months prior to the current month. For example, the May 1994 Component Failure Analysis Report (CFAR) covers the 18 month interval from August 1, 1992 through January 31, 1994. This delay is due to the time involved in collecting and processing failure report data.

The actual number of NPRDS reportable check valve failures at Fort Calhoun Station are shown above on the graph at the left side of the page.

For May 1994, the CFAR provided the following failure rates:

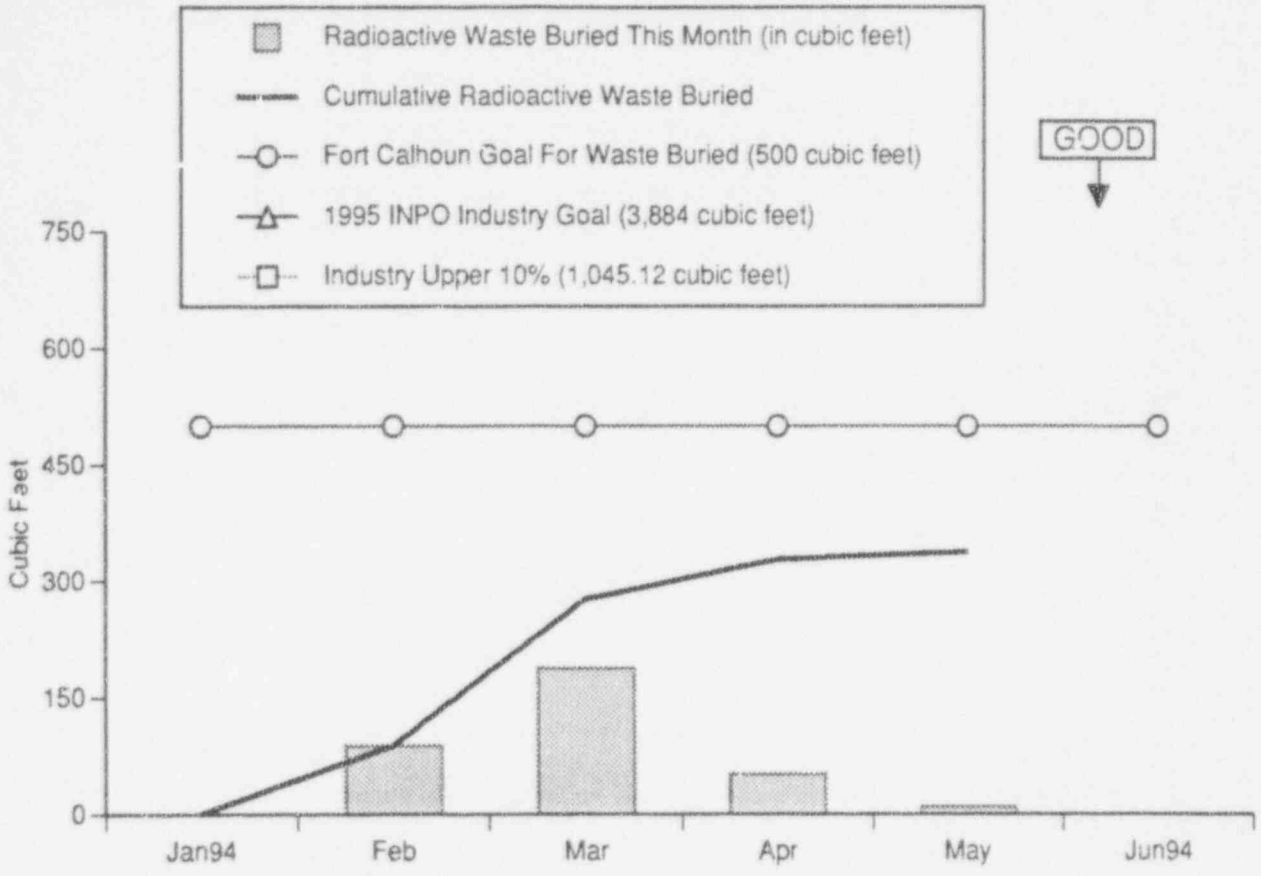
Fort Calhoun Station	1.17 E-6
Industry (excluding FCS)	1.73 E-6

The recent increase in the FCS failure rate is due to 2 reportable failures of RC-374, Pressurizer RC-4 Spray Line Check Valve; one occurred in October and another in November 1993.

The 1994 Fort Calhoun monthly goal for this indicator is ≤1.75 E-6.

Data Source: Jaworski/Edwards (Manager/Source)
Accountability: Jaworski/Rollins
Adverse Trend: None

SEP 43



VOLUME OF LOW-LEVEL SOLID RADIOACTIVE WASTE

This indicator shows the volume of the monthly radioactive waste buried, the cumulative annual total for radioactive waste buried, the Fort Calhoun and INPO goals, and the approximate industry upper 10%.

Amount of solid radwaste shipped off-site for processing during May (cubic feet)	2,080.0
Volume of Solid Radwaste Buried during May (cubic feet)	9.8
Cumulative volume of solid radioactive waste buried in 1994 (cubic feet)	337.6
Amount of solid radioactive waste in temporary storage after July 1, 1994 (cubic feet)	0.0

A graph will be added to this indicator in July 1994 to depict the amount of solid radioactive waste in temporary storage.

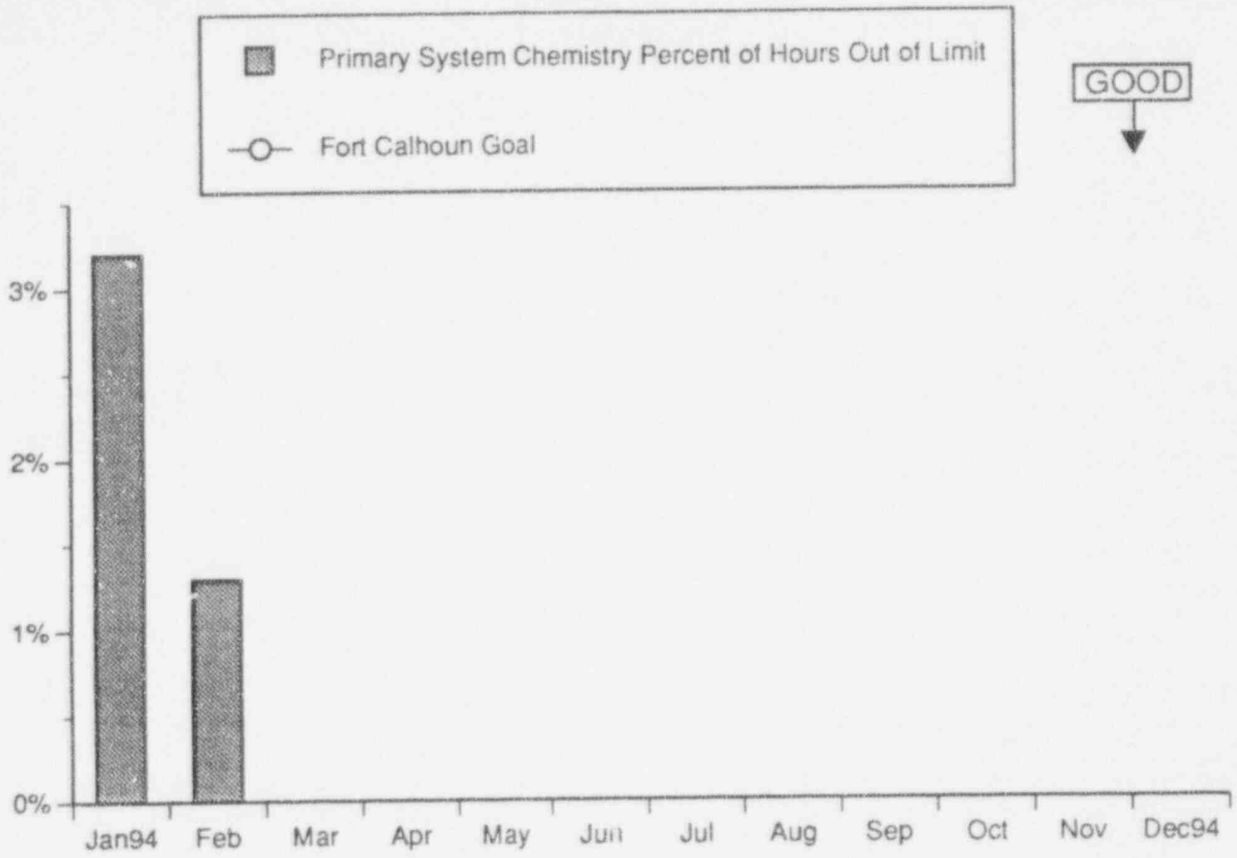
The 1994 Fort Calhoun goal for the volume of solid radioactive waste which has been buried is 500 cubic feet. The 1995 INPO industry goal is 110 cubic meters (3,884 cubic feet) per year. The industry upper ten percentile value from 1/91 through 12/93 is approximately 29.59 cubic meters (1,045.12 cubic feet) per year.

Data Source: Chase/Breuer (Manager/Source)

Accountability: Chase/Lovett

Adverse Trend: None

SEP 54



PRIMARY SYSTEM CHEMISTRY PERCENT OF HOURS OUT OF LIMIT

The Primary System Chemistry Percent of Hours Out of Limit indicator has been revised to track the primary system chemistry performance by monitoring only lithium.

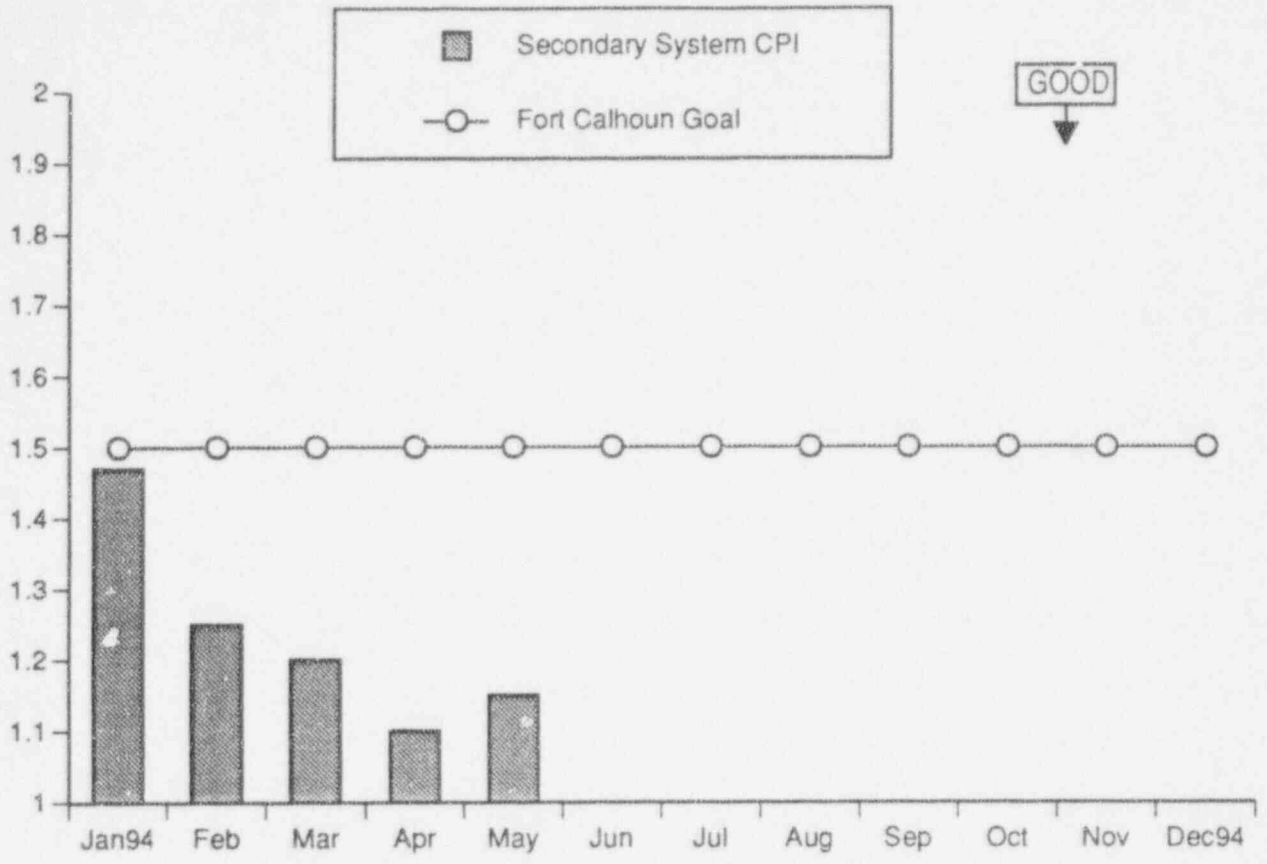
The Primary System Chemistry Percent of Hours Out of Limit was 0.0% for the month of May 1994.

The 1994 Fort Calhoun monthly goal for this indicator had not been approved at the time of this report's publication.

Data Source: Smith/Spires (Manager/Source)

Accountability: Chase/Smith

Adverse Trend: None



SECONDARY SYSTEM CHEMISTRY

Criteria for calculating the Secondary System Chemistry Performance Index (CPI) are: 1) The plant is at greater than 30% power; and 2) the power is changing at less than 5% per day.

The CPI for May 1994 was 1.15. The year-to-date average monthly CPI value was 1.23 at the end of the month.

The CPI for December 1993 was 1.92. This relatively higher number was due primarily to iron transport following the plant start-up.

The 1994 Fort Calhoun monthly goal for the CPI is a maximum value of 1.5.

The CPI calculation is different from that reported in 1993 in that it reflects the recent INPO revision to the calculation. This revision addresses the penalties for the beneficial effect of alternative chemistry, i.e., morpholine, such as used at Fort Calhoun Station, and focuses more on specific impurities.

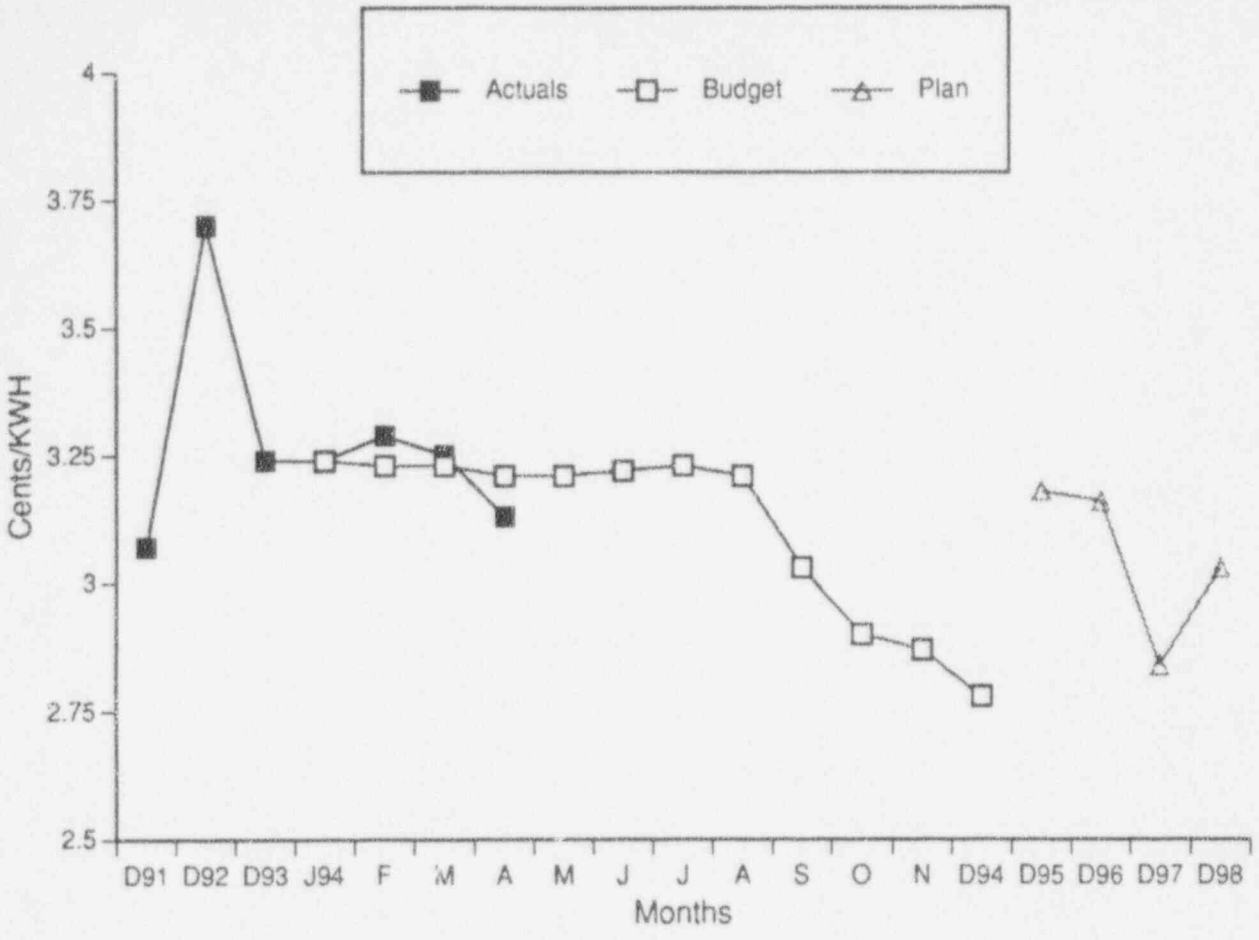
Data Source: Smith/Spires (Manager/Source)

Accountability: Chase/Smith

Positive Trend

COST

Goal: To operate Fort Calhoun Station in a manner that cost effectively maintains nuclear generation as a viable source of electricity.



CENTS PER KILOWATT HOUR

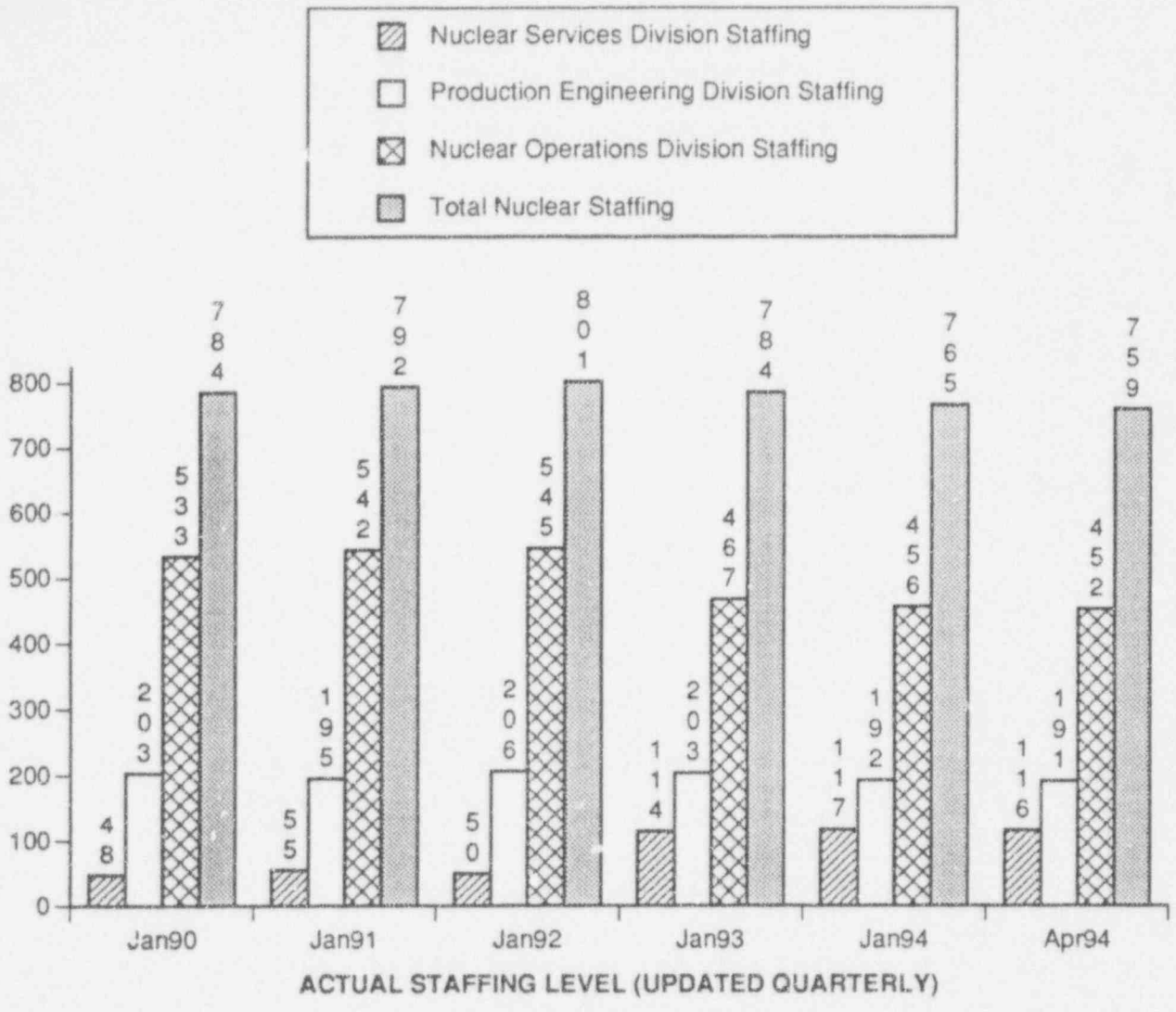
The purpose of this indicator is to quantify the economical operation of Fort Calhoun Station.

The cents per kilowatt hour indicator represents the budget and actual cents per kilowatt hour on a 12 month rolling average for the current year. The basis for the budget curve is the approved 1993 and 1994 revised budget. The basis for the actual curve is the Financial and Operating Report. The information provided is one month behind the reporting month due to the time required for processing the data.

The December 31 amounts are also shown for the prior years 1991, 1992 and 1993. In addition, the report shows the plan amounts for the years 1995 through 1998 for reference. The basis for the dollars are the Nuclear Long Range Financial Plan and the 1994 Corporate Planning and Budget Review. The basis for the generation is provided by Nuclear Fuels.

The unit price is averaging lower than the budget due to expenses being below budget while generation remains on budget.

Data Source: Scofield/Jamieson (Manager/Source)
Accountability: Scofield
Adverse Trend: None



STAFFING LEVEL

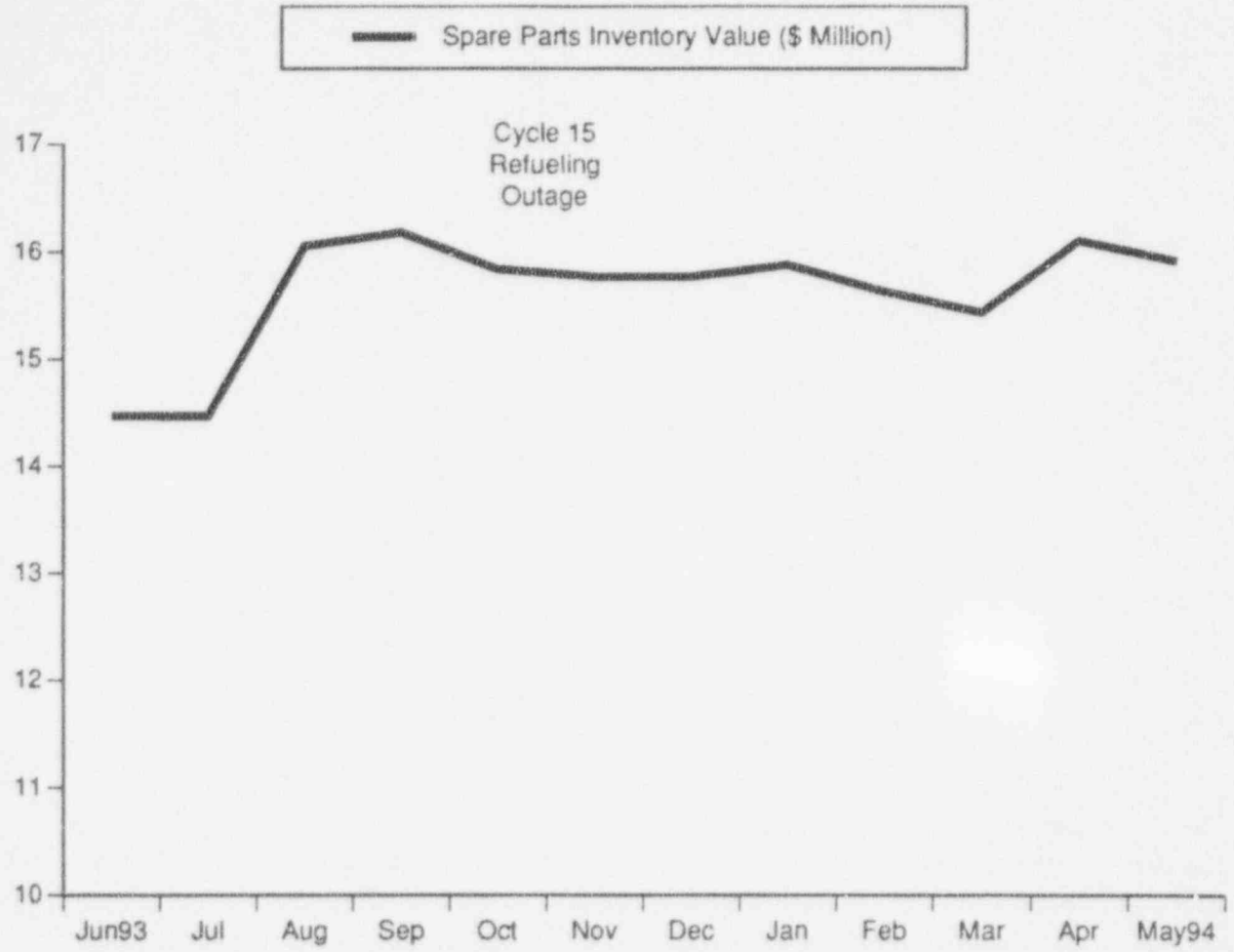
The actual staffing levels for the three Nuclear Divisions are shown on the graph above.

The authorized staffing levels for 1994 are:

1994 Authorized Staffing
453 Nuclear Operations Division
191 Production Engineering Division
117 Nuclear Services Division

Data Source: Ponec (Manager & Source)
Accountability: Ponec
Adverse Trend: None

SEP 24



SPARE PARTS INVENTORY VALUE

The spare parts inventory value at the Fort Calhoun Station at the end of May 1994 was reported as $15,916,197.

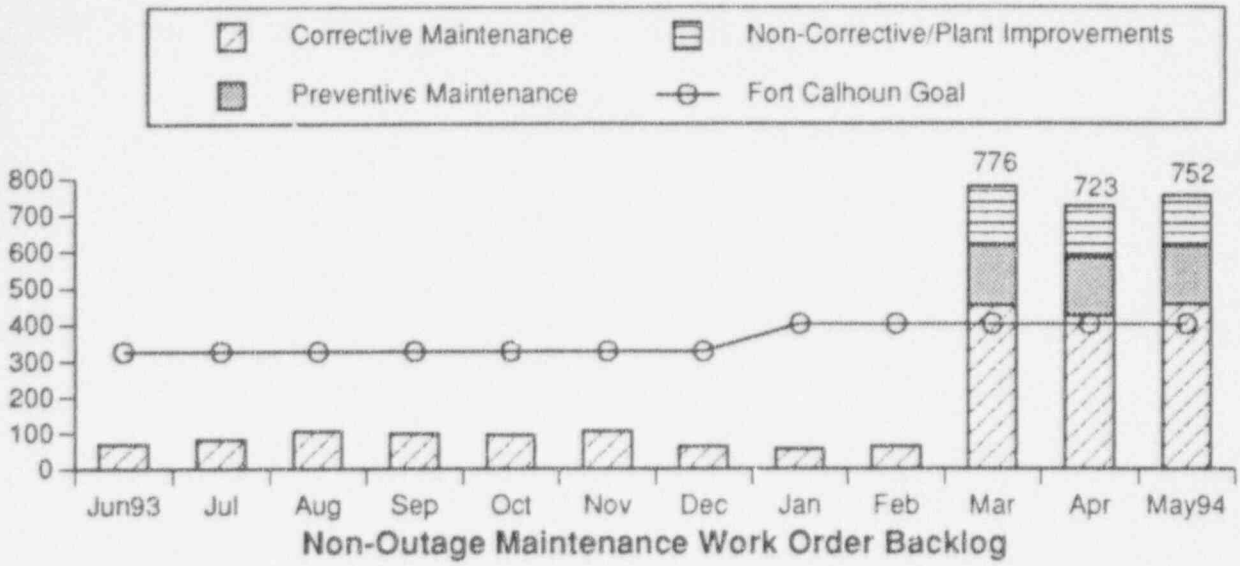
Data Source: Steele/Huliska (Manager/Source)

Accountability: Willrett/McCormick

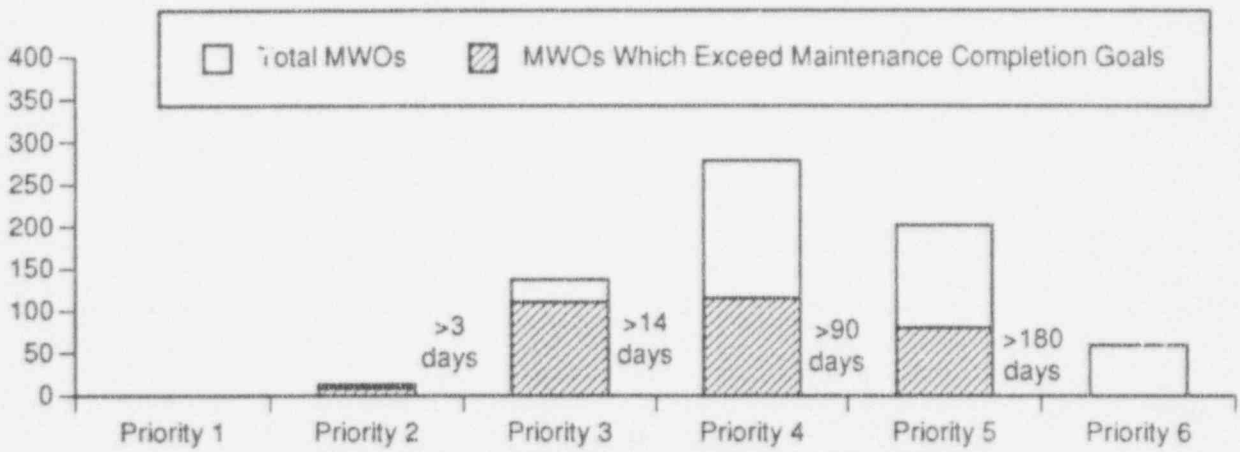
Adverse Trend: None

DIVISION AND DEPARTMENT PERFORMANCE INDICATORS

These indicators may be deleted from this report if the responsible group contacts the Manager - Station Engineering to request their removal. Indicators referencing SEP items require documentation to ensure that the original intent and scope of the SEP item will not be altered by removal of the indicator from this report.



Non-Outage Maintenance Work Order Backlog



Non-Outage Maintenance Work Order Aging

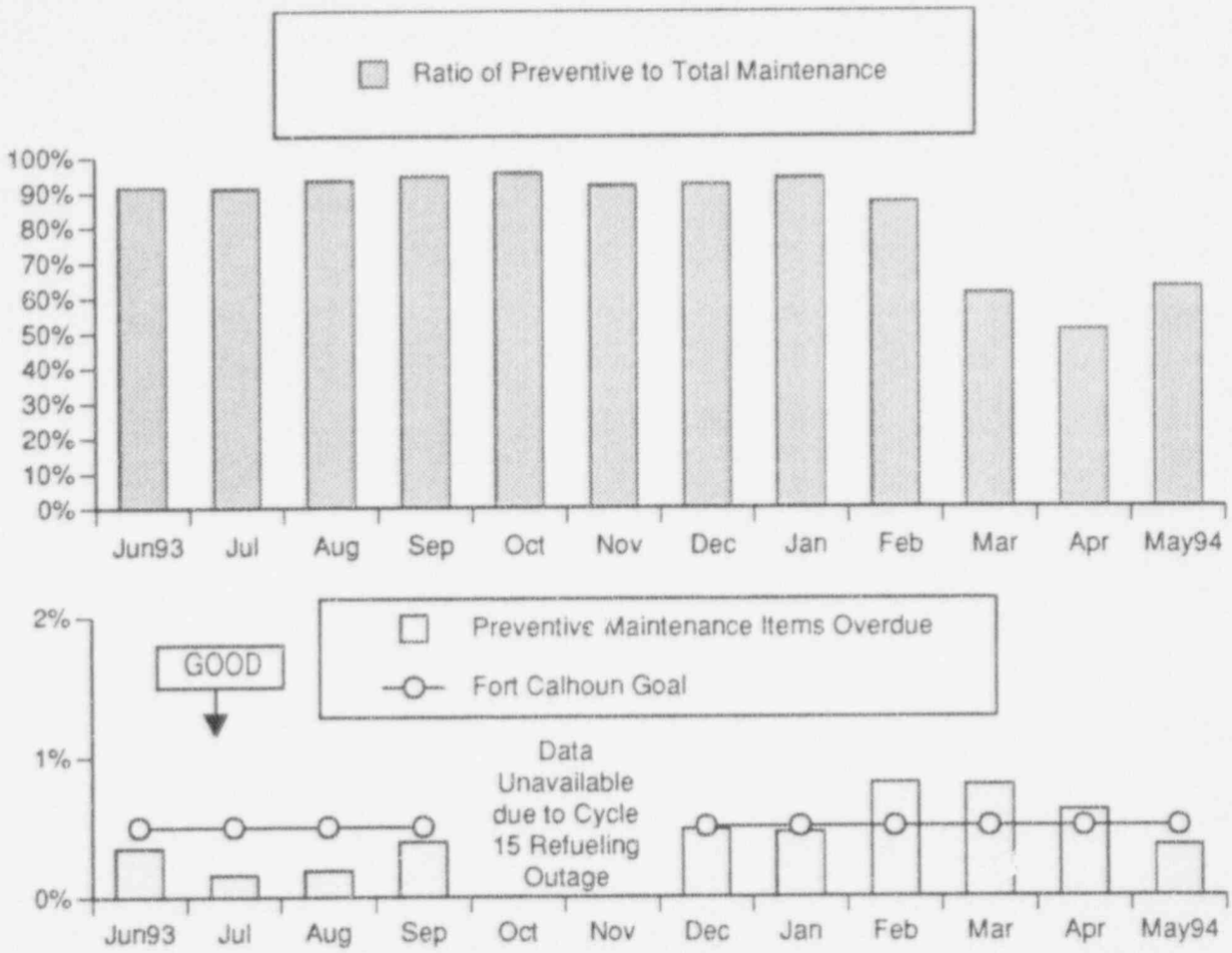
MAINTENANCE WORKLOAD BACKLOGS

This indicator shows the backlog of non-outage Maintenance Work Orders remaining open at the end of the reporting month. It also includes a breakdown by maintenance classification and priority. The 1994 goal for this indicator has been changed to 400 non-outage corrective MWOs. To ensure that the MWO backlog is worked in a timely manner, non-outage maintenance completion goals have been established as:

		Goal
Priority 1	Emergency	N/A
Priority 2	Immediate Action	3 days
Priority 3	Operations Concern	14 days
Priority 4	Essential Corrective	90 days
Priority 5	Non-Essential Corrective	180 days
Priority 6	Non-Corrective/Plant Improvements	N/A

Data Source: Chase/Schmitz (Manager/Source)
Accountability: Chase/Faulhaber
Adverse Trend: None

SEP 36



RATIO OF PREVENTIVE TO TOTAL MAINTENANCE & PREVENTIVE MAINTENANCE ITEMS OVERDUE

The top graph shows the ratio of completed non-outage preventive maintenance to total completed non-outage maintenance.

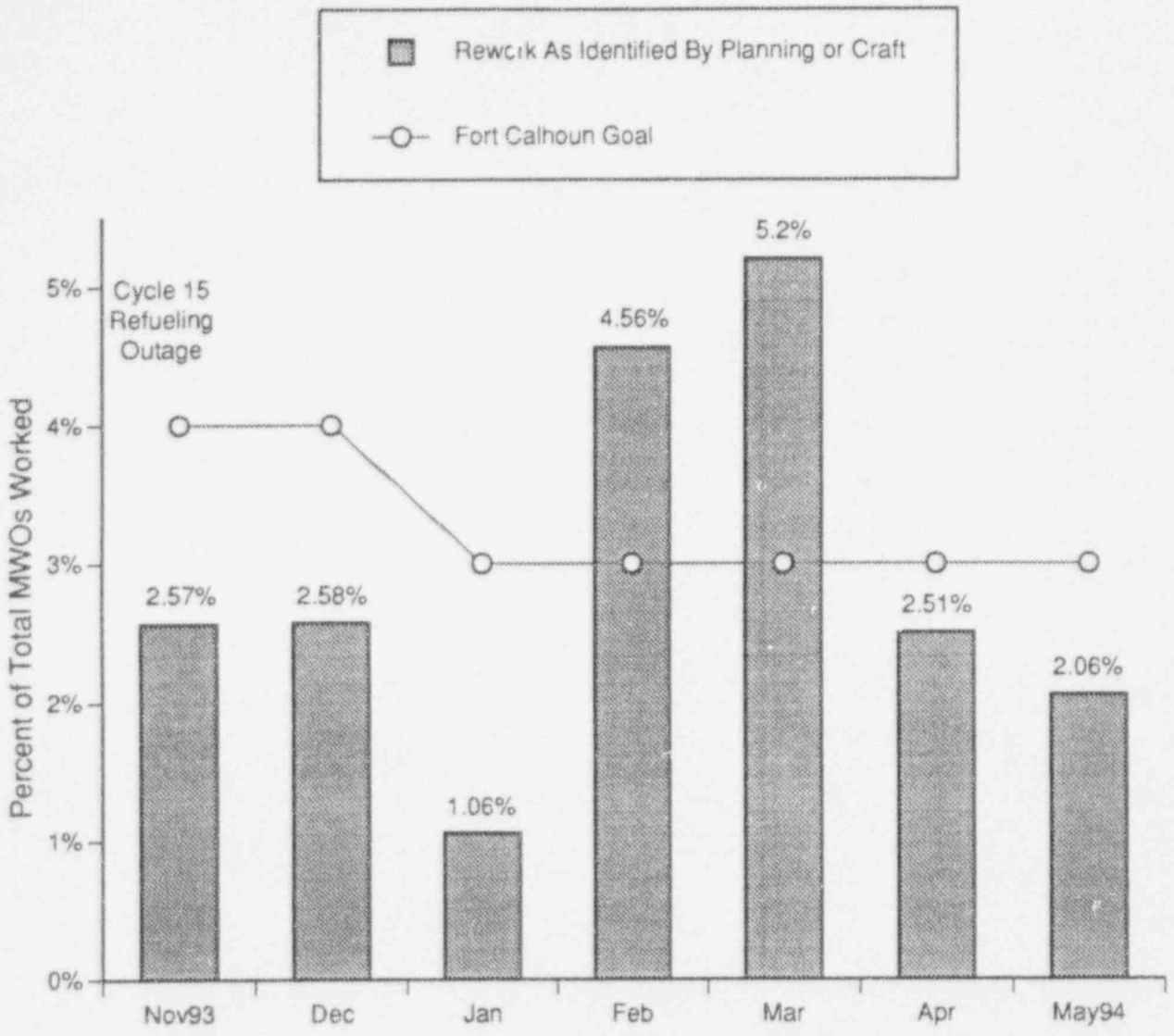
The ratio of preventive to total maintenance was 62.7% for the month of May 1994. The trend of this ratio reflects the revised definition of corrective maintenance which was implemented in March.

The lower graph shows the percentage of preventive maintenance items overdue. During May, 558 PM items were completed. 2 of these PM items (0.36% of the total) were not completed within the allowable grace period or administratively closed.

The 1994 Fort Calhoun monthly goal for the percentage of preventive maintenance items overdue is a maximum of 0.5%.

Accountability: Chase/Faulhaber
Data Source: Chase/Schmitz/Melstad (Manager/Sources)
Adverse Trend: None

SEP 41



PERCENTAGE OF TOTAL MWOs COMPLETED PER MONTH IDENTIFIED AS REWORK

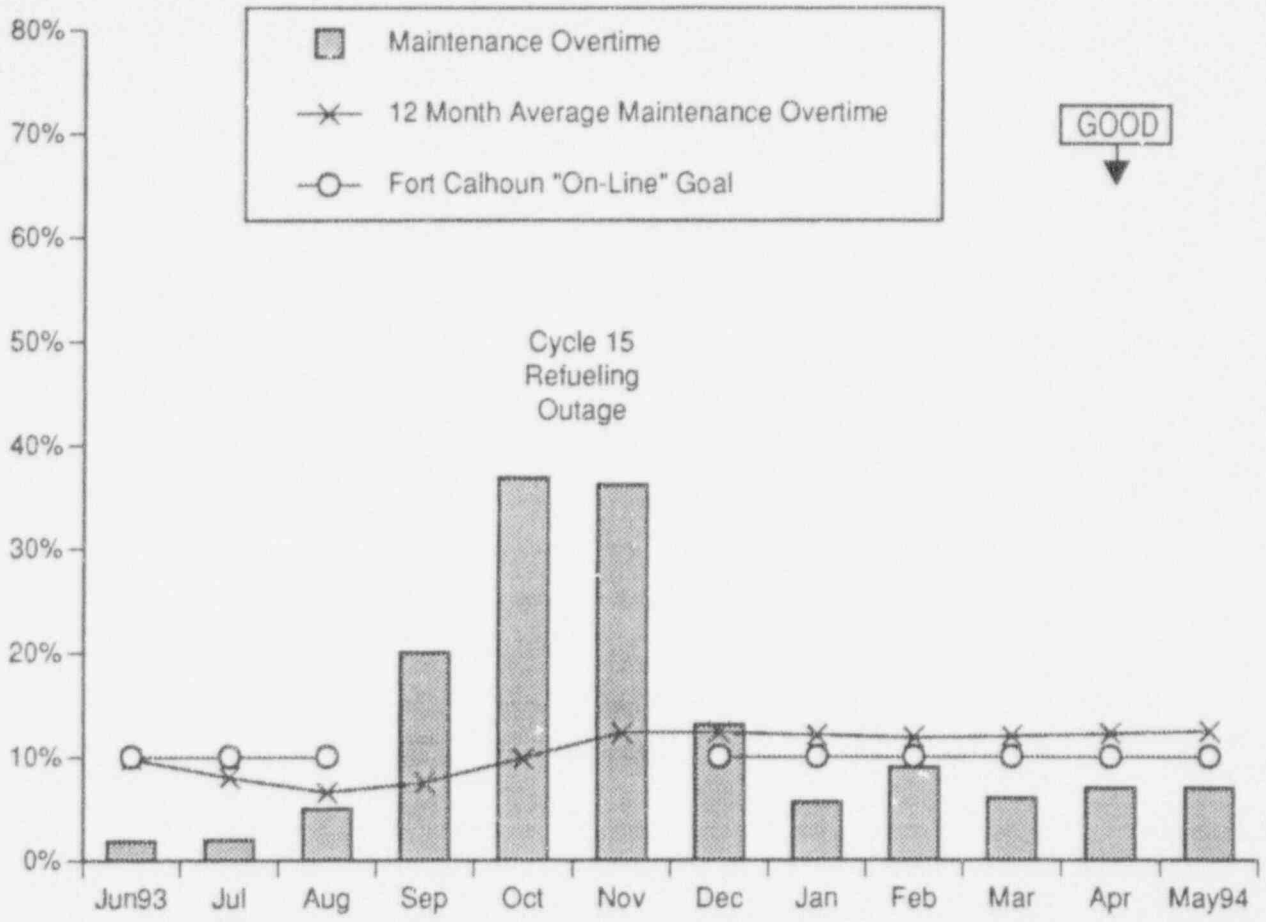
This graph indicates the percentage of total MWOs completed per month identified as rework. Rework activities are identified by maintenance planning and craft.

The 1994 Fort Calhoun monthly goal for this indicator is <3%.

Data Source: Faulhaber/Schmitz (Manager/Source)

Accountability: Chase/Faulhaber

Adverse Trend: None



MAINTENANCE OVERTIME

The Maintenance Overtime Indicator monitors the ability to perform the desired maintenance activities with the allotted resources.

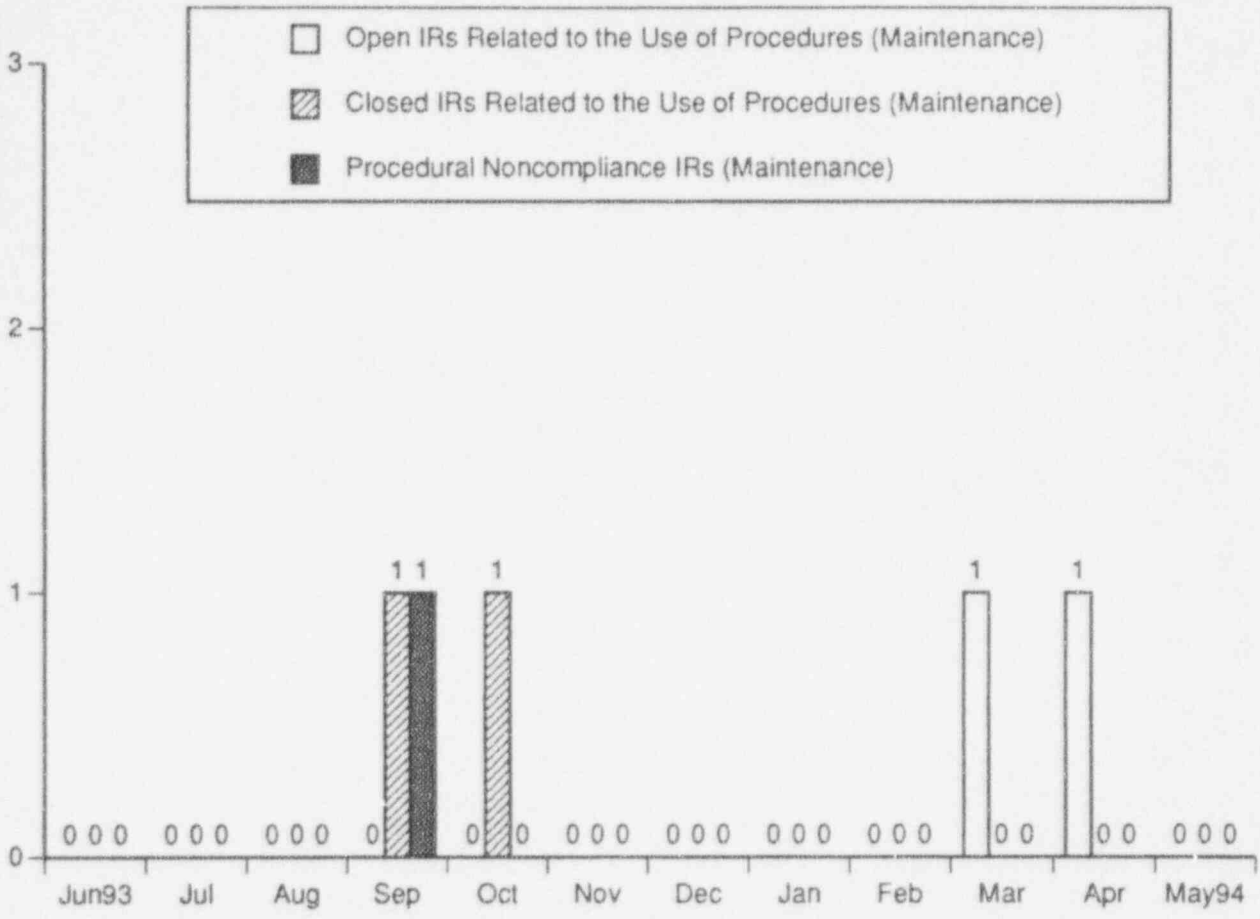
The percent of overtime hours with respect to normal hours was reported as 7.0% for the month of May 1994. The 12 month average percentage of overtime hours with respect to normal hours was reported as 12.46% at the end of the month.

The 1994 Fort Calhoun monthly "on-line" goal for this indicator is a maximum value of 10%.

Data Source: Chase/Schmitz (Manager/Source)

Accountability: Chase/Faulhaber

Positive Trend



PROCEDURAL NONCOMPLIANCE INCIDENTS (MAINTENANCE)

This indicator shows the number of open Maintenance Incident Reports (IRs) that are related to the use of procedures, the number of closed IRs that are related to the use of procedures, and the number of open and closed IRs that received procedural noncompliance cause codes for each of the last twelve months.

There were no procedural noncompliance incidents for maintenance reported for the month of May 1994.

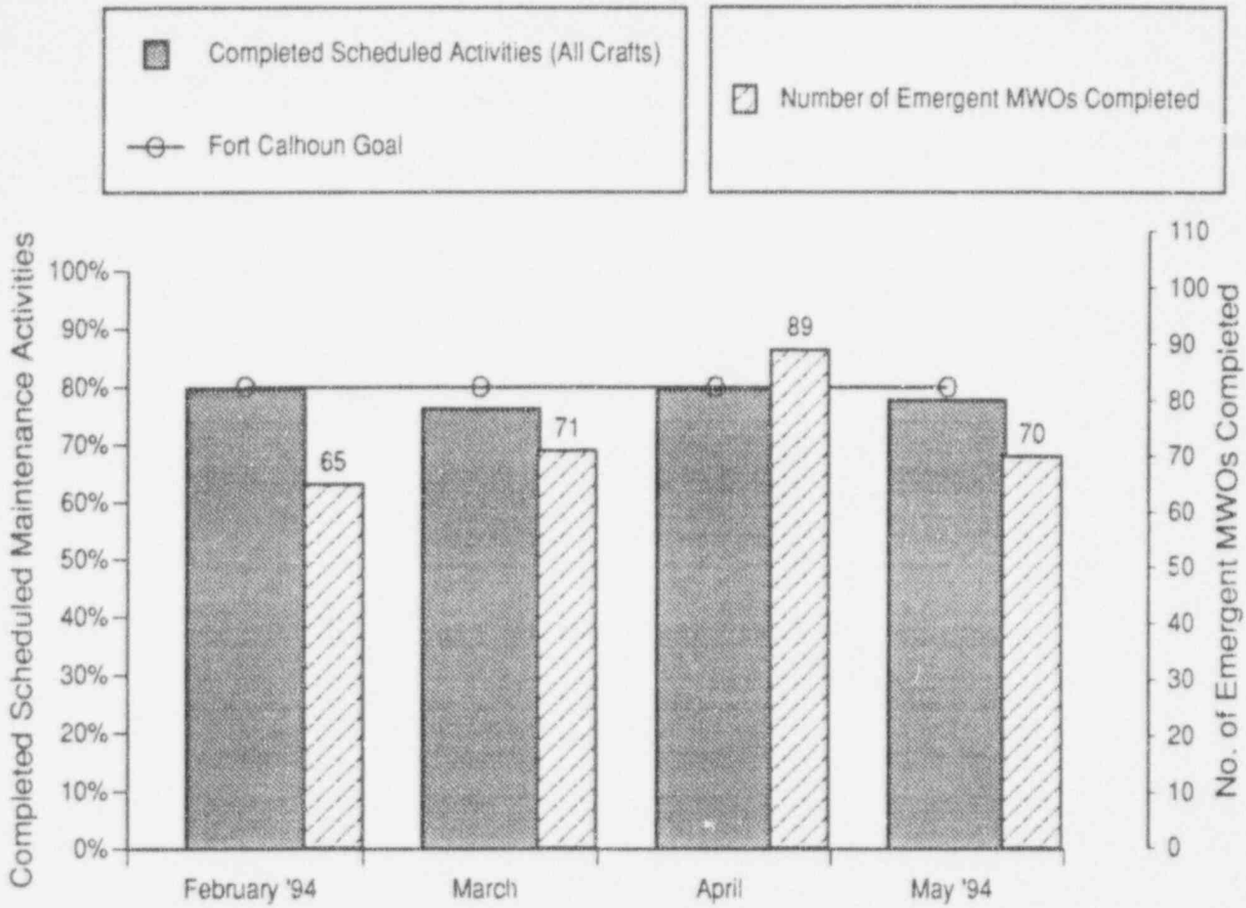
There was 1 procedural noncompliance incident (IR 930225) reported in September 1993.

Data Source: Chase/Keister (Manager/Source)

Accountability: Chase/Conner

Adverse Trend: None

SEP 15, 41 & 44



PERCENT OF COMPLETED SCHEDULED MAINTENANCE ACTIVITIES (ALL MAINTENANCE CRAFTS)

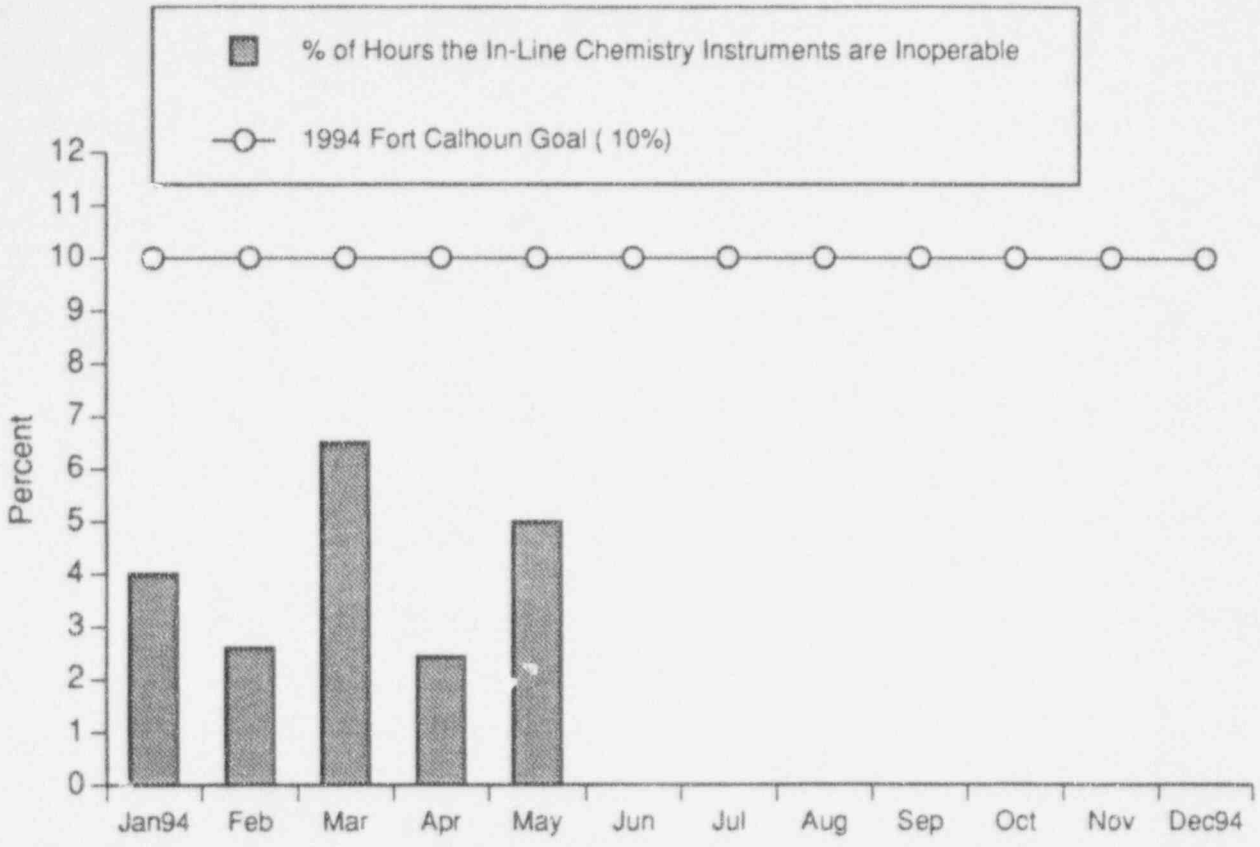
This indicator shows the percent of the number of completed scheduled maintenance activities as compared to the number of scheduled maintenance activities concerning all Maintenance Crafts. Maintenance activities include MWRs, MWOs, STs, PMOs, calibrations, and miscellaneous maintenance activities. The number of emergent MWOs completed for the month is also shown.

The percent of the number of completed scheduled maintenance activities as compared to the number of scheduled maintenance activities for May 1994 was 77.8%. Also, there were 70 emergent MWOs completed during the month.

The 1994 Fort Calhoun monthly goal for completed scheduled maintenance activities is 80%.

Data Source: Chase/Schmitz (Manager/Source)
Accountability: Chase/Faulhaber
Adverse Trend: None

SEP 33



IN-LINE CHEMISTRY INSTRUMENTS OUT-OF-SERVICE

This indicator shows the percentage of hours the in-line chemistry system instruments are inoperable for the reporting month. The chemistry systems involved in this indicator include the Secondary System and the Post Accident Sampling System (PASS).

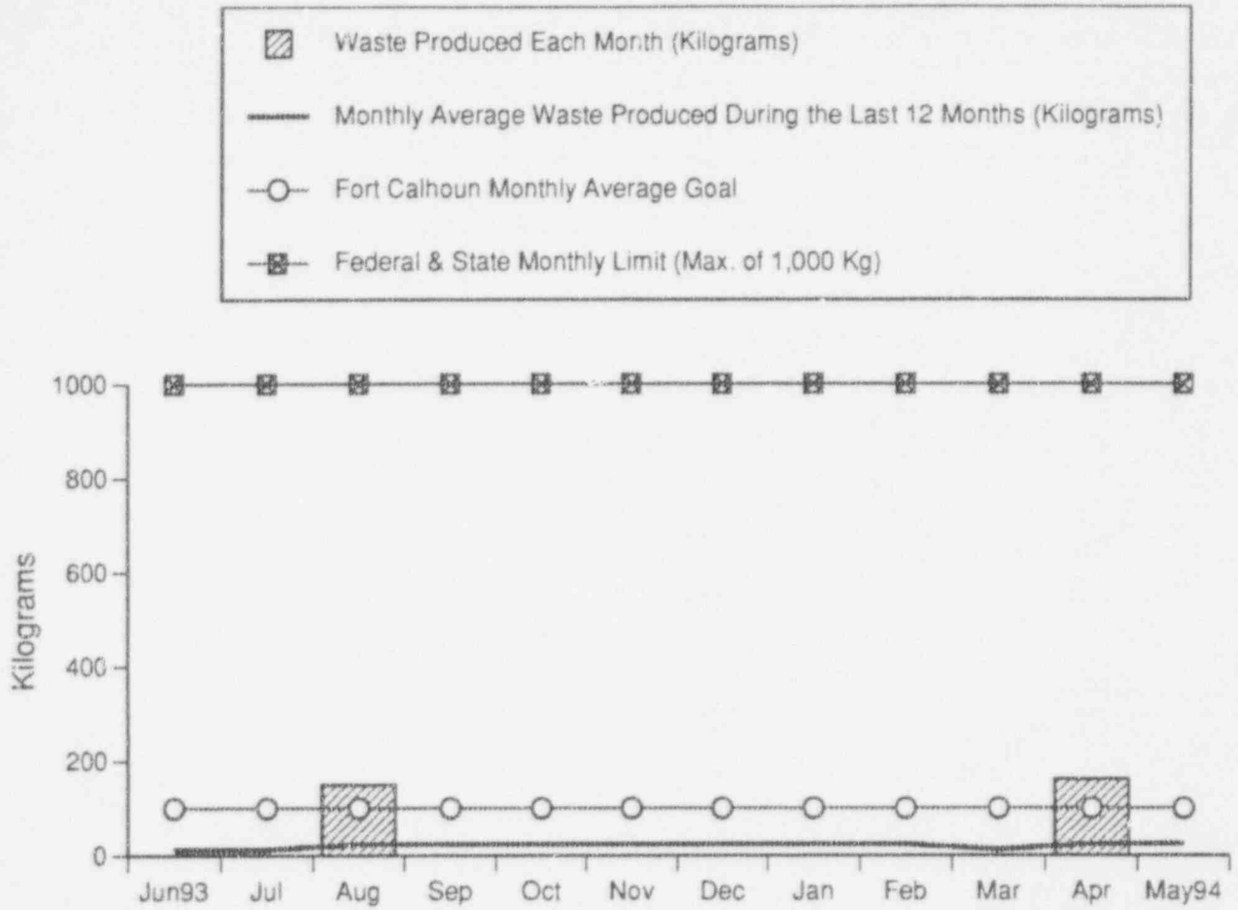
At the end of May 1994 the percentage of hours the in-line chemistry system instruments were inoperable was 4.99%.

It should be noted the total number of in-line chemistry instruments considered within this performance indicator has been increased to 51. This is the result of including the new Waterplant panel, AI-160 (5 instruments), and the chemical lagoon pH sensor, PHE-1519B, as well as the deletion of 2 PASS detectors.

The entire instrument channel is considered inoperative if: 1) the instrument is inoperative, 2) the chart recorder associated with the instrument is inoperative, or 3) the alarm function associated with the instrument is inoperative. If any of the functions listed above are not operational, then the instrument is not performing its intended function.

The 1994 Fort Calhoun monthly goal for this indicator is a maximum of 10% in-line chemistry instruments inoperable. 5 out-of-service chemistry instruments make up 10% of all the chemistry instruments that are counted for this indicator.

Data Source: Chase/Reneaud (Manager/Source)
Accountability: Chase/Jaworski
Positive Trend



HAZARDOUS WASTE PRODUCED

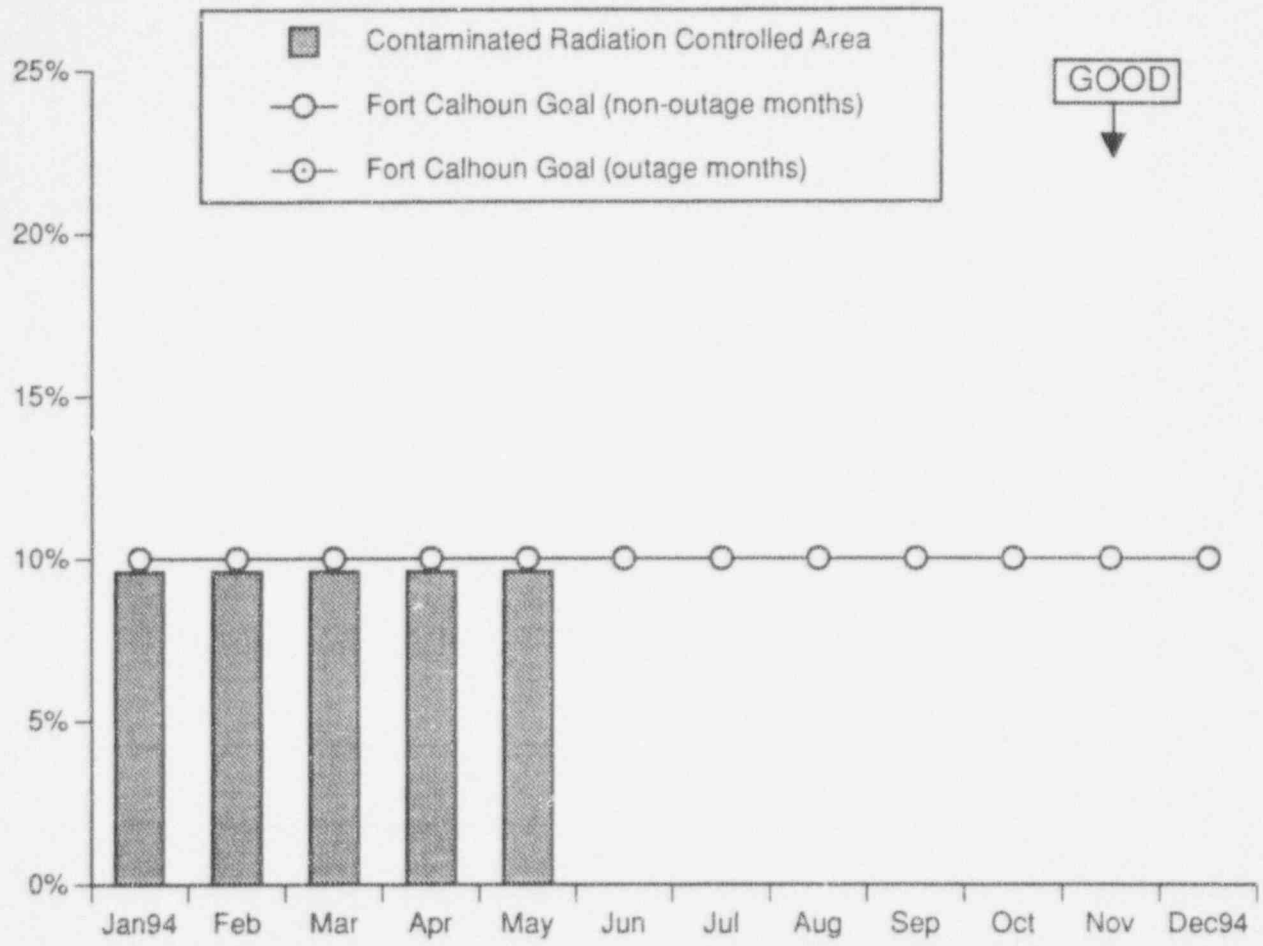
This indicator shows the total amount of hazardous waste produced by the Fort Calhoun Station each month, the monthly average goal and the monthly average total for hazardous waste produced during the last 12 months. This hazardous waste consists of non-halogenated hazardous waste, halogenated hazardous waste, and other hazardous waste produced.

During the month of May 1994, 0.0 kilograms of non-halogenated hazardous waste was produced, 0.0 kilograms of halogenated hazardous waste was produced, and 0.0 kilograms of other hazardous waste was produced. The total for hazardous waste produced during the last 12 months is 310.9 kilograms. The monthly average for hazardous waste produced during the last 12 months is 25.9 kilograms.

Hazardous waste is counted based upon a full drum of waste.

The 1994 Fort Calhoun monthly average goal for this indicator is a maximum of 100 kilograms.

Date Source: Chase/Smith (Manager/Source)
Accountability: Chase/Smith
Positive Trend



CONTAMINATED RADIATION CONTROLLED AREA

This indicator shows the percentage of the RCA that is contaminated based on the total square footage. The 1994 monthly non-outage goal is a maximum of 10% contaminated RCA and the monthly outage goal is a maximum of 13% contaminated RCA.

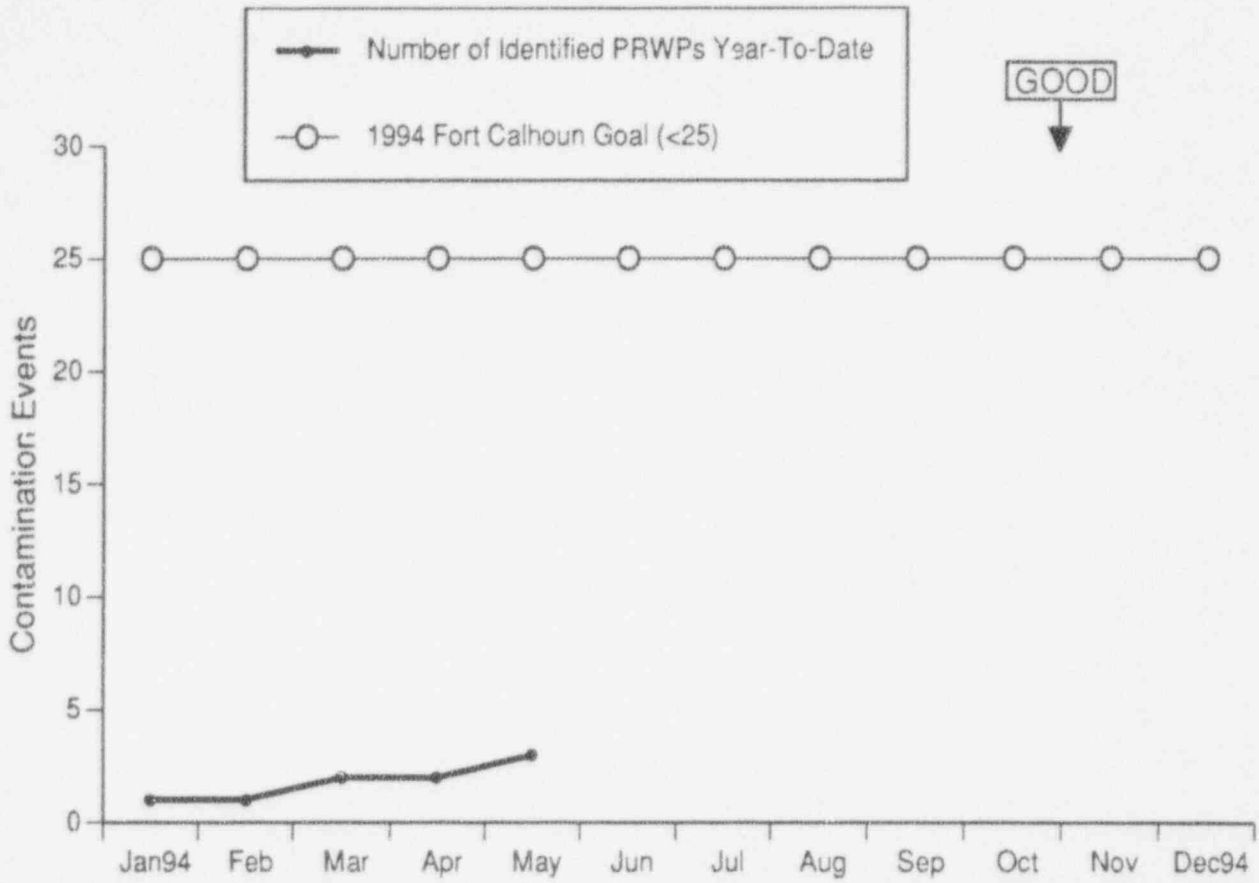
At the end of May 1994, the percentage of the total square footage of the RCA that was contaminated was 9.6%.

Data Source: Chase/Gundal (Manager/Source)

Accountability: Chase/Lovett

Positive Trend

SEP 54



RADIOLOGICAL WORK PRACTICES PROGRAM

The Radiological Work Practices Program Indicator shows the number of Poor Radiological Work Practices (PRWPs) which were identified during the reporting month.

The number of PRWPs which are identified each month should indirectly provide a means to qualitatively assess supervisor accountability for their workers' radiological performance.

During the month of May 1994, there was 1 PRWP identified. The PRWP occurred when an individual was contaminated while moving fuel for the rerack.

There have been 3 PRWPs in 1994.

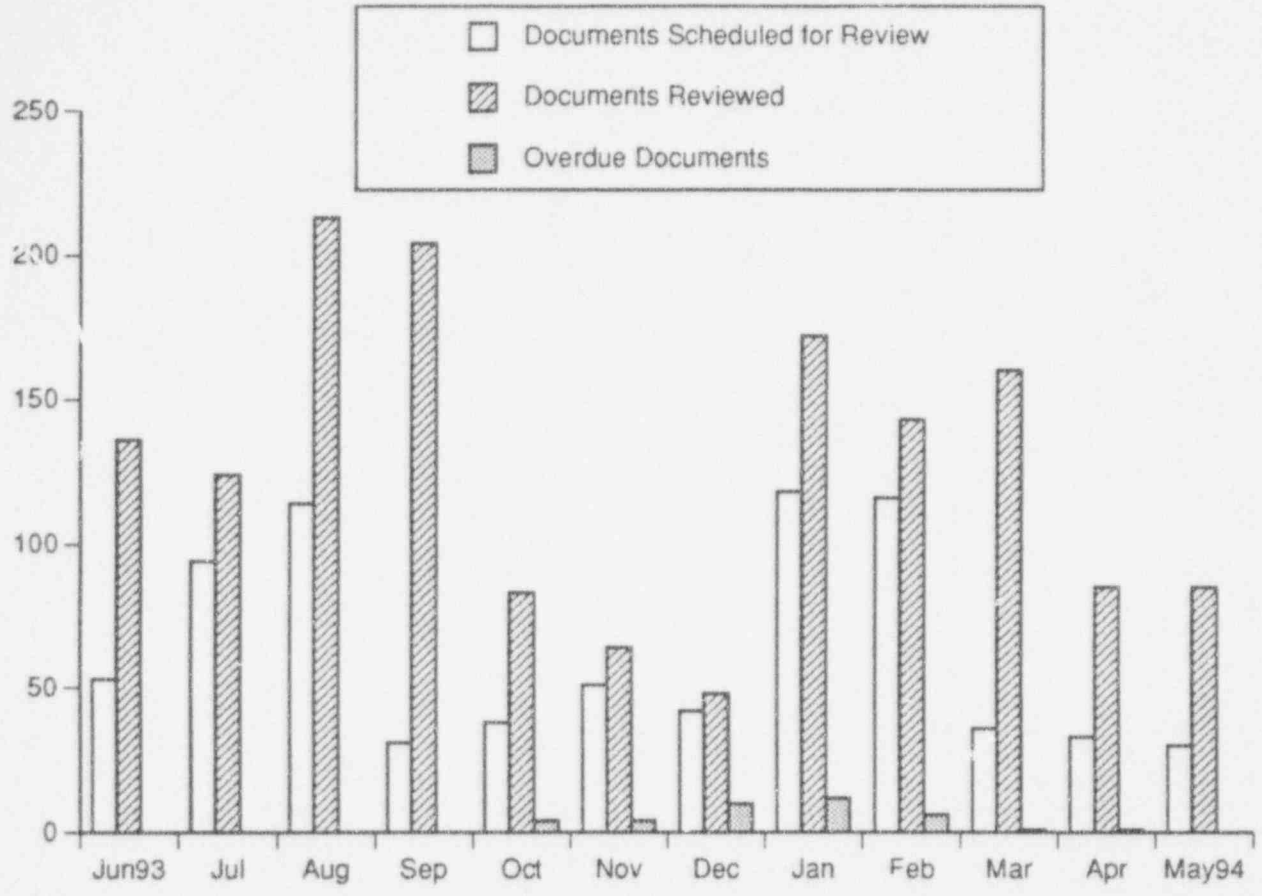
The 1994 year-end goal for the number of PRWPs is a maximum of 25.

Data Source: Chase/Little (Manager/Source)

Accountability: Chase/Lovett

Adverse Trend: None

SEP 52



DOCUMENT REVIEW

This indicator shows the number of completed, scheduled, and overdue (greater than 6 months past the scheduled due date) biennial reviews for the reporting month. These document reviews are performed in-house and include Special Procedures, the Site Security Plan, Maintenance Procedures, Preventive Maintenance Procedures, and the Operating Manual.

During May 1994 there were 30 document reviews scheduled, while 85 document reviews were completed. At the end of the month, there were no document reviews more than 6 months overdue.

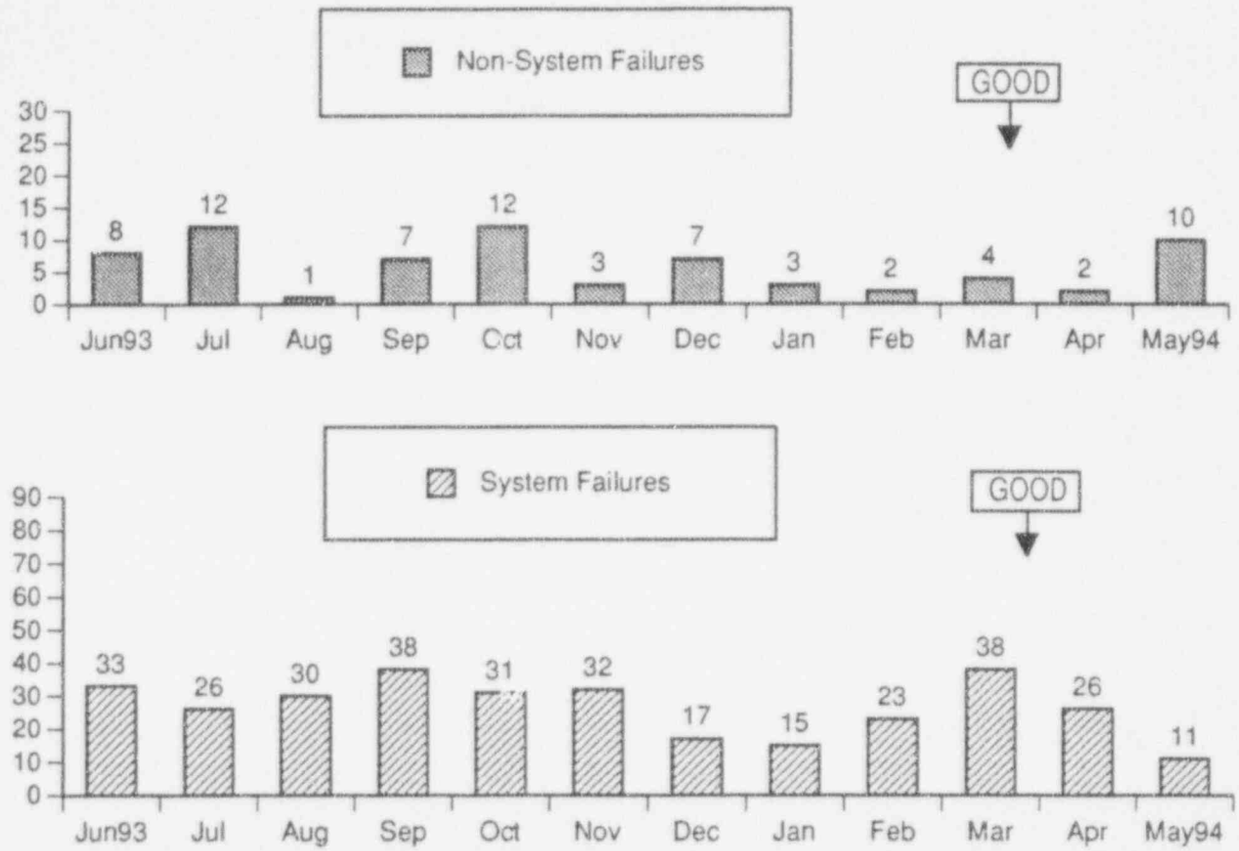
There were 27 new documents initiated in May.

Data Source: Chase/Keister (Manager/Source)

Accountability: Chase/Jaworski

Adverse Trend: None

SEP 46



LOGGABLE/REPORTABLE INCIDENTS (SECURITY)

The Loggable/Reportable Incidents (Security) Indicator is depicted in two separate graphs. The top graph depicts the total number of loggable/reportable non-system failures concerning Security Badges, Access Control and Authorization, Security Force Error, and Unsecured Doors. The bottom graph shows the total number of loggable/ reportable incidents concerning system failures which occurred during the reporting month.

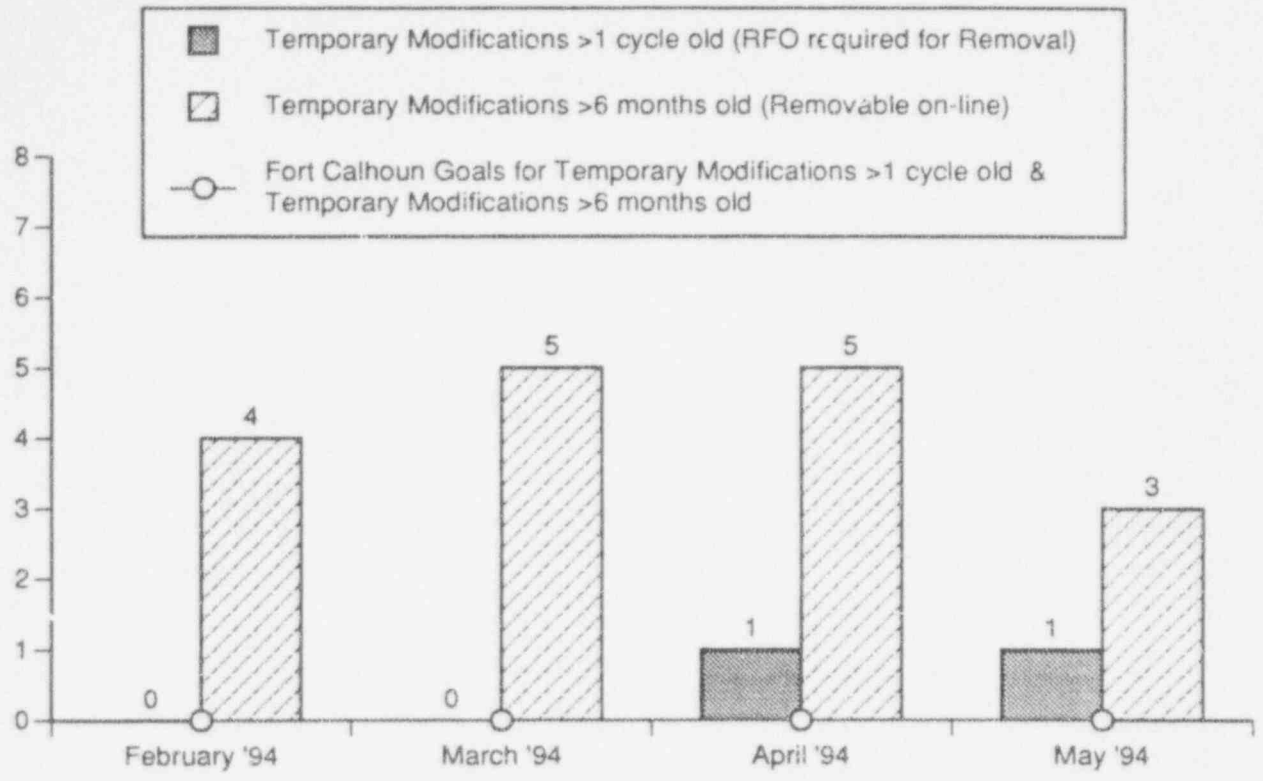
During the month of May 1994, there were 21 loggable/reportable incidents identified. System failures accounted for 11 (52%) of the loggable/reportable incidents. System failures declined 58% during the reporting month. Non-system failures increased from 2 in April 1994 to 10 in May. There were 5 lost/unattended security badge incidents which contributed significantly to the rise in non-system failures.

Data Source: Sefick/Woerner (Manager/Source)

Accountability: Sefick

Adverse Trend: None

SEP 58



TEMPORARY MODIFICATIONS

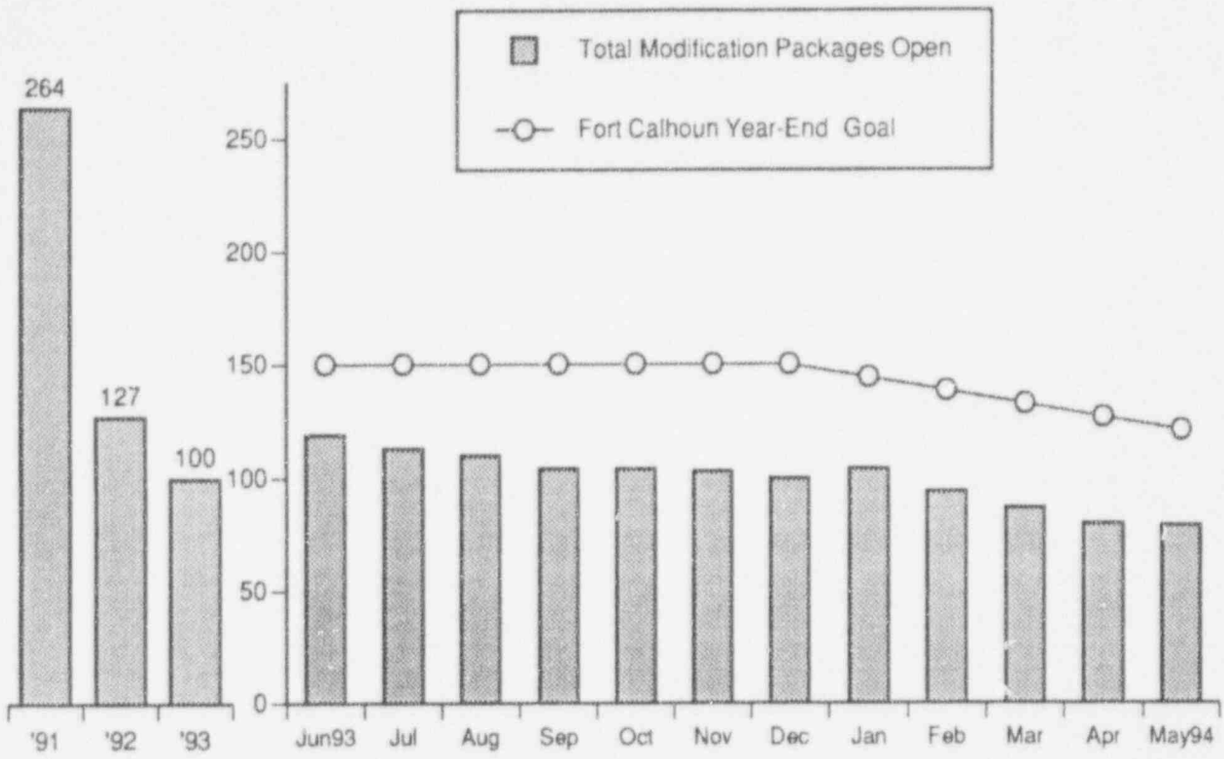
This indicator provides information on the number of temporary modifications greater than one fuel cycle old requiring a refueling outage (RFO) for removal and the number of temporary modifications removable on-line that are greater than six months old. The 1994 Fort Calhoun monthly goals for this indicator are 0.

There is currently 1 temporary modification that is greater than one fuel cycle old requiring a refueling outage to remove: Epoxy repairs to ST-4B, which is awaiting completion of MWO 931325, scheduled start date 1995 Refueling Outage. This temporary modification was previously included in the on-line removable >6 months old classification, but was re-classified as an outage modification to save engineering resources from completing 1 ECN to allow the epoxy repair to remain in place and a second ECN to remove it during the 1995 refueling outage. In addition, at the end of May 1994 there were 3 temporary modifications installed that were greater than six months old that can be removed on-line. These were: 1) Local indication for BAST CH-11A and CH-11B, in which Operations is reviewing a draft FLC. After review, Licensing is to issue an FLC, and the NRC is to approve; 2) LP-30 transformer, in which ECN 93-183 is approved for accomplishment prior to 8/31/94; and 3) Door 1011-7 lockset replacement, in which ECN 93-408 is approved for accomplishment 1995 on-line.

At the end of May 1994, there was a total of 24 TMs installed in the Fort Calhoun Station. 12 of the 24 installed TMs require an outage for removal and 12 are removable on-line. In 1994 a total of 24 temporary modifications have been installed.

Data Source: Jaworski/Turner (Manager/Source)
Accountability: Jaworski/Gorence
Adverse Trend: None

SEP 62 & 71



OUTSTANDING MODIFICATIONS

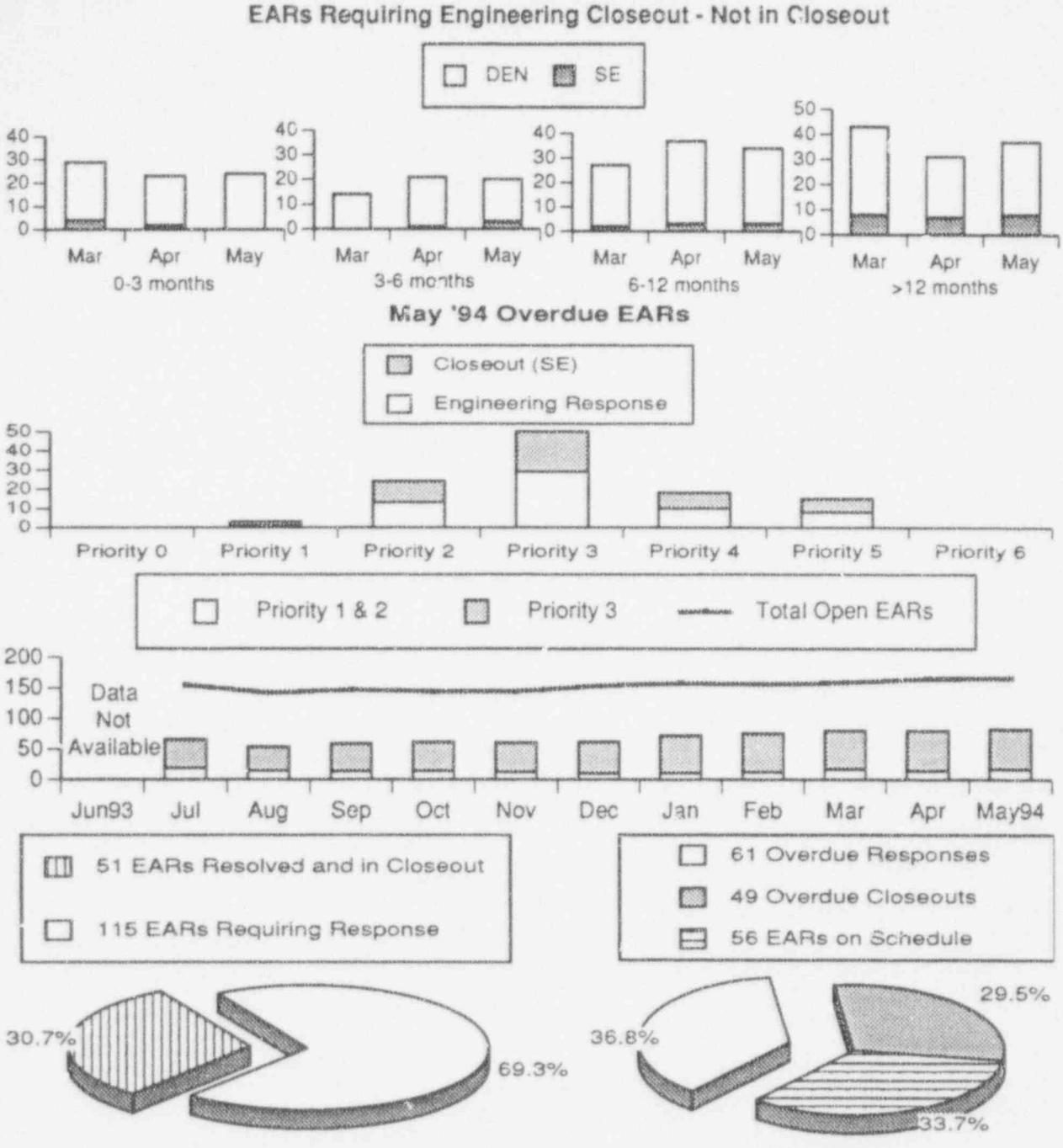
This indicator shows the total number of outstanding modifications (excluding outstanding modifications which are proposed to be cancelled).

Category	Reporting Month
Form FC-1133 Backlog/In Progress	1
Mod. Requests Being Reviewed	1
Design Engr. Backlog/In Progress	44
Construction Backlog/In Progress	19
Design Engr. Update Backlog/In Progress	14
Total	79

At the end of May 1994, 7 additional modification requests had been issued this year and 37 modification requests had been cancelled. The Nuclear Projects Review Committee (NPRC) had completed 86 backlog modification request reviews this year. The Nuclear Projects Committee (NPC) had completed 46 backlog modification request reviews this year.

The 1994 year-end Fort Calhoun goal for this indicator is a maximum of 80 outstanding modifications.

Data Source: Jaworski/Turner (Manager/Source)
Scofield/Lounsbery (Manager/Source)
Accountability: Scofield/Phelps
Adverse Trend: None



ENGINEERING ASSISTANCE REQUEST BREAKDOWN

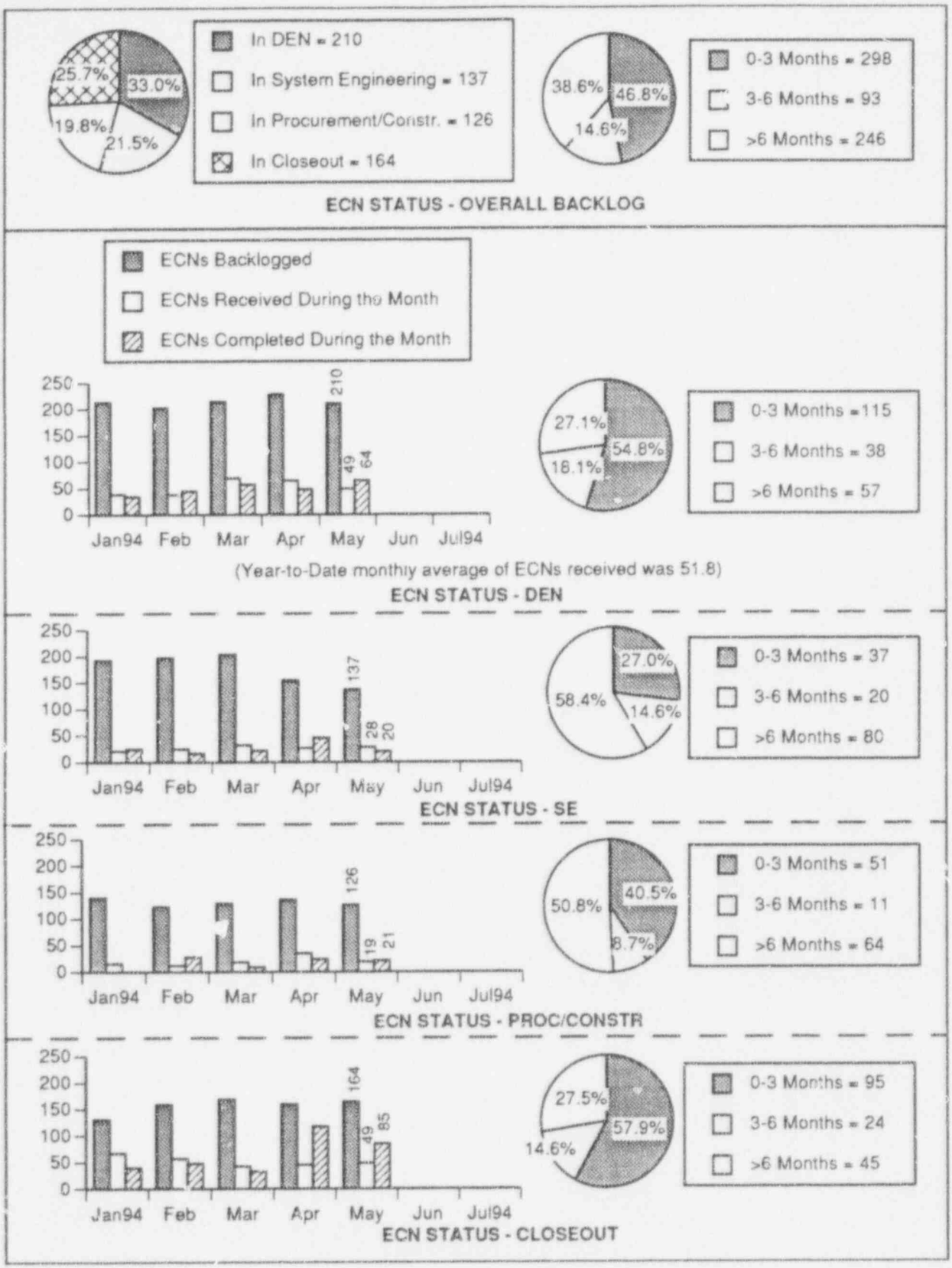
This indicator shows a breakdown of the number of EARs assigned to Design Engineering and System Engineering. The 1994 year-end goal for this indicator is a maximum of 140 outstanding EARs.

Total EAR breakdown is as follows:

EARs opened during the month	12
EARs closed during the month	15
Total EARs open as of the end of the month	166

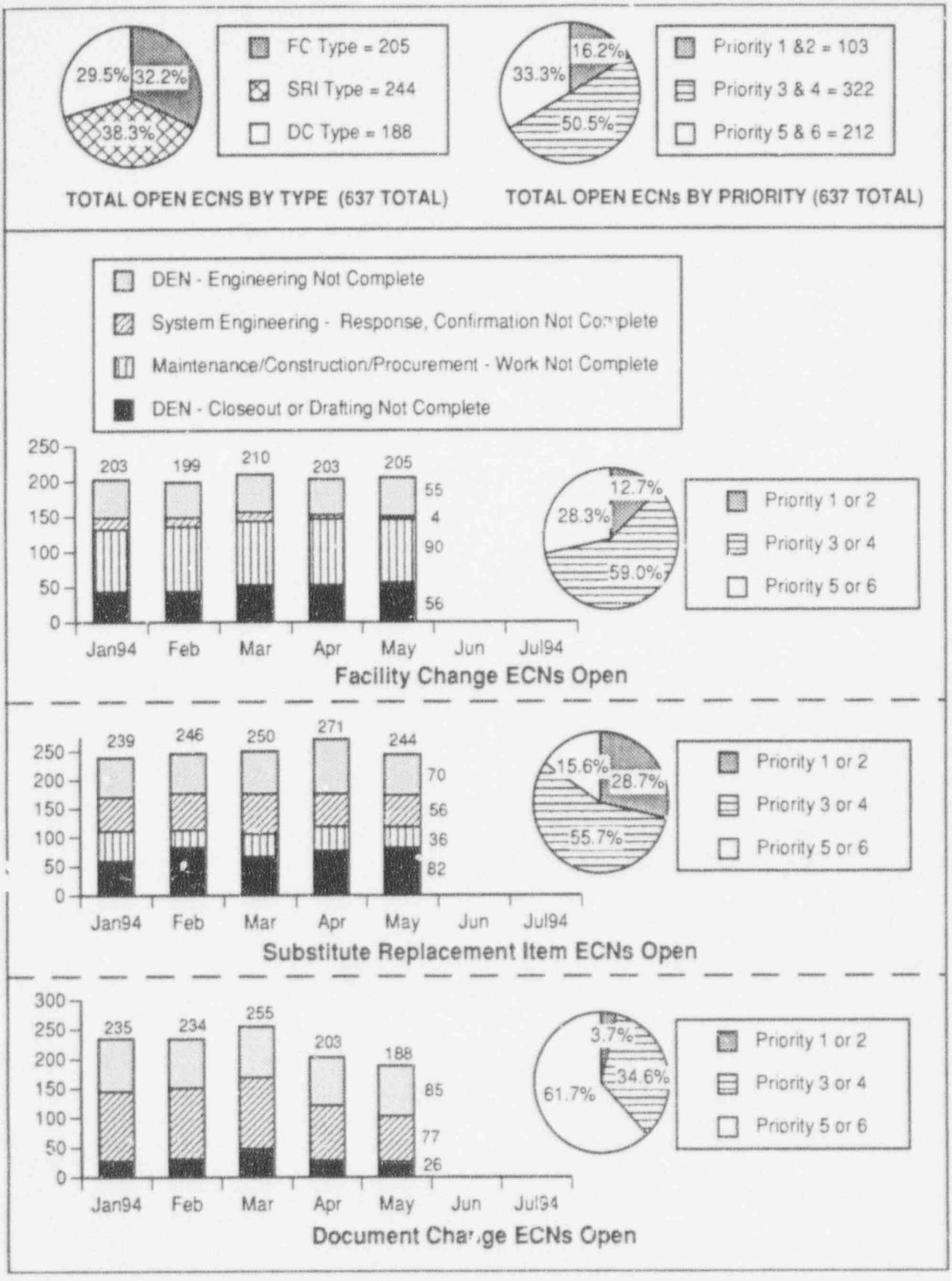
Data Source: Skiles/Pulverenti (Manager/Source)
Accountability: Jaworski/Skiles
Adverse Trend: None

SEP 62



ENGINEERING CHANGE NOTICE STATUS

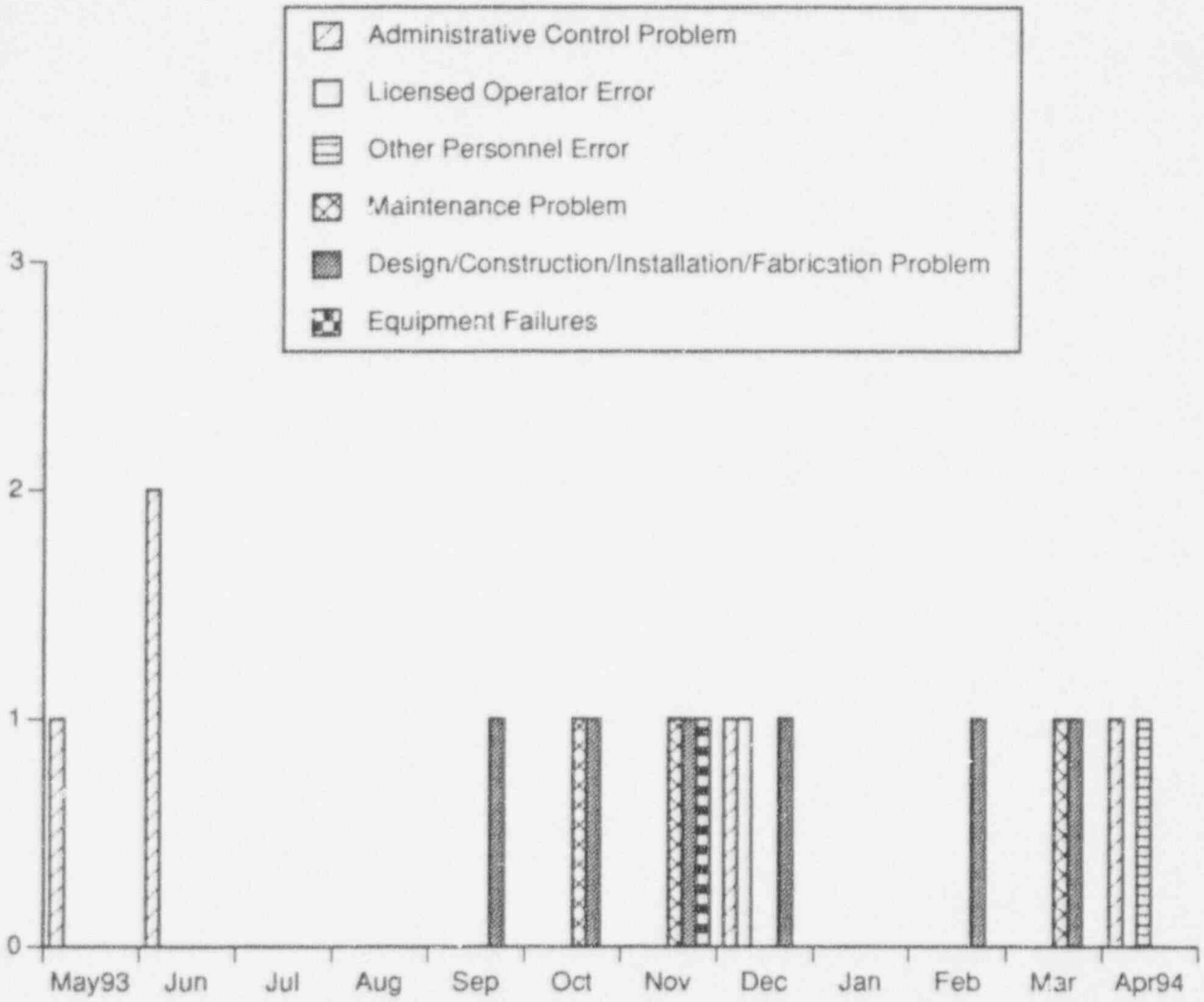
Data Source: Skiles/McShannon (Manager/Source)
Accountability: Skiles/Jaworski
Adverse Trend: None



ENGINEERING CHANGE NOTICES OPEN

Data Source: Skiles/McShannon (Manager/Source)
Accountability: Skiles/Jaworski
Adverse Trend: None

SEP 62



LICENSEE EVENT REPORT (LER) ROOT CAUSE BREAKDOWN

This indicator shows the LERs by event date broken down by Root Cause Code for each of the past twelve months from May 1, 1993 through April 30, 1994. To be consistent with the Preventable/Personnel Errors LER indicator, this indicator is reported by the LER event date as opposed to the LER report date.

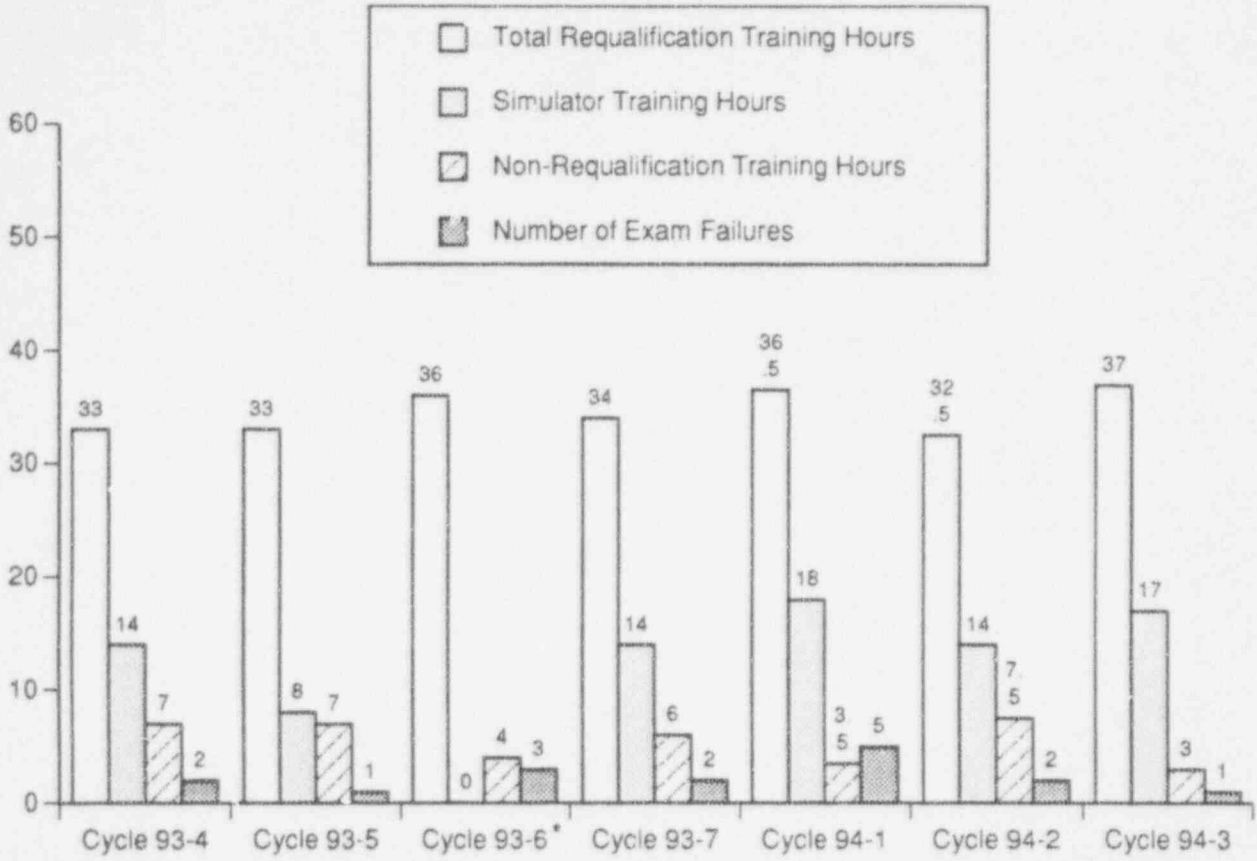
The cause codes are intended to identify possible programmatic deficiencies. For detailed descriptions of these codes, see the "Performance Indicator Definitions" section of this report.

There were 2 events in April 1994 that resulted in LERs.

Data Source: Short/Cavanaugh (Manager/Source)

Accountability: Chase

Adverse Trend: None



* Note: The Simulator was out-of-service for maintenance and modifications during Cycle 93-6.

LICENSED OPERATOR REQUALIFICATION TRAINING

This indicator provides information on the total number of hours of training given to each crew during each cycle. The Simulator training hours shown on the graph are a subset of the total training hours. Non-Requalification Training Hours are used for AOP/EOP verification & validation, INPO commitments, GET, Fire Brigade, Safety Meetings, and Division Manager lunches.

Exam failures are defined as failures in the written, simulator, and Job Performance Measures (JPMs) segments of the Licensed Operator Requalification Training.

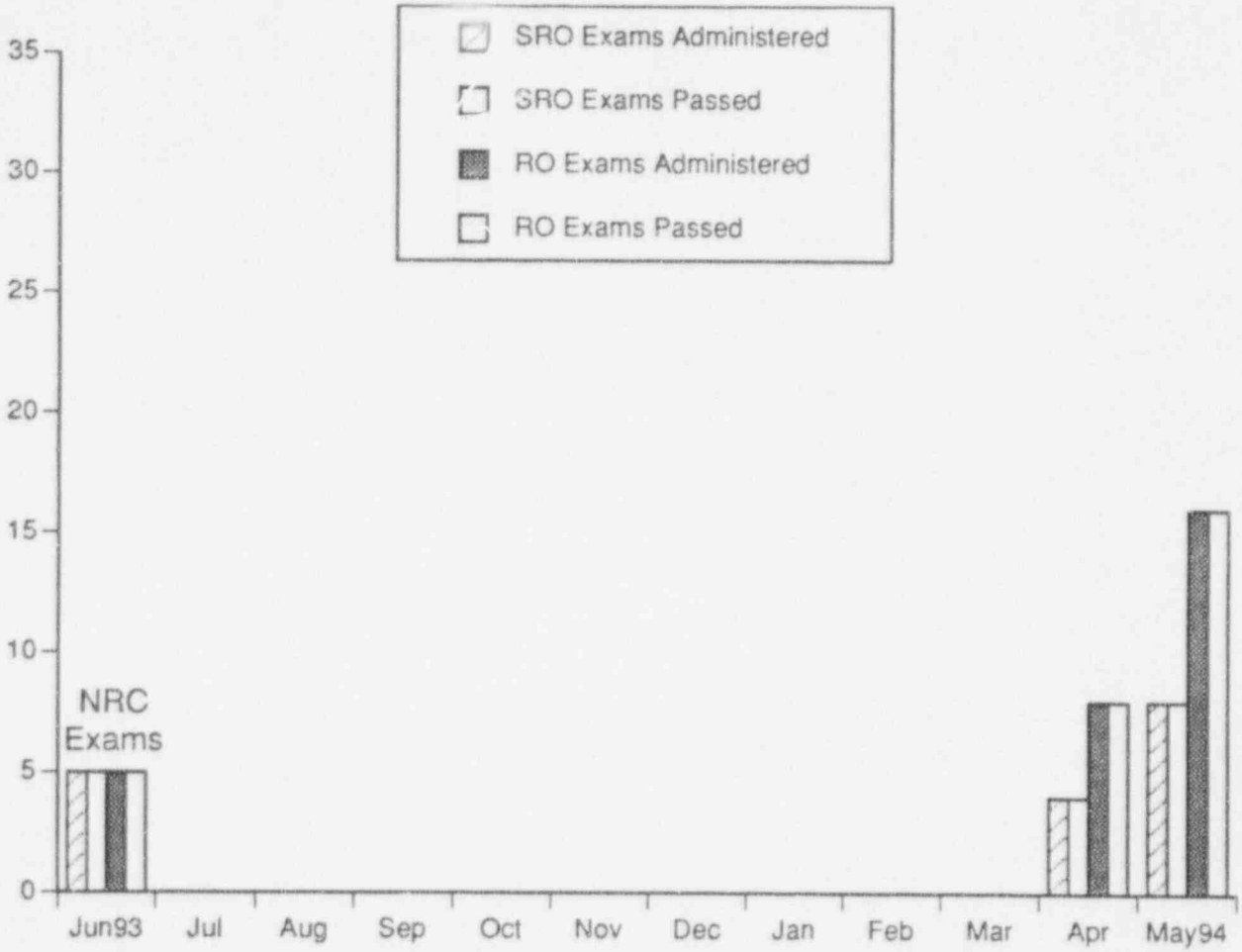
There was 1 written exam failure, and no simulator exam failures for Cycle 94-3. The individual who failed the written exam was remediated without impacting the Operations Department shift schedule.

Data Source: Gasper/Guliani (Manager/Source)

Accountability: Gasper/Guliani

Adverse Trend: None

SEP 68



LICENSE CANDIDATE EXAMS

This indicator shows the number of Senior Reactor Operator (SRO) and Reactor Operator (RO) quizzes and exams taken and passed each month. These internally administered quizzes and exams are used to plot the SRO and RO candidates' monthly progress.

Hot License class convened April 11, 1994, to conduct General Fundamentals training. There are 4 RO candidates and 2 SRO candidates enrolled in this phase of the training (3 additional SRO candidates, who are not required to take the Generic Fundamentals examination, will join the class in November).

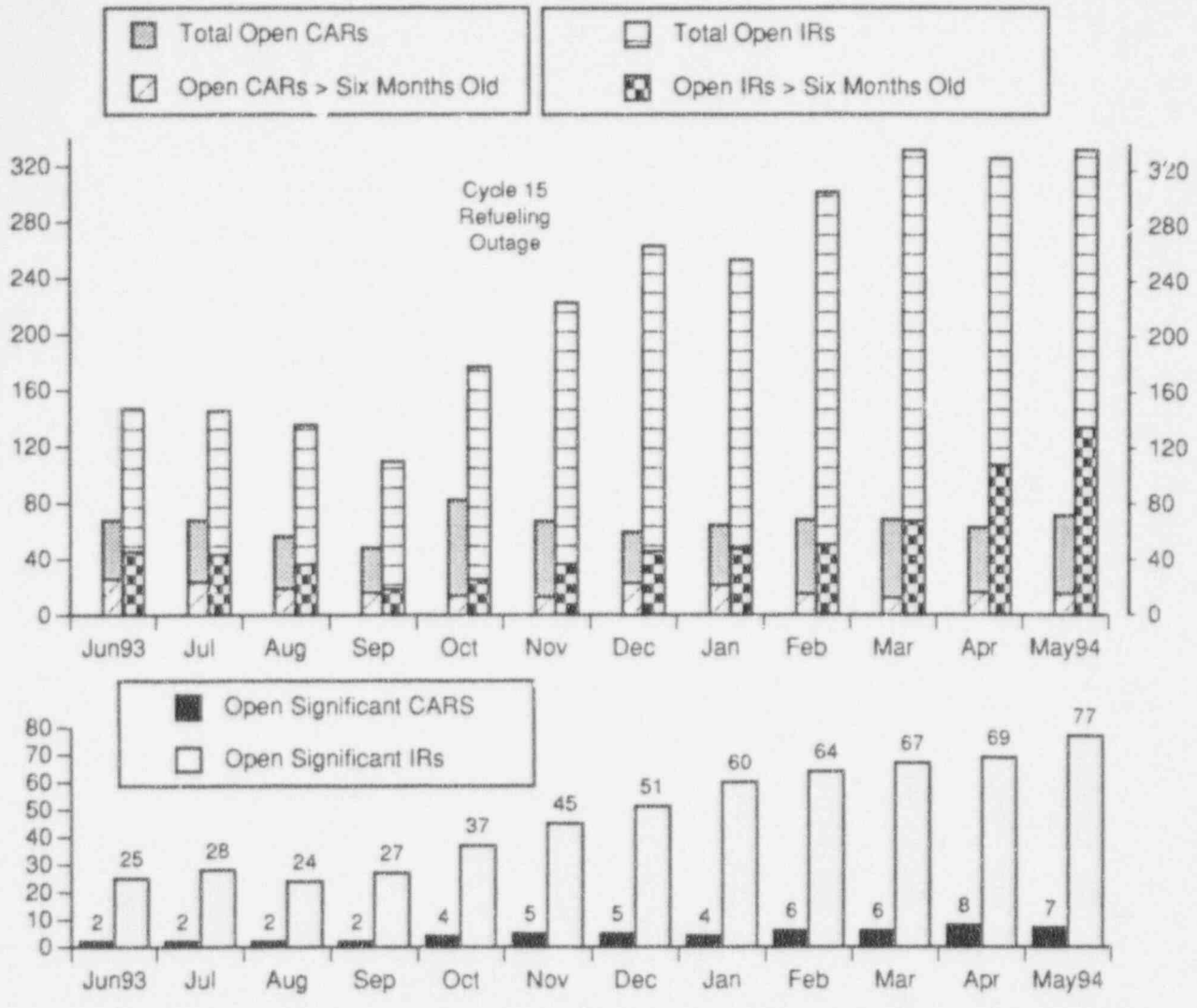
4 in-house examinations were given to each candidate during May, and all RO and SRO candidates passed all exams. No NRC examinations were given during May.

Data Source: Gasper/Guliani (Manager/Source)

Accountability: Gasper/Guliani

Adverse Trend: None

SEP 68



OPEN CORRECTIVE ACTION REPORTS AND INCIDENT REPORTS

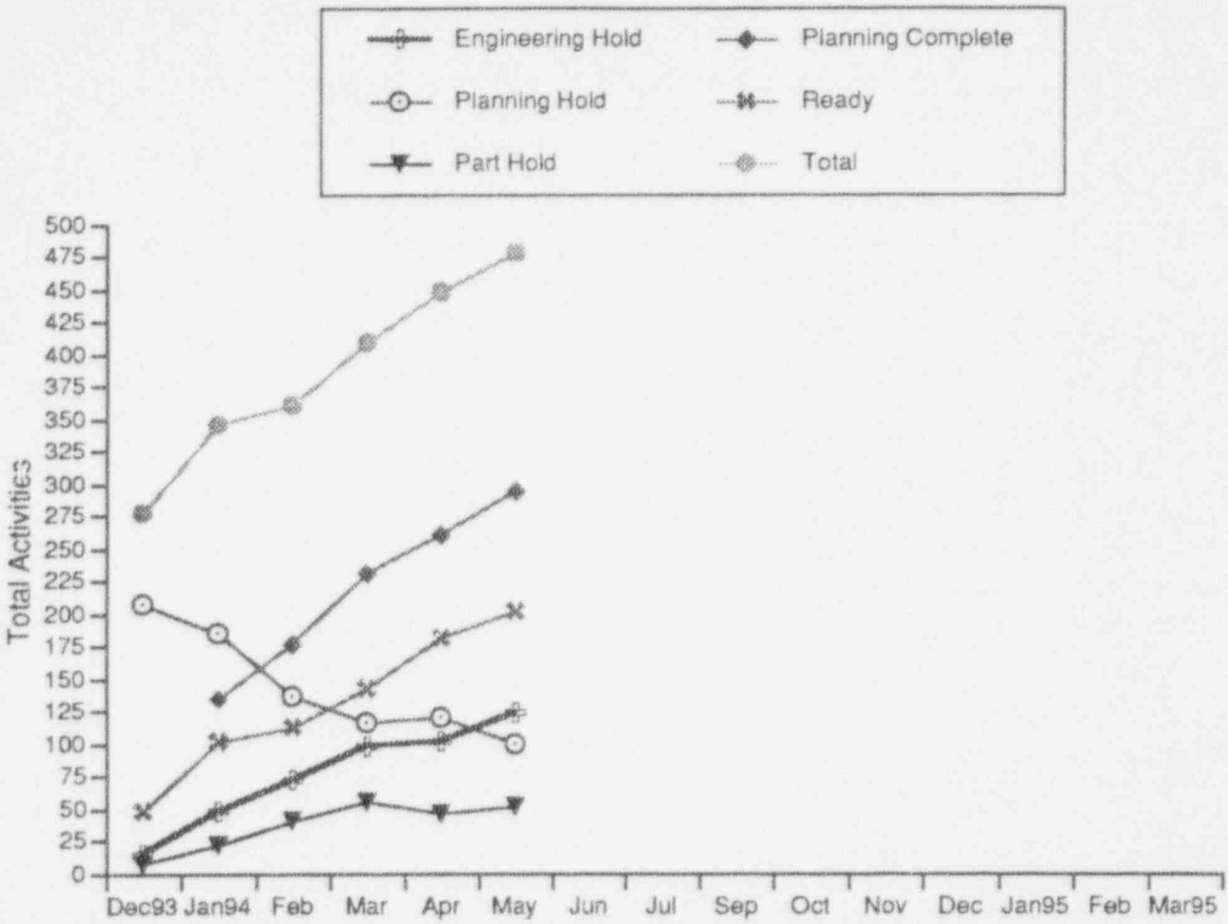
This indicator shows the total number of open Corrective Action Reports (CARs), CARs >6 months old, the total number of Open IRs, IRs >6 months old, the number of open significant CARs and the number of open significant IRs.

At the end of May 1994 there were 71 open CARs. 15 of these CARs were greater than 6 months old. There were 7 Open Significant CARs at the end of the month.

Also, at the end of May there were 335 open IRs. 135 of these IRs were greater than 6 months old. There were 77 Open Significant IRs at the end of the month.

The 1994 monthly goal for the number of CARs greater than 6 months old is less than 30.

Data Source: Orr/Gurtis (Manager/Source) & CHAMPS
Accountability: Andrews/Gambhir/Gates
Adverse Trend: Although the number of IRs has been increasing, an adverse trend is not indicated because the increase is a result of a revision to Standing Order R-6 that lowers the threshold for writing IRs and requires completion of all corrective actions prior to closing IRs.



MWO PLANNING STATUS (CYCLE 16 REFUELING OUTAGE)

This indicator shows the total number of Maintenance Work Requests (MWRs) and Maintenance Work Orders (MWOs) that have been approved for inclusion in the Cycle 16 Refueling Outage. This graph indicates:

•Parts Holds (part hold removed when parts are staged and ready for use)

•Engineering Holds (Engineering hold removed when appropriate engineering paperwork or support is received for the package)

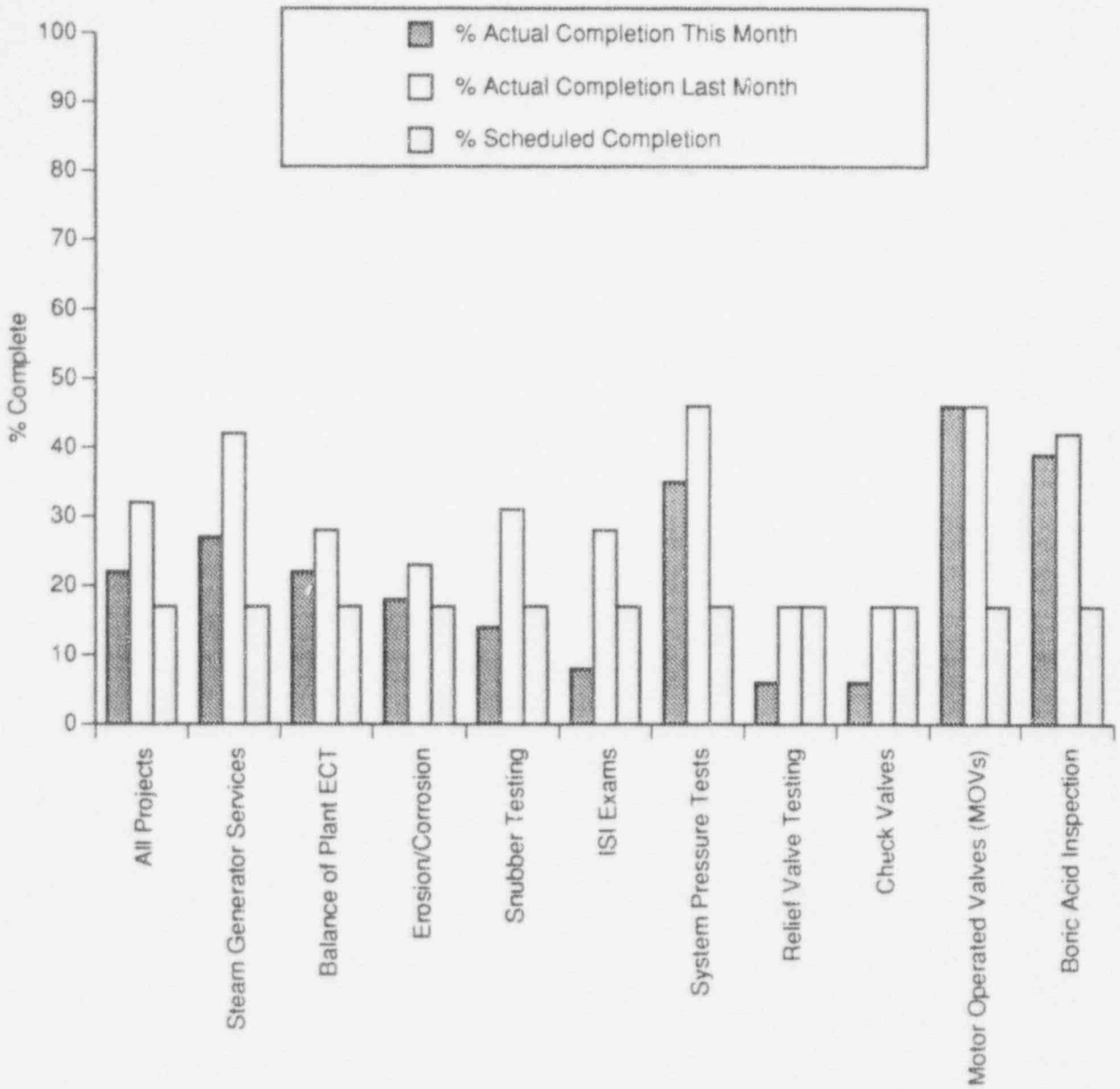
•Planning Holds (Planning hold removed when planning is completed to the point when package is ready or other support is necessary to continue the planning process)

•Planning Complete (status given when only items keeping the job from being ready to work are parts or engineering support)

•Ready (status when all planning, supporting documentation, and parts are ready to go)

Data Source: Chase/Schmitz (Manager/Source)
Accountability: Chase/Johansen
Adverse Trend: None

SEP 31



OVERALL PROJECT STATUS (CYCLE 16 REFUELING OUTAGE)

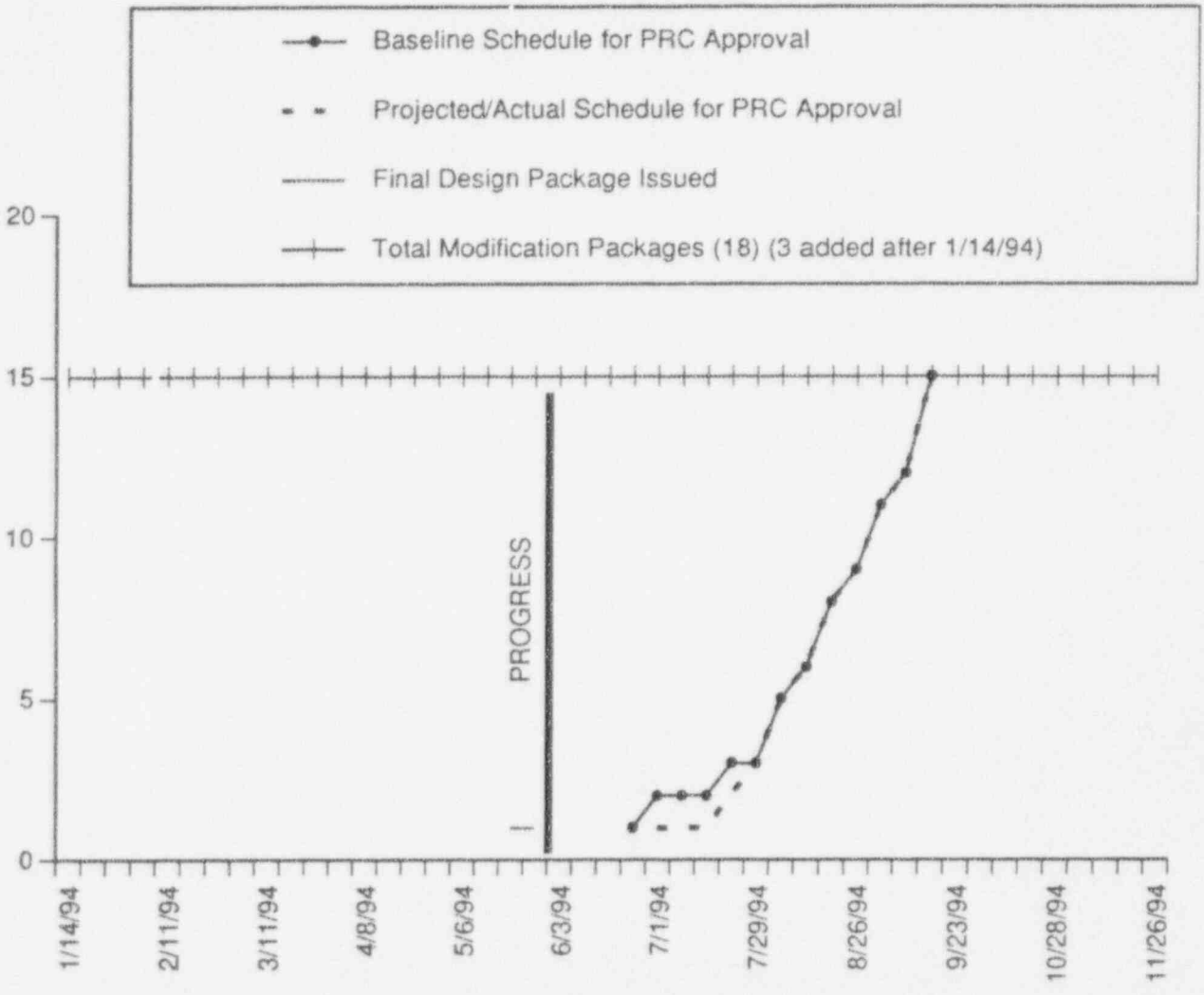
This indicator shows the status of the projects which are in the scope of the Cycle 16 Refueling Outage. SSED's goal is to have all projects complete by 2/10/95, 30 days prior to the Refueling Outage start date.

Additional data points will be added to this indicator as information becomes available.

Data Source: Jaworski/Swearngin (Manager/Source)
Accountability: Jaworski/Boughter
Adverse Trend: None

SEP 31

1995 OUTAGE MODIFICATIONS



PROGRESS OF CYCLE 16 OUTAGE MODIFICATION PLANNING (FROZEN SCOPE OF 15 MODIFICATIONS)

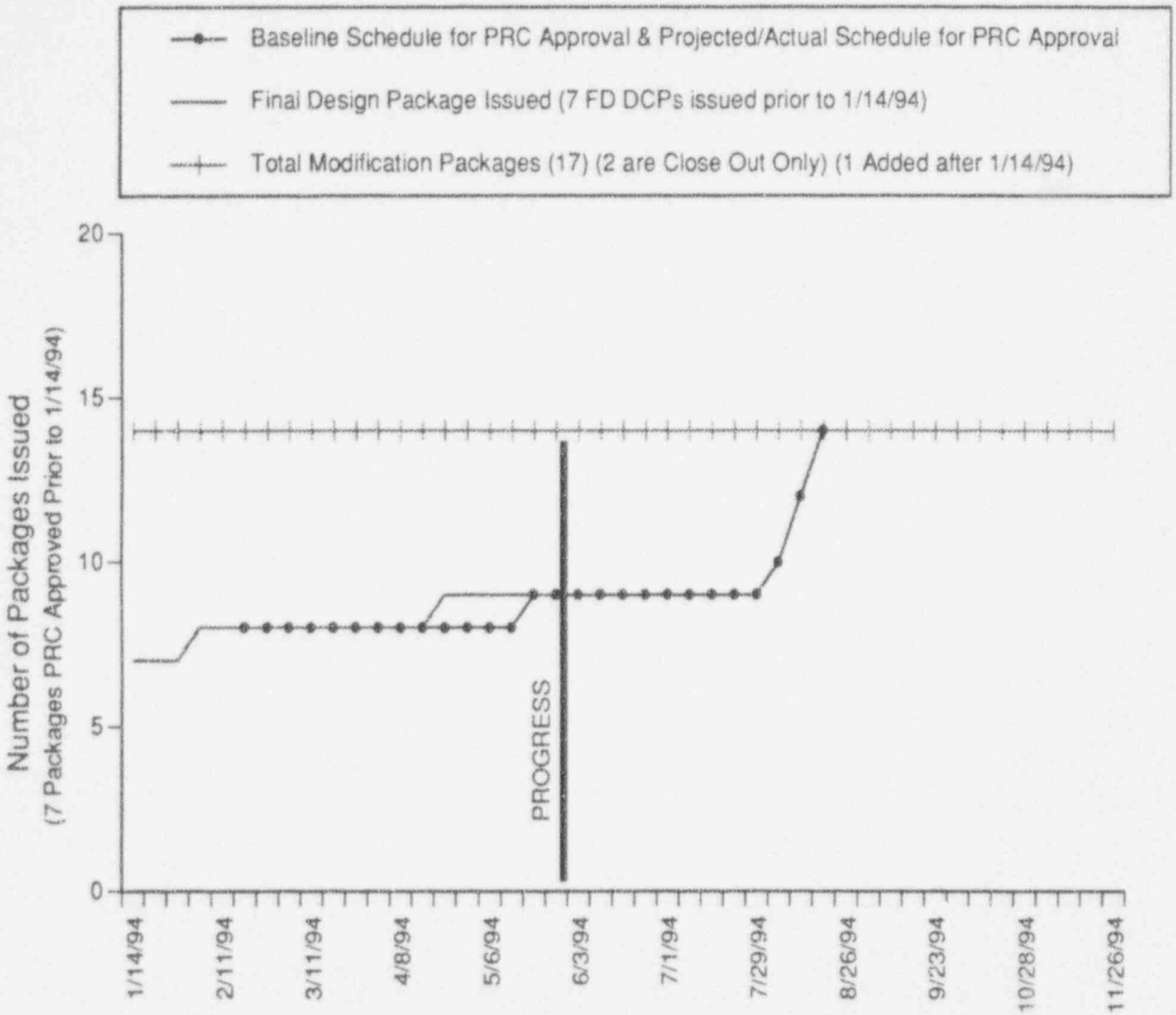
This indicator shows the status of modifications approved for installation during the Cycle 16 Refueling Outage. The data is represented with respect to the baseline schedule (established 1/14/94) and the current schedule. This information is taken from the Modification Variation Report produced by the Design Engineering group.

The goal for this indicator is to have all modification packages identified prior to 1/14/94 PRC approved by October 15, 1994. Modifications added after 1/14/94 are not included in this performance indicator and will be scheduled as soon as possible.

Data Source: Skiles/Ronne (Manager/Source)
Accountability: Phelps/Skiles
Adverse Trend: None

SEP 31

1994 ON-LINE MODIFICATIONS



PROGRESS OF 1994 ON-LINE MODIFICATION PLANNING
(FROZEN SCOPE OF 14 MODIFICATIONS)

This indicator shows the status of modifications approved for on-line installation during 1994. The data is represented with respect to the baseline schedule (established 1/14/94) and the current schedule. This information is taken from the Modification Variance Report produced by the Design Engineering Nuclear group.

In May, no modifications were deleted and none were added.

The goal for this indicator is to have all modification packages identified prior to 1/14/94 PRC approved by August 15, 1994. Modifications added after 1/14/94 are not included in this performance indicator and will be scheduled as soon as possible.

Data Source: Skiles/Ronne (Manager/Source)
Accountability: Phelps/Skiles
Adverse Trend: None

ACTION PLANS

ACTION PLANS

This section lists action plans that have been developed for the performance indicators cited as Adverse Trends during the month preceding this report. Also included are Action Plans for indicators that have been cited in the preceding month's report as Needing Increased Management Attention for 3 consecutive months.

In accordance with Revision 3 of NOD-QP-37, the following performance indicators would require action plans based on 3 consecutive months of performance cited as "Needing Increased Management Attention":

- **Unplanned Automatic Reactor Scrams Per 7,000 Critical Hours**
- **Unplanned Safety System Actuations (INPO and NRC)**
- **Equipment Forced Outages Per 1,000 Critical Hours**

The Plant Manager and Station Engineering Manager have reviewed the daily and ongoing actions being taken to return these performance indicators to meeting the goals. This review indicates appropriate action is being taken and no explicit action plan is required.

The action plan for **Thermal Performance** follows:

Actions to improve Thermal Performance are:

1) Pursuing adjustments and repairs (in progress) on condenser backwash valves to enhance condenser performance.

2) Investigate the possibility of FW flow nozzle fouling.

3) Investigate the effects of adding Ethanolamine (late summer) to secondary chemistry to clean system and possibly reduce S/G blowdown.

The action plan for **Number of Control Room Equipment Deficiencies** follows:

1) Control room deficiencies are being worked and closed routinely by the maintenance department. A target closure rate of 10 per week has been established. Once the goal is met, the target will be adjusted periodically to ensure a positive or neutral trend.

2) To ensure that these deficiencies are being pursued with the best technical solutions and that all departments are supporting the Control Room Deficiency Goal, a working group of Maintenance, Engineering, and Operations personnel has been established.

The action plan for **Preventive Maintenance Items Overdue** follows:

This performance indicator did not meet the goal for the months of February, March and April 1994 primarily because the responsible departments are not closing PMO paperwork in a timely manner. This applies to PM's which have been completed and to PM's which must be deferred for various reasons.

The Maintenance PEP is recommending changes to the administrative closeout process to simplify the process. This should eliminate most of the overdue PM's. Additionally, the Maintenance Planning group will begin issuing a weekly "Overdue PM Report" to responsible department supervisors to increase their awareness of overdue PM's.

PERFORMANCE INDICATOR DEFINITIONS

AUXILIARY FEEDWATER SYSTEM SAFETY SYSTEM PERFORMANCE

The sum of the known (planned and unplanned) unavailable hours and the estimated unavailable hours for the auxiliary feedwater system for the reporting period divided by the critical hours for the reporting period multiplied by the number of trains in the auxiliary feedwater system.

CHECK VALVE FAILURE RATE

Compares the Fort Calhoun check valve failure rate to the industry check valve failure rate (failures per 1 million component hours). The data for the industry failure rate is three months behind the PI Report reporting month. This indicator tracks performance for SEP #43.

COLLECTIVE RADIATION EXPOSURE

Collective radiation exposure is 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. This indicator tracks radiological work performance for SEP #54.

COMPONENT FAILURE ANALYSIS REPORT (CFAR) SUMMARY

The number of INPO categories for Fort Calhoun Station with significantly higher (1.645 standard deviations) failure rates than the rest of the industry for an eighteen month time period. Failures are reported as component (i.e. pumps, motors, valves, etc.) and application (i.e. charging pumps, main steam stop valves, control element drive motors, etc.) categories.

Failure Cause Categories are:

Wear Out/Aging - a failure thought to be the consequence of expected wear or aging.

Manufacturing Defect - a failure attributable to inadequate assembly or initial quality of the responsible component or system.

Engineering/Design - a failure attributable to the inadequate design of the responsible component or system.

Other Devices - a failure attributable to a failure or misoperation of another component or system, including associated devices.

Maintenance/Testing - a failure that is a result of improper maintenance or testing, lack of maintenance, or personnel errors that occur during maintenance or testing activities performed on the responsible component or system, including failure to follow procedures.

Errors - failures attributable to incorrect procedures that were followed as written, improper installation of equipment, and personnel errors (including failure to follow procedures properly). Also included in this category are failures for which the cause is unknown or cannot be assigned to any of the preceding categories.

CENTS PER KILOWATT HOUR

The purpose of this indicator is to quantify the economical operation of Fort Calhoun Station. The cents per kilowatt hour indicator represents the budget and actual cents per kilowatt hour on a 12 month rolling average for the current year. The basis for the budget curve is the approved 1993 budget. The basis for the actual curve is the Financial and Operating Report.

CLEAN CONTROLLED AREA CONTAMINATIONS ≥1,000 DISINTEGRATIONS/MINUTE PER PROBE AREA

The personnel contamination events in the clean controlled area. This indicator tracks personnel performance for SEP #15 & 54.

CONTAMINATED RADIATION CONTROLLED AREA

The percentage of the Radiation Controlled Area, which includes the auxiliary building, the radwaste building, and areas of the C/RP building, that is contaminated based on the total square footage. This indicator tracks performance for SEP # 54.

DAILY THERMAL OUTPUT

This indicator shows the daily core thermal output as measured from computer point XC105 (in thermal megawatts). The 1500 MW Tech Spec limit, and the unmet portion of the 1495 MW FCS daily goal for the reporting month are also shown.

DIESEL GENERATOR RELIABILITY (25 DEMANDS)

This indicator shows the number of failures occurring for each emergency diesel generator during the last 25 start demands and the last 25 load-run demands.

DISABLING INJURY/ILLNESS FREQUENCY RATE (LOST TIME ACCIDENT RATE)

This indicator is defined as the number of accidents for all utility personnel permanently assigned to the station, involving days away from work per 200,000 man-hours worked (100 man-years). This does not include contractor personnel. This indicator tracks personnel performance for SEP #25 & 26.

DOCUMENT REVIEW (BIENNIAL)

The Document Review Indicator shows the number of documents reviewed, the number of documents scheduled for review, and the number of document reviews that are overdue for the reporting month. A document review is considered overdue if the review is not complete within 6 months of the assigned due date. This indicator tracks performance for SEP #46.

EMERGENCY AC POWER SYSTEM SAFETY SYSTEM PERFORMANCE

The sum of the known (planned and unplanned) unavailable and the estimated unavailable hours for the emergency AC power system for the reporting period divided by the number of hours in the reporting period multiplied by the number of trains in the emergency AC power system.

PERFORMANCE INDICATOR DEFINITIONS

EMERGENCY DIESEL GENERATOR UNIT RELIABILITY

This indicator shows the number of failures that were reported during the last 20, 50, and 100 emergency diesel generator demands at the Fort Calhoun Station. Also shown are trigger values which correlate to a high level of confidence that a unit's diesel generators have obtained a reliability of greater than or equal to 95% when the demand failures are less than the trigger values.

1) Number of Start Demands: All valid and inadvertent start demands, including all start-only demands and all start demands that are followed by load-run demands, whether by automatic or manual initiation. A start-only demand is a demand in which the emergency generator is started, but no attempt is made to load the generator.

2) Number of Start Failures: Any failure within the emergency generator system that prevents the generator from achieving specified frequency and voltage is classified as a valid start failure. This includes any condition identified in the course of maintenance inspections (with the emergency generator in standby mode) that definitely would have resulted in a start failure if a demand had occurred.

3) Number of Load-Run Demands: For a valid load-run demand to be counted the load-run attempt must meet one or more of the following criteria:

A) A load-run of any duration that results from a real automatic or manual initiation.

B) A load-run test to satisfy the plant's load and duration as stated in each test's specifications.

C) Other special tests in which the emergency generator is expected to be operated for at least one hour while loaded with at least 50% of its design load.

4) Number of Load-Run Failures: A load-run failure should be counted for any reason in which the emergency generator does not pick up load and run as predicted. Failures are counted during any valid load-run demands.

5) Exceptions: Unsuccessful attempts to start or load-run should not be counted as valid demands or failures when they can be attributed to any of the following:

A) Spurious trips that would be bypassed in the event of an emergency.

B) Malfunction of equipment that is not required during an emergency.

C) Intentional termination of a test because of abnormal conditions that would not have resulted in major diesel generator damage or repair.

D) Malfunctions or operating errors which would have not prevented the emergency generator from being restarted and brought to load within a few minutes.

E) A failure to start because a portion of the starting system was disabled for test purpose, if followed by a successful start with the starting system in its normal alignment.

Each emergency generator failure that results in the generator being declared inoperable should be counted as one demand and one failure. Exploratory tests during corrective maintenance and the successful test that follows repair to verify operability should not be counted as demands or failures when the EDG has not been declared operable again.

EMERGENCY DIESEL GENERATOR UNRELIABILITY

This indicator measures the total unreliability of emergency diesel generators. In general, unreliability is the ratio of unsuccessful operations (starts or load-runs) to the number of valid demands. Total unreliability is a combination of start unreliability and load-run unreliability.

ENGINEERING ASSISTANCE REQUEST (EAR) BREAKDOWN

This indicator shows a breakdown, by age and priority of the EAR, of the number of EARs assigned to Design Engineering Nuclear and System Engineering. This indicator tracks performance for SEP #62.

ENGINEERING CHANGE NOTICE (ECN) STATUS

The number of ECNs that were opened, ECNs that were completed, and open backlog ECNs awaiting completion by DEN for the reporting month. This indicator tracks performance for SEP #62.

ENGINEERING CHANGE NOTICES OPEN

This indicator breaks down the number of Engineering Change Notices (ECNs) that are assigned to Design Engineering Nuclear (DEN), System Engineering, and Maintenance. The graphs provide data on ECN Facility Changes open, ECN Substitute Replacement Parts open, and ECN Document Changes open. This indicator tracks performance for SEP #62.

EQUIPMENT FORCED OUTAGES PER 1,000 CRITICAL HOURS

Equipment forced outages per 1000 critical hours is the inverse of the mean time between forced outages caused by equipment failures. The mean time is equal to the number of hours the reactor is critical in a period (1000 hours) divided by the number of forced outages caused by equipment failures in that period.

EQUIVALENT AVAILABILITY FACTOR

This indicator is defined as the ratio of gross available generation to gross maximum generation, expressed as a percentage. Available generation is the energy that can be produced if the unit is operated at the maximum power level permitted by equipment and regulatory limitations. Maximum generation is the energy that can be produced by a unit in a given period if operated continuously at maximum capacity.

FORCED OUTAGE RATE

This indicator is defined as the percentage of time that the unit was unavailable due to forced events compared to the time planned for electrical generation. Forced events are failures or other unplanned conditions that require removing the unit from service before the end of the next weekend. Forced events include start-up failures and events initiated while the unit is in reserve shutdown (i.e., the unit is available but not in service).

PERFORMANCE INDICATOR DEFINITIONS

FUEL RELIABILITY INDICATOR
This indicator is defined as the steady-state primary coolant I-131 activity, corrected for the tramp uranium contribution and normalized to a common purification rate. Tramp uranium is fuel which has been deposited on reactor core internals from previous defective fuel or is present on the surface of fuel elements from the manufacturing process. Steady state is defined as continuous operation for at least three days at a power level that does not vary more than + or - 5%. Plants should collect data for this indicator at a power level above 85%, when possible. Plants that did not operate at steady-state power above 85% should collect data for this indicator at the highest steady-state power level attained during the month.
The density correction factor is the ratio of the specific volume of coolant at the RCS operating temperature (540 degrees F., Vf = 0.02146) divided by the specific volume of coolant at normal letdown temperature (120 degrees F at outlet of the letdown cooling heat exchanger, Vf = 0.016204), which results in a density correction factor for FCS equal to 1.32.

GROSS HEAT RATE
Gross heat rate is defined as the ratio of total thermal energy in British Thermal Units (BTU) produced by the reactor to the total gross electrical energy produced by the generator in kilowatt-hours (KWH).

HAZARDOUS WASTE PRODUCED
The total amount (in Kilograms) of non-halogenated hazardous waste, halogenated hazardous waste, and other hazardous waste produced by FCS each month.

HIGH PRESSURE SAFETY INJECTION SYSTEM SAFETY SYSTEM PERFORMANCE
The sum of the known (planned and unplanned) unavailable hours and the estimated unavailable hours for the high pressure safety injection system for the reporting period divided by the critical hours for the reporting period multiplied by the number of trains in the high pressure safety injection system.

INDUSTRIAL SAFETY ACCIDENT RATE - INPO
This indicator is defined as the number of accidents per 200,000 man-hours worked for all utility personnel permanently assigned to the station that result in any of the following: 1) one or more days of restricted work (excluding the day of the accident); 2) one or more days away from work (excluding the day of the accident); and 3) fatalities. Contractor personnel are not included for this indicator.

IN-LINE CHEMISTRY INSTRUMENTS OUT OF SERVICE
Total number of in-line chemistry instruments that are out-of-service in the Secondary System and the Post Accident Sampling System (PASS).

LICENSE CANDIDATE EXAMS
This indicator shows the number of SRO and/or RO quizzes and exams that are administered and passed each month. This indicator tracks training performance for SEP #68.

LICENSED OPERATOR REQUALIFICATION TRAINING
The total number of hours of training given to each crew during each cycle. Also provided are the simulator training hours (which are a subset of the total training hours), the number of non-requalification training hours and the number of exam failures. This indicator tracks training performance for SEP #68.

LICENSEE EVENT REPORT (LER) ROOT CAUSE BREAKDOWN
This indicator shows the number and root cause code for Licensee Event Reports. The root cause codes are as follows:

1) Administrative Control Problem - Management and supervisory deficiencies that affect plant programs or activities (i.e., poor planning, breakdown or lack of adequate management or supervisory control, incorrect procedures, etc.)

2) Licensed Operator Error - This cause code captures errors of omission/commission by licensed reactor operators during plant activities.

3) Other Personnel Error - Errors of omission/commission committed by non-licensed personnel involved in plant activities.

4) Maintenance Problem - The intent of this cause code is to capture the full range of problems which can be attributed in any way to programmatic deficiencies in the maintenance functional organization. Activities included in this category are maintenance, testing, surveillance, calibration and radiation protection.

5) Design/Construction/Installation/Fabrication Problem - This cause code covers a full range of programmatic deficiencies in the areas of design, construction, installation, and fabrication (i.e., loss of control power due to underrated fuse, equipment not qualified for the environment, etc.).

6) Equipment Failures (Electronic Piece-Parts or Environmental-Related Failures) - This code is used for spurious failures of electronic piece-parts and failures due to meteorological conditions such as lightning, ice, high winds, etc. Generally, it includes spurious or one-time failures. Electric components included in this category are circuit cards, rectifiers, bistables, fuses, capacitors, diodes, resistors, etc.

LOGGABLE/REPORTABLE INCIDENTS (SECURITY)
The total number of security incidents for the reporting month depicted in two graphs. This indicator tracks security performance for SEP #58.

MAINTENANCE OVERTIME
The % of overtime hours compared to normal hours for maintenance. This includes OPPD personnel as well as contract personnel.

PERFORMANCE INDICATOR DEFINITIONS

MAINTENANCE WORKLOAD BACKLOGS

This indicator shows the backlog of non-outage Maintenance Work Orders remaining open at the end of the reporting month. Maintenance classifications are defined as:

Corrective - Repair and restoration of equipment or components that have failed or are malfunctioning and are not performing their intended function.

Preventive - Actions taken to maintain a piece of equipment within design operating conditions, prevent equipment failure, and extend its life and are performed prior to equipment failure.

Non-Corrective/Plant Improvements - Maintenance activities performed to implement station improvements or to repair non-plant equipment.

Maintenance Work Priorities are defined as:

Emergency - Conditions which significantly degrade station safety or availability.

Immediate Action - Equipment deficiencies which significantly degrade station reliability. Potential for unit shutdown or power reduction.

Operations Concern - Equipment deficiencies which hinder station operation.

Essential - Routine corrective maintenance on essential station systems and equipment.

Non-Essential - Routine corrective maintenance on non-essential station systems and equipment.

Plant Improvement - Non-corrective maintenance and plant improvements.

This indicator tracks maintenance performance for SEP #36.

MAXIMUM INDIVIDUAL RADIATION EXPOSURE

The total maximum amount of radiation received by an individual person working at FCS on a monthly, quarterly, and annual basis.

MWO PLANNING STATUS (CYCLE 16 REFUELING OUTAGE)

The total number of Maintenance Work Orders that have been approved for inclusion in the Cycle 15 Refueling Outage and the number that are ready to work (parts staged, planning complete, and all other paperwork ready for field use). Also included is the number of MWOs that have engineering holds (ECNs, procedures and other miscellaneous engineering holds), parts hold, (parts staged, not yet inspected, parts not yet arrived) and planning hold (job scope not yet completed). Maintenance Work Requests (MWRs) are also shown that have been identified for the Cycle 15 Refueling Outage and have not yet been converted to MWOs.

NUMBER OF CONTROL ROOM EQUIPMENT DEFICIENCIES

A control room equipment deficiency (CRD) is defined as any component which is operated or controlled from the Control Room, provides indication or alarm to the Control Room, provides testing capabilities from the Control Room, provides automatic actions from or to the Control Room, or provides a passive function for the Control Room and has been identified as deficient, i.e., does not perform under all conditions as designed. This definition also applies to the Alternate Shutdown Panels AI-179, AI-185, and AI-212.

A plant component which is deficient or inoperable is considered an "Operator Work Around (OWA) Item" if some other action is required by an operator to compensate for the condition of the component. Some examples of OWAs are: 1) The control room level indicator does not work but a local sightglass can be read by an Operator out in the plant; 2) A deficient pump cannot be repaired because replacement parts require a long lead time for purchase/delivery, thus requiring the redundant pump to be operated continuously; 3) Special actions are required by an Operator because of equipment design problems. These actions may be described in Operations Memorandums, Operator Notes, or may require changes to Operating Procedures. 4) Deficient plant equipment that is required to be used during Emergency Operating Procedures or Abnormal Operating Procedures. 5) System indication that provides critical information during normal or abnormal operations.

NUMBER OF MISSED SURVEILLANCE TESTS RESULTING IN LICENSEE EVENT REPORTS

The number of Surveillance Tests (STs) that result in Licensee Event Reports (LERs) during the reporting month. This indicator tracks missed STs for SEP #60 & 61.

OPEN CORRECTIVE ACTION REPORTS & INCIDENT REPORTS

This indicator displays the total number of open Corrective Action Reports (CARs), the number of CARs that are older than six months and the number of open significant CARs. Also displayed are the number of open Incident Reports (IRs), the number of IRs that are greater than six months old and the number of open significant IRs.

OUTSTANDING MODIFICATIONS

The number of Modification Requests (MRs) in any state between the issuance of a Modification Number and the completion of the drawing update.

1) Form FC-1133 Backlog/In Progress. This number represents modification requests that have not been plant approved during the reporting month.

2) Modification Requests Being Reviewed. This category includes:

A.) Modification Requests that are not yet reviewed.

B.) Modification Requests being reviewed by the Nuclear Projects Review Committee (NPRC).

C.) Modification Requests being reviewed by the Nuclear Projects Committee (NPC)

These Modification Requests may be reviewed several times before they are approved for accomplishment or

cancelled. Some of these Modification Requests are returned to Engineering for more information, some approved for evaluation, some approved for study, and some approved for planning. Once planning is completed and the scope of the work is clearly defined, these Modification Requests may be approved for accomplishment with a year assigned for construction or they may be cancelled. All of these different phases require review.

3) Design Engineering Backlog/In Progress. Nuclear Planning has assigned a year in which construction will be completed and design work may be in progress.

4) Construction Backlog/In Progress. The Construction Package has been issued or construction has begun but the modification has not been accepted by the System Acceptance Committee (SAC).

5) Design Engineering Update Backlog/In Progress. PED has received the Modification Completion Report but the drawings have not been updated.

The above mentioned outstanding modifications do not include modifications which are proposed for cancellation.

OVERALL PROJECT STATUS (REFUELING OUTAGE)

This indicator shows the status of the projects which are in the scope of the Refueling Outage.

PERCENTAGE OF TOTAL MWOs COMPLETED PER MONTH IDENTIFIED AS REWORK

The percentage of total MWOs completed per month identified as rework. Rework activities are identified by maintenance planning and craft. Rework is: Any maintenance work repeated to correct a deficiency which has re-occurred within 60 days following similar work activities. Any additional work required to correct deficiencies discovered during a failed Post Maintenance Test to ensure the component/system passes subsequent Post Maintenance Tests. This definition can be found in S. O. M-101.

PERCENT OF COMPLETED SCHEDULED MAINTENANCE ACTIVITIES

The % of the number of completed maintenance activities as compared to the number of scheduled maintenance activities each month. This % is shown for all maintenance crafts. Also shown are the number of emergent MWOs. Maintenance activities include MWRs, MWOs, STs, PMOs, calibrations, and other miscellaneous activities. This indicator tracks Maintenance performance for SEP #33.

PREVENTABLE/PERSONNEL ERROR LERs

This indicator is a breakdown of LERs. For purposes of LER event classification, a preventable LER is defined as: An event for which the root cause is personnel error (i.e., inappropriate action by one or more individuals), inadequate administrative controls, a design/construction/installation/fabrication problem (involving work completed by or supervised by OPPD personnel) or a maintenance problem (attributed to inadequate or improper upkeep/repair of plant equipment). Also, the cause of the event must have occurred within approximately two years of the "Event Date" specified in the LER (e.g., an event for which the cause is attributed to a problem with the original design of the plant would not be considered preventable).

For purposes of LER event classification, a "Personnel Error" LER is defined as follows: An event for which the root cause is inappropriate action on the part of one or more individuals (as opposed to being attributed to a department or a general group). Also, the inappropriate action must have occurred within approximately two years of the "Event Date" specified in the LER. Additionally, each event classified as a "Personnel Error" should also be classified as "Preventable." This indicator trends personnel performance for SEP Item #15.

PRIMARY SYSTEM CHEMISTRY % OF HOURS OUT OF LIMIT

The % of hours out of limit are reported for lithium divided by the total number of hours possible for the month. EPRI limits are used.

PROCEDURAL NONCOMPLIANCE INCIDENTS (MAINTENANCE)

The number of identified incidents concerning maintenance procedural problems, the number of closed IRs related to the use of procedures (includes the number of closed IRs caused by procedural noncompliance), and the number of closed procedural noncompliance IRs. This indicator trends personnel performance for SEP #15, 41 & 44.

PROGRESS OF CYCLE 15 OUTAGE MODIFICATION PLANNING (FROZEN SCOPE OF 15 MODIFICATIONS)

This indicator shows the status of modifications approved for completion during the Refueling Outage.

PROGRESS OF 1994 ON-LINE MODIFICATION PLANNING (FROZEN SCOPE OF 14 MODIFICATIONS)

This indicator shows the status of modifications approved for completion during 1994.

RADIOLOGICAL WORK PRACTICES PROGRAM

The number of identified poor radiological work practices (PRWPs) for the reporting month. This indicator tracks radiological work performance for SEP #52.

RATIO OF PREVENTIVE TO TOTAL MAINTENANCE & PREVENTIVE MAINTENANCE ITEMS OVERDUE

The ratio of preventive maintenance (including surveillance testing and calibration procedures) to the sum of non-outage corrective maintenance and preventive maintenance completed over the reporting period. The ratio, expressed as a percentage, is calculated based on manhours. Also displayed are the % of preventive maintenance items in the month that were not completed or administratively closed by the scheduled date plus a grace period equal to 25 % of the scheduled interval. This indicator tracks preventive maintenance activities for SEP #41.

PERFORMANCE INDICATOR DEFINITIONS

RECORDABLE INJURY/ILLNESS CASES FREQUENCY RATE
The number of injuries requiring more than normal first aid per 200,000 man-hours worked. This indicator trends personnel performance for SEP #15, 25 & 26.

REPEAT FAILURES
The number of Nuclear Plant Reliability Data System (NPRDS) components with more than 1 failure and the number of NPRDS components with more than 2 failures for the last eighteen months.

SAFETY SYSTEM FAILURES
Safety system failures are any events or conditions that could prevent the fulfillment of the safety functions of structures or systems. If a system consists of multiple redundant subsystems or trains, failure of all trains constitutes a safety system failure. Failure of one of two or more trains is not counted as a safety system failure. The definition for the indicator parallels NRC reporting requirements in 10 CFR 50.72 and 10 CFR 50.73. The following is a list of the major safety systems, subsystems, and components monitored for this indicator: Accident Monitoring Instrumentation, Auxiliary (and Emergency) Feedwater System, Combustible Gas Control, Component Cooling Water System, Containment and Containment Isolation, Containment Coolant Systems, Control Room Emergency Ventilation System, Emergency Core Cooling Systems, Engineered Safety Features Instrumentation, Essential Compressed Air Systems, Essential or Emergency Service Water, Fire Detection or Suppression Systems, Isolation Condenser, Low Temperature Overpressure Protection, Main Steam Line Isolation Valves, Onsite Emergency AC & DC Power w/Distribution, Radiation Monitoring Instrumentation, Reactor Coolant System, Reactor Core Isolation Cooling System, Reactor Trip System and Instrumentation, Recirculation Pump Trip Actuation Instrumentation, Residual Heat Removal Systems, Safety Valves, Spent Fuel Systems, Standby Liquid Control System and Ultimate Heat Sink.

SECONDARY SYSTEM CHEMISTRY PERFORMANCE INDEX
The Chemistry Performance Index (CPI) is 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. The CPI is calculated using the following equation: CPI = (sodium/0.90) + (Chloride/1.70) + (Sulfate/1.90) + (Iron/4.40) + (Copper/0.30)/5. Where: Sodium, sulfate and chloride are the monthly average blowdown concentrations in ppb, iron and copper are monthly time weighted average feedwater concentrations in ppb. The denominator for each of the 5 factors is the INPO median value. If the monthly average for a specific parameter is less than the INPO median value, the median value is used in the calculation.

SIGNIFICANT EVENTS
Significant events are those events identified by NRC staff through detailed screening and evaluation of operating experience. The screening process includes the daily review and discussion of all reported operating reactor events, as well as other operational data such as special tests or construction activities. An event identified from the screening process as a significant event candidate is further evaluated to determine if any actual or potential threat to the health and safety of the public was involved. Specific examples of the type of criteria are summarized as follows: 1) Degradation of important safety equipment; 2) Unexpected plant response to a transient; 3) Degradation of fuel integrity, primary coolant pressure boundary, important associated features; 4) Scram with complication; 5) Unplanned release of radioactivity; 6) Operation outside the limits of the Technical Specifications; 7) Other.
INPO significant events reported in this indicator are SERs (Significant Event Reports) which inform utilities of significant events and lessons learned identified through the SEE-IN screening process.

SPARE PARTS INVENTORY VALUE
The dollar value of the spare parts inventory value for FCS during the reporting period.

STAFFING LEVEL
The actual staffing level and the authorized staffing level for the Nuclear Operations Division, the Production Engineering Division, and the Nuclear Services Division. This indicator tracks performance for SEP #24.

STATION NET GENERATION
The net generation (sum) produced by the FCS during the reporting month.

TEMPORARY MODIFICATIONS
The number of temporary mechanical and electrical configurations to the plant's systems.
1) Temporary configurations are defined as electrical jumpers, electrical blocks, mechanical jumpers, or mechanical blocks which are installed in the plant operating systems and are not shown on the latest revision of the P&ID, schematic, connection, wiring, or flow diagrams.
2) Jumpers and blocks which are installed for Surveillance Tests, Maintenance Procedures, Calibration Procedures, Special Procedures, or Operating Procedures are not considered as temporary modifications unless the jumper or block remains in place after the test or procedure is complete. Jumpers and blocks installed in test or lab instruments are not considered as temporary modifications.
3) Scaffolding is not considered a temporary modification. Jumpers and blocks which are installed and for which MRs have been submitted will be considered as temporary modifications until final resolution of the MR and the jumper or block is removed or is permanently recorded on the drawings. This indicator tracks temporary modifications for SEP #62 & 71.

PERFORMANCE INDICATOR DEFINITIONS

THERMAL PERFORMANCE

The ratio of the design gross heat rate (corrected) to the adjusted actual gross heat rate, expressed as a percentage.

UNIT CAPABILITY FACTOR

The ratio of the available energy generation over a given time period to the reference energy generation (the energy that could be produced if the unit were operated continuously at full power under reference ambient conditions) over the same time period, expressed as a percentage.

UNPLANNED AUTOMATIC REACTOR SCRAMS PER 7,000 CRITICAL HOURS

This indicator is defined as the number of unplanned automatic scrams (reactor protection system logic actuations) that occur per 7,000 hours of critical operation. The value for this indicator is calculated by multiplying the total number of unplanned automatic reactor scrams in a specific time period by 7,000 hours, then dividing that number by the total number of hours critical in the same time period. The indicator is further defined as follows:

1) Unplanned means that the scram was not an anticipated part of a planned test.

2) Scram means the automatic shutdown of the reactor by a rapid insertion of negative reactivity (e.g., by control rods, liquid injection system, etc.) that is caused by actuation of the reactor protection system. The scram signal may have resulted from exceeding a setpoint or may have been spurious.

3) Automatic means that the initial signal that caused actuation of the reactor protection system logic was provided from one of the sensors monitoring plant parameters and conditions, rather than the manual scram switches or, in manual turbine trip switches (or push-buttons) provided in the main control room.

4) Critical means that during the steady-state condition of the reactor prior to the scram, the effective multiplication factor (k_{eff}) was essentially equal to one.

UNPLANNED CAPABILITY LOSS FACTOR

The ratio of the unplanned energy losses during a given period of time, to the reference energy generation (the energy that could be produced if the unit were operated continuously at full power under reference ambient conditions) over the same time period, expressed as a percentage.

UNPLANNED SAFETY SYSTEM ACTUATIONS - (INPO DEFINITION)

This indicator is defined as the sum of the following safety system actuations:

1) The number of unplanned Emergency Core Cooling System (ECCS) actuations that result from reaching an ECCS actuation setpoint or from a spurious/inadvertent ECCS signal.

2) The number of unplanned emergency AC power system actuations that result from a loss of power to a safeguards bus. An unplanned safety system actuation occurs when an actuation setpoint for a safety system is reached or when a spurious or inadvertent signal is generated (ECCS only), and major equipment in the system is actuated. Unplanned means that the system actuation was not part of a planned test or evolution. The ECCS actuations to be counted are actuations of the high pressure injection system, the low pressure injection system, or the safety injection tanks.

UNPLANNED SAFETY SYSTEM ACTUATIONS (NRC DEFINITION)

The number of safety system actuations which include (only) the High Pressure Safety Injection System, the Low Pressure Safety Injection System, the Safety Injection Tanks, and the Emergency Diesel Generators. The NRC classification of safety system actuations includes actuations when major equipment is operated and when the logic systems for the above safety systems are challenged.

VIOLATIONS PER 1,000 INSPECTION HOURS

This indicator is defined as the number of violations sited in NRC inspection reports for FCS per 1,000 NRC inspection hours. The violations are reported in the year that the inspection was actually performed and not based on when the inspection report is received. The hours reported for each inspection report are used as the inspection hours.

VOLUME OF LOW-LEVEL SOLID RADIOACTIVE WASTE

This indicator is defined as the volume of low-level solid radioactive waste actually shipped for burial. This indicator also shows the volume of low-level radioactive waste which is in temporary storage, the amount of radioactive oil that has been shipped off-site for processing, and the volume of solid dry radioactive waste which has been shipped off-site for processing. Low-level solid radioactive waste consists of dry active waste, sludges, resins, and evaporator bottoms generated as a result of nuclear power plant operation and maintenance. Dry radioactive waste includes contaminated rags, cleaning materials, disposable protective clothing, plastic containers, and any other material to be disposed of at a low-level radioactive waste disposal site, except resin, sludge, or evaporator bottoms. Low-level refers to all radioactive waste that is not spent fuel or a by-product of spent fuel processing. This indicator tracks radiological work performance for SEP #54.

SAFETY ENHANCEMENT PROGRAM INDEX

The purpose of the Safety Enhancement Program (SEP) Performance Indicators Index is to list performance indicators related to SEP items with parameters that can be trended.

SAFETY ENHANCEMENT PROGRAM INDEX (continued)

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FORT CALHOUN STATION
OPERATING CYCLES AND REFUELING OUTAGE DATES

Event	Date Range	Production (MWH)	Cumulative (MWH)
Cycle 1	09/26/73 -02/01/75	3,299,639	3,299,639
1st Refueling	02/01/75 -05/09/75	*	*
Cycle 2	05/09/75 -10/01/76	3,853,322	7,152,961
2nd Refueling	10/01/76 -12/13/76	*	*
Cycle 3	12/13/76 - 9/30/77	2,805,927	9,958,888
3rd Refueling	09/30/77 -12/09/77	*	*
Cycle 4	12/09/77 - 10/14/78	3,026,832	12,985,720
4th Refueling	10/14/78 - 12/24/78	*	*
Cycle 5	12/24/78 - 01/18/80	3,882,734	16,868,454
5th Refueling	01/18/80 - 06/11/80	*	*
Cycle 6	06/11/80 - 09/18/81	3,899,714	20,768,168
6th Refueling	09/18/81 - 12/21/81	*	*
Cycle 7	12/21/81 - 12/06/82	3,561,866	24,330,034
7th Refueling	12/06/82 - 04/07/83	*	*
Cycle 8	04/07/83 - 03/03/84	3,406,371	27,736,405
8th Refueling	03/03/84 - 07/12/84	*	*
Cycle 9	07/12/84 - 09/28/85	4,741,488	32,477,893
9th Refueling	09/28/85 - 01/16/86	*	*
Cycle 10	01/16/86 - 03/07/87	4,356,753	36,834,646
10th Refueling	03/07/87 - 06/08/87	*	*
Cycle 11	06/08/87 - 09/27/88	4,936,859	41,771,505
11th Refueling	09/27/88 - 01/31/89	*	*
Cycle 12	01/31/89 - 02/17/90	3,817,954	45,589,459
12th Refueling	02/17/90 - 05/29/90	*	*
Cycle 13	05/29/90 - 02/01/92	5,451,069	51,040,528
13th Refueling	02/01/92 - 05/03/92	*	*
Cycle 14	05/03/92 -09/25/93	4,981,485	56,022,013
14th Refueling	09/25/93 - 11/26/93	*	*
Cycle 15	11/26/93 - 03/11/95	*	*
15th Refueling	03/11/95 - 04/29/95	(Planned Dates)	

FORT CALHOUN STATION
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-Sept. 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-Feb. 1,1992