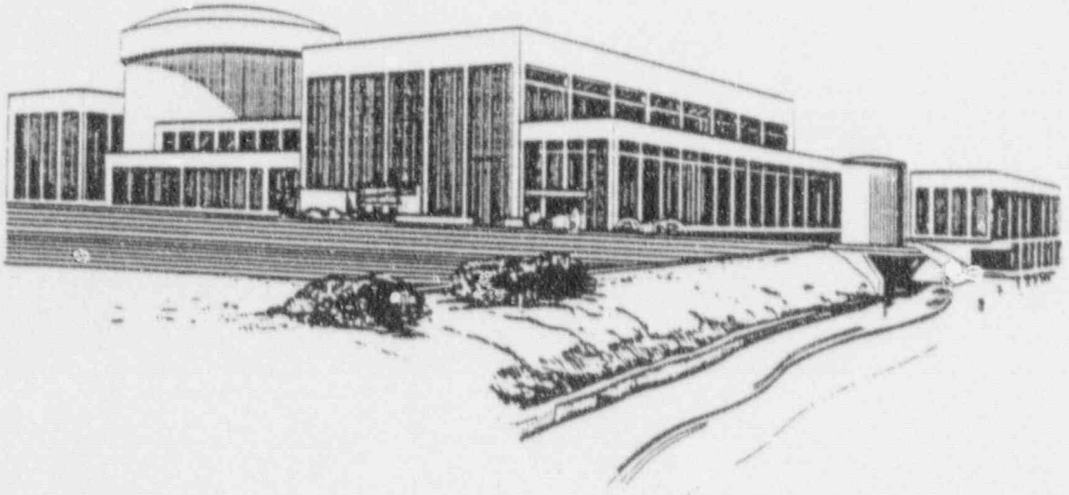
FORT CALHOUN STATION
PERFORMANCE INDICATORS

MAY 1992



Prepared by:

Production Engineering Division
System Engineering
Test and Performance Group

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:
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ABSTRACT

PURPOSE

The "Performance Indicators Program" is intended to provide selected Fort Calhoun plant performance information to OPPD's personnel responsible for optimizing unit performance. The information is presented in a way that provides ready identification of trends and a means to track progress toward reaching corporate goals. The information can be used for assessing and monitoring Fort Calhoun's plant performance, with emphasis on safety and reliability. Some performance indicators show company goals or industry information. This information can be used for comparison or as a means of promoting pride and motivation.

SCOPE

The conditions, goals, and projections reflected within this report are current as of the end of the month being reported, unless otherwise stated.

In order for the Performance Indicator Program to be effective, the following guidelines were followed while implementing the program:

1) Data was selected which most effectively monitors Fort Calhoun's performance in key areas.

2) Established corporate goals and industry information were included for comparison.

3) Formal definitions were developed for each performance parameter to ensure consistency in future reports and allow comparison with industry averages where appropriate.

Comments and input are encouraged to ensure that this program is tailored to address the areas which are most meaningful to the people using the report. Please refer comments to the System Engineering Department's Test and Performance Group. To increase personnel awareness of Fort Calhoun Station's plant performance, it is suggested that this report be distributed throughout your respective departments.

REFERENCES

INPO Good Practices OA-102, "Performance Monitoring - Management Information"

INPO Report Dated November 1984, "Nuclear Power Plant Operational Data"

NUMARC 87-00, "Guidelines and Technical Bases for NUMARC Initiatives Addressing Station Black-out at Light Water Reactors", Revision 1, Appendix D, "EDG Reliability Program", dated April 6, 1990.

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TRAINING AND QUALIFICATION

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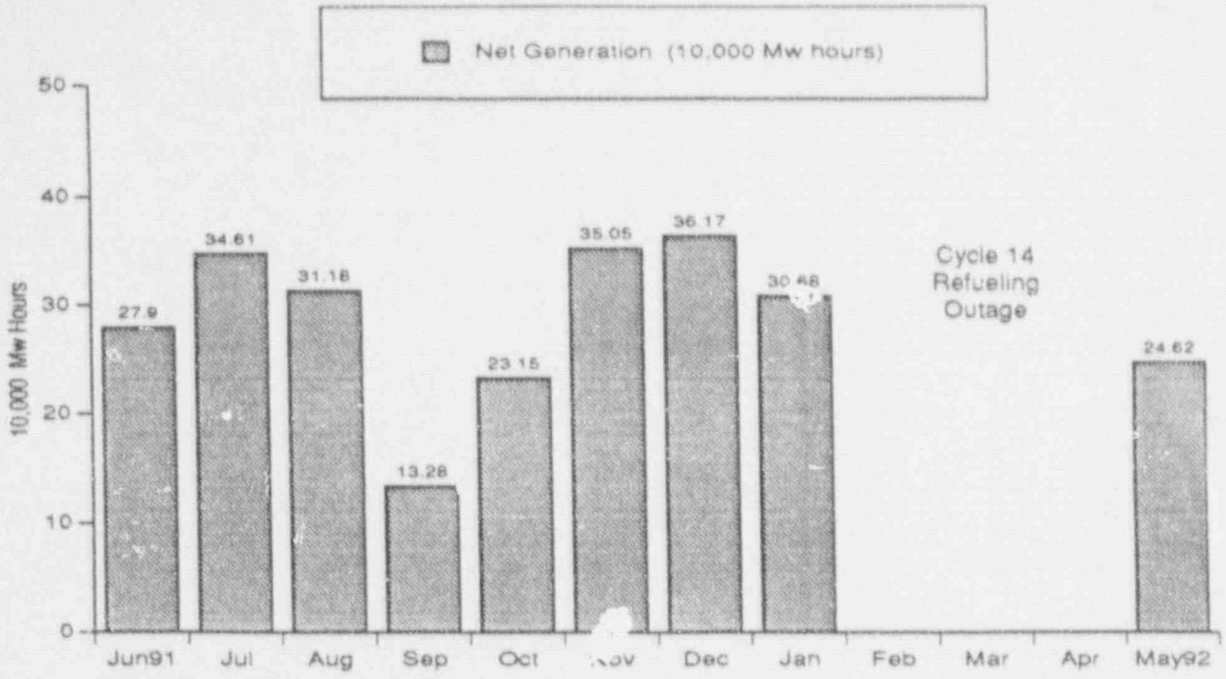
TABLE OF CONTENTS/SUMMARY TREND SYMBOLS

A = ADVERSE TREND
I = IMPROVED PERFORMANCE
D = DECLINING PERFORMANCE
NMA = NEEDS MANAGEMENT ATTENTION
NA = NOT APPLICABLE/AVAILABLE



STATION NET GENERATION

This indicator shows the net generation of the Fort Calhoun Station for the reporting month.

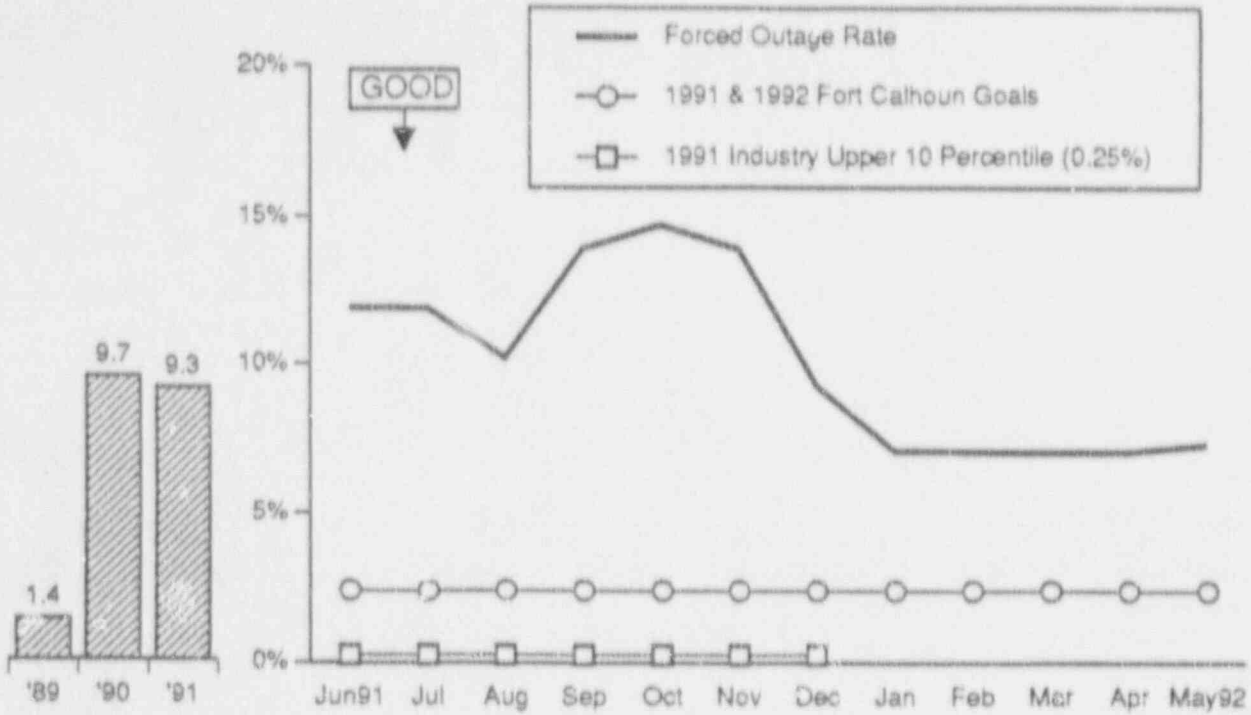
During the month of May 1992, a net total of 246,192 MWH was generated by the Fort Calhoun Station.

The station was returned to service after the Cycle 14 Refueling Outage when the reactor was taken critical on 5/1/92 at 1035 hours and the generator was put on-line on 5/3/92. A forced outage occurred on 5/14/92 when the turbine generator tripped on a false high level moisture separator trip signal which caused a simultaneous reactor trip. The reactor was returned to critical and the generator was put on-line on 5/15/92.

Unplanned energy losses for the month were: 1) the Cycle 14 Refueling Outage extension; 2) the reduction to 58% power for the inoperable condenser valve: 3) the reactor trip; 4) the hold at 48% power for repair on a feedwater pump suction valve; and 5) the 5/31 dropped control rod caused by a faulty clutch coil.

The low net generation for the months of September and October 1991 was due to the following three forced outages: 1) the station batteries replacement outage from 9/12/91 at 2100 hours through 10/6/91 at 1114 hours; 2) a steam leak on the drain line from a turbine control valve was repaired from 10/18/91 at 0307 hours to 10/19/91 at 1116 hours; and 3) a steam leak repair on a test pipe on the high pressure turbine shell from 10/25/91 at 2204 to 10/26/91 at 0810.

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



FORCED OUTAGE RATE

The forced outage rate was reported as 7.31% for the twelve months from 6/1/91 to 5/31/92.

A forced outage occurred on 5/14/92 at 1557 hours when the turbine generator tripped on a false high level moisture separator trip signal which caused a simultaneous reactor trip. The reactor was returned to critical at 0537 on 5/15/92 and the generator was on-line at 1150 hours at 5/15/92.

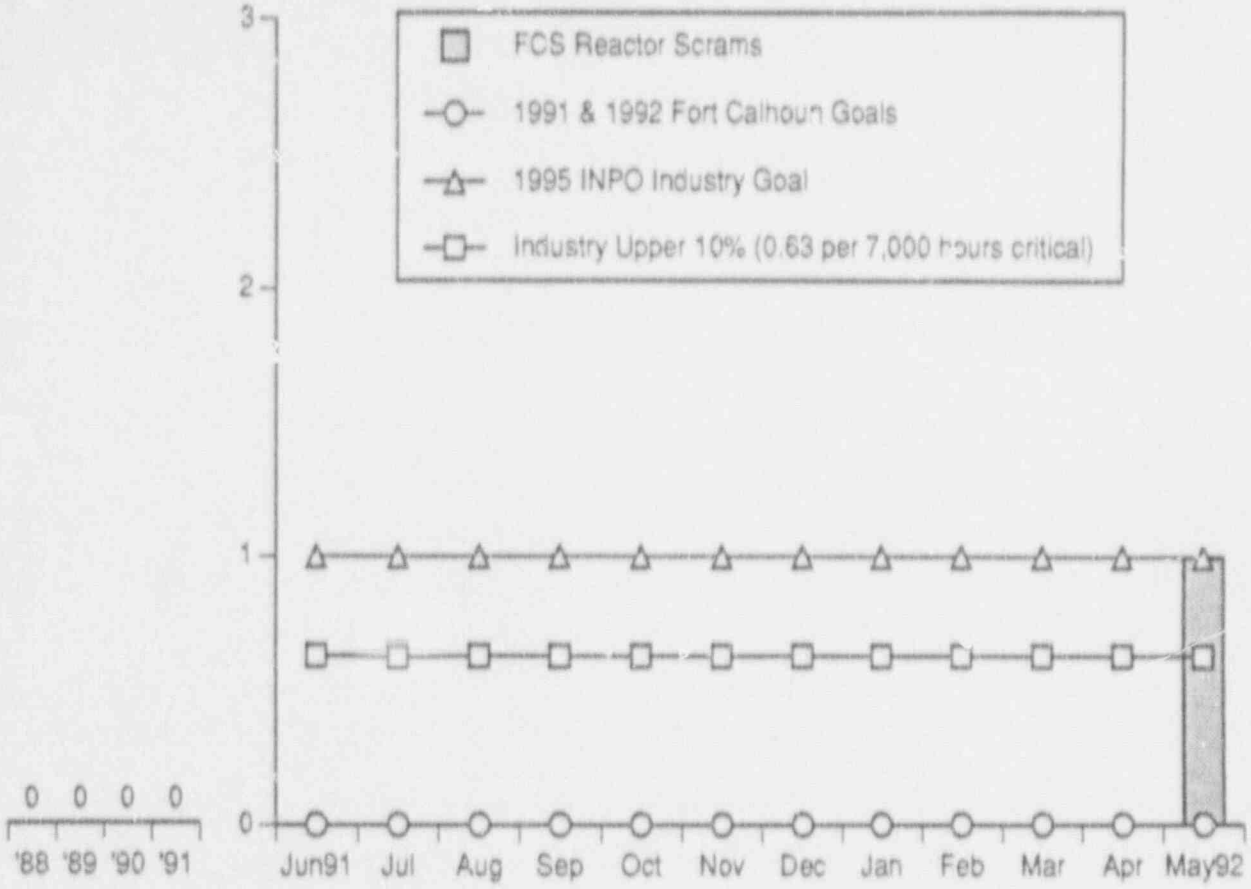
During the months of September and October 1991 a forced outage occurred when the station batteries were declared inoperable. The generator was taken off line on 9/12/91 and remained off line until 10/6 /91.

The generator was taken off line on October 18 & 19, 1991 due to a steam leak on a turbine control valve before seat drain line. The generator was again taken off line on October 25 & 26 due to a steam leak from an instrument tap on the high pressure turbine.

A forced outage occurred during the month of August 1991 to replace a failed potential transformer (PT). This PT converted 345 KV to 120V for use in the breaker synchronization circuit.

The 1992 and 1991 Fort Calhoun goals for Forced Outage Rate are 2.4%.

Data Source: Monthly Operations Report & NERC GAD Forms
Accountability: Peterson
Adverse Trend: None



UNPLANNED AUTOMATIC REACTOR SCRAMS PER 7,000 HOURS CRITICAL

There was one unplanned automatic reactor scram in May 1992. This scram occurred on May 14 at 1557 when the turbine generator tripped on a false high level moisture separator trip signal which caused a simultaneous reactor trip. The last unplanned automatic reactor scram prior to this occurred on July 2, 1986.

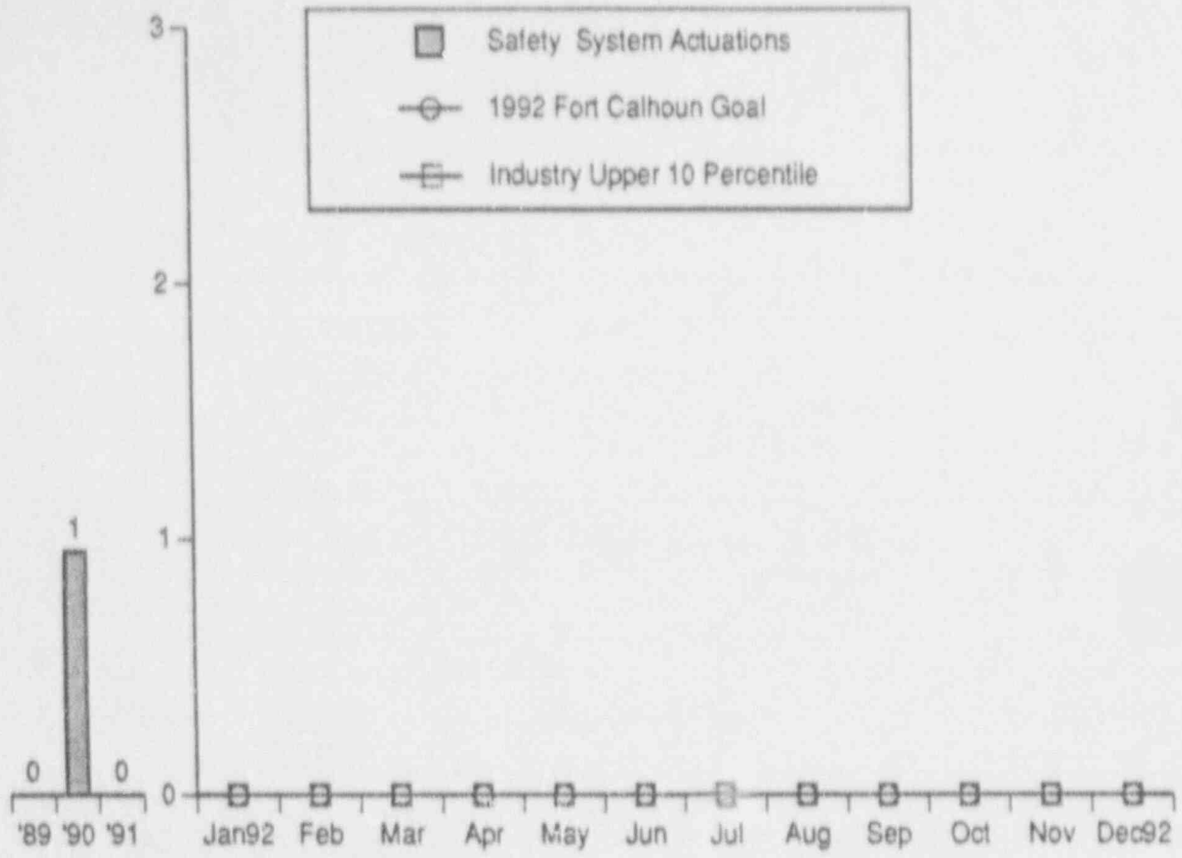
The 1992 goal for unplanned automatic reactor scrams while critical has been set at zero. The 1995 INPO industry goal is one per 7,000 hours critical.

The industry upper ten percentile value is approximately 0.63 scrams per 7,000 hours critical.

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

Accountability: Patterson

Adverse Trend: None



UNPLANNED SAFETY SYSTEM ACTUATIONS - (INPO DEFINITION)

There were no unplanned safety system actuations during the month of May 1992.

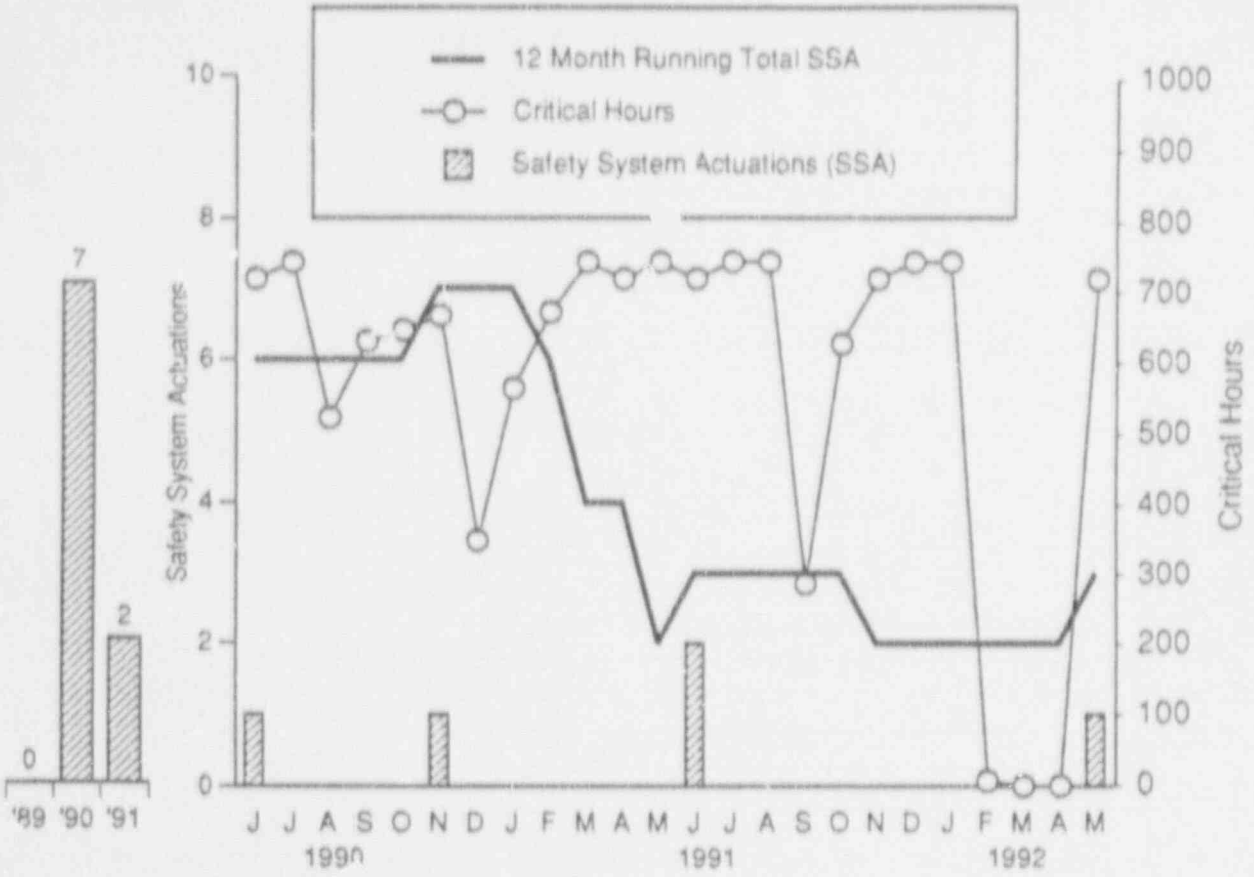
The 1992 goal for the number of unplanned safety system actuations is zero.

The industry upper ten percentile value for the number of unplanned safety system actuations per year is zero. The Fort Calhoun Station is currently performing in the upper ten percentile of nuclear power plants for this indicator.

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

Accountability: Jaworski/Foley/Ronning

Adverse Trend: None



UNPLANNED SAFETY SYSTEM ACTUATIONS - (NRC DEFINITION)

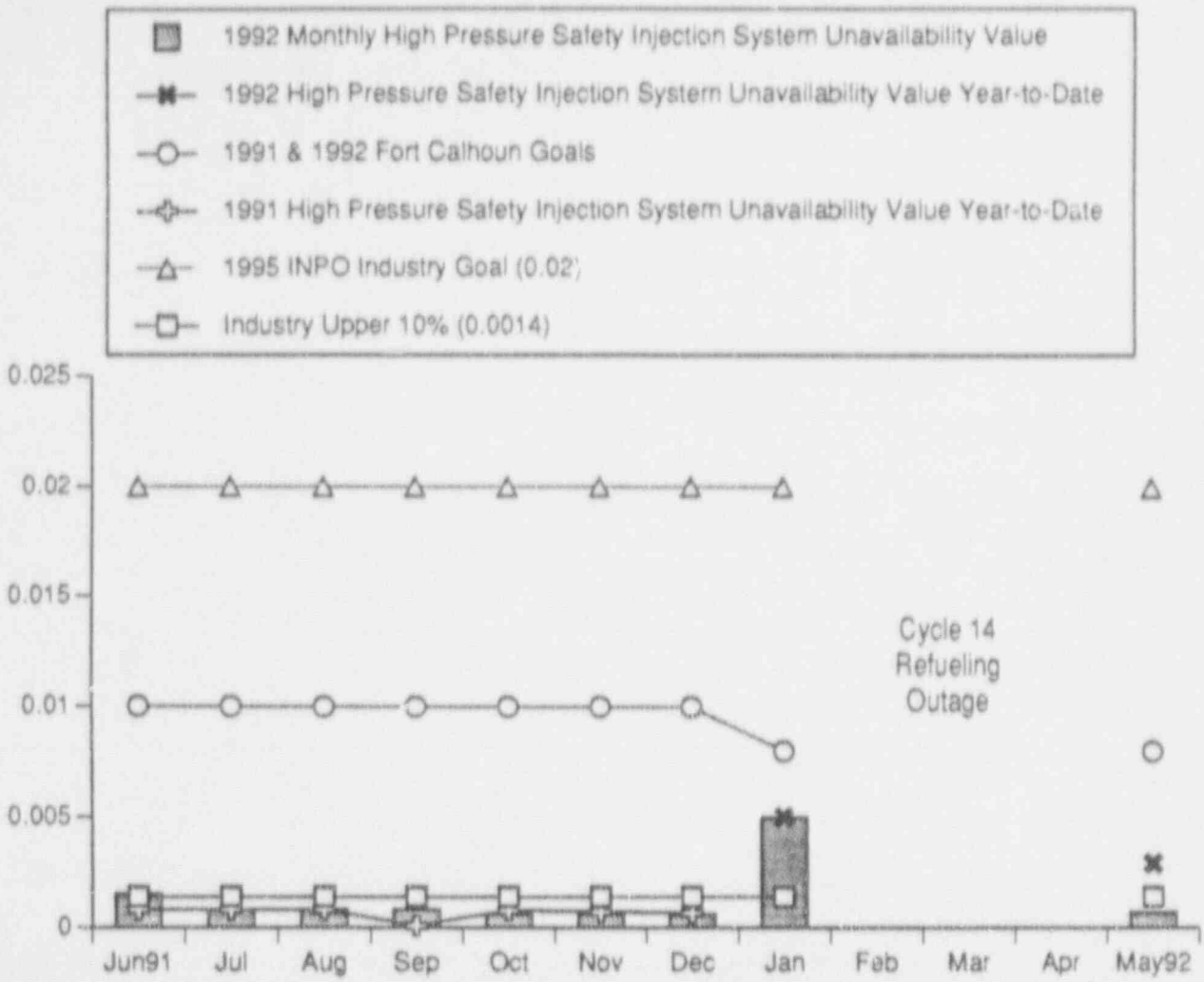
This indicator shows the number of unplanned safety system actuations (SSAs) which include the High and Low Pressure Safety Injection Systems, the Safety Injection Tanks, and the Emergency Diesel Generators. The NRC classification of SSAs includes actuations when major equipment is operated and when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

An unplanned safety system actuation occurred on May 14, 1992 when 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.

In June 1991 when there were two anticipatory signal starts for DG-2. The first start occurred after a control relay was bumped causing a momentary loss of power to safety bus 1A4. DG-2 started a second time when a breaker trip occurred during DG-1 breaker synchronization. DG-2 was not required to provide power to the safety bus in either of these situations.

The 1992 Fort Calhoun goal for this indicator is a maximum of three.

Data Source: Monthly Operations Report & Plant Licensee Event Reports (LERs)
Accountability: Jaworski/Foley/Ronning
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.

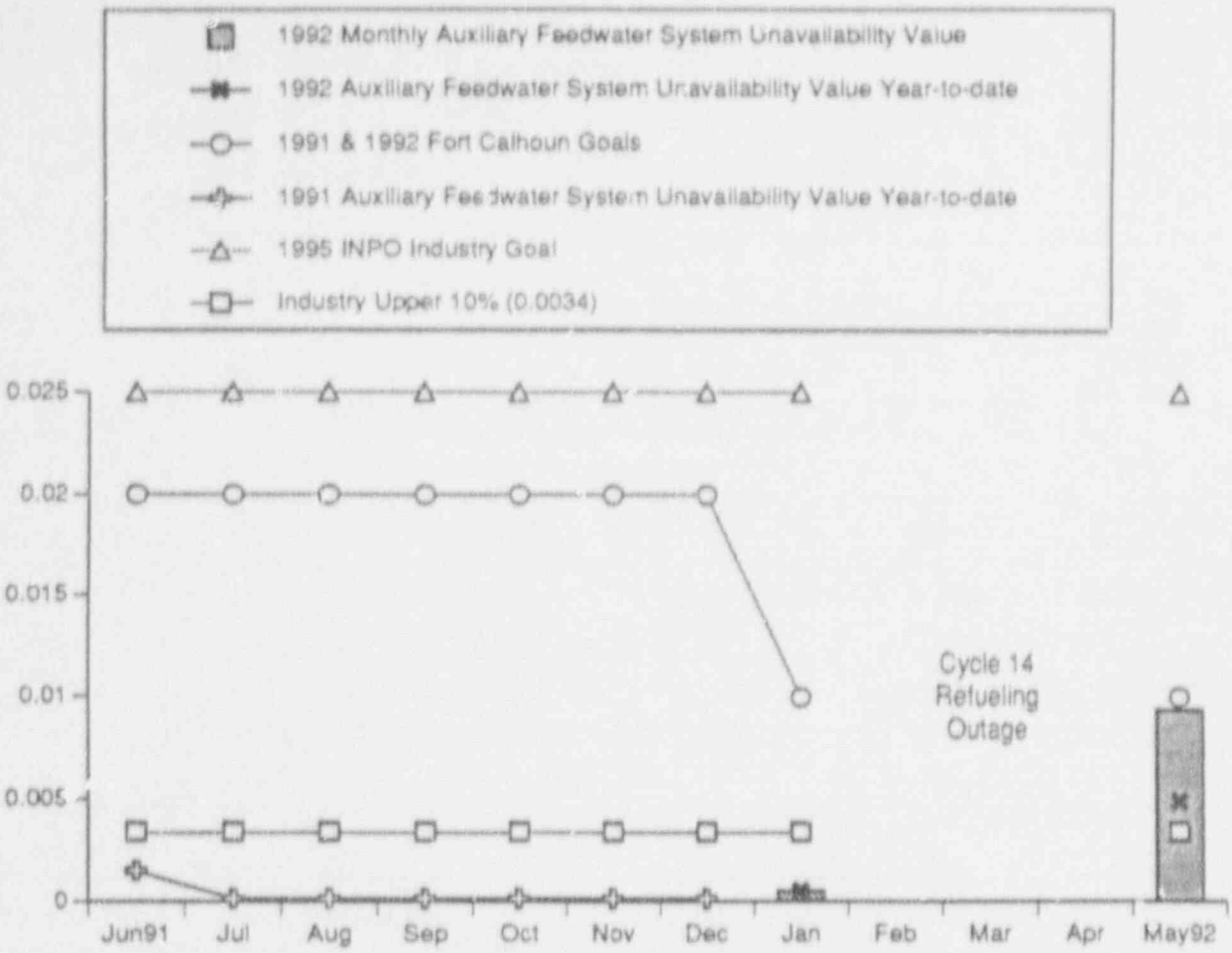
The High Pressure Safety Injection System unavailability value for May 1992 was 0.00069. There were 1.5 hours of planned unavailability for surveillance tests in May.

The 1992 Fort Calhoun goal for this indicator is 0.008. The 1995 INPO industry goal is 0.02 and the industry upper ten percentile value (for the three year period from 1/89 through 12/91) is approximately 0.0014.

Data Source: Jaworski/Schaffer

Accountability: Jaworski/Schaffer

Adverse Trend: None



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 1992 was 0.0094. Preventive maintenance activities resulted in 2.67 hours of planned unavailability and 10.9 hours of unplanned unavailablity on 5/27/92 due to corrective maintenance following the initial attempt to perform a PM .

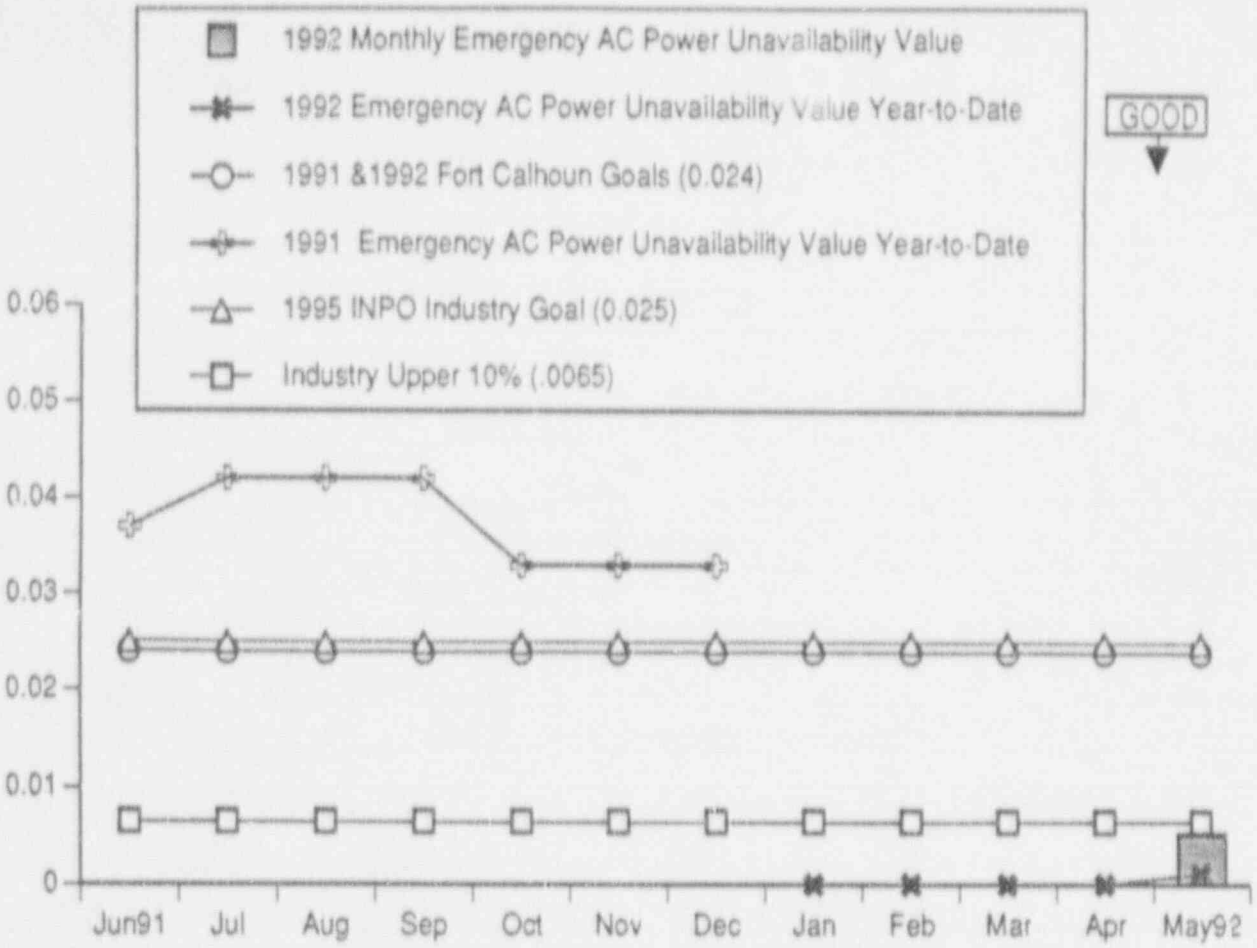
The 1992 year-to-date AFW unavailability value was 0.0049 at the end of May.

The 1992 Fort Calhoun goal for this indicator is 0.01. The 1995 INPO industry goal is 0.025 and the industry upper ten percentile value (for the three year period from 1/89 through 12/91) is approximately 0.0034.

Data Source: Jaworski/Hilgenkamp

Accountability: Jaworski/Hilgenkamp

Adverse Trend: None



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 1992 is 0.0053. On May 26, there were 7.9 hours of planned unavailability for DG-1 to tighten the fan blades and repair a starting air solenoid valve .

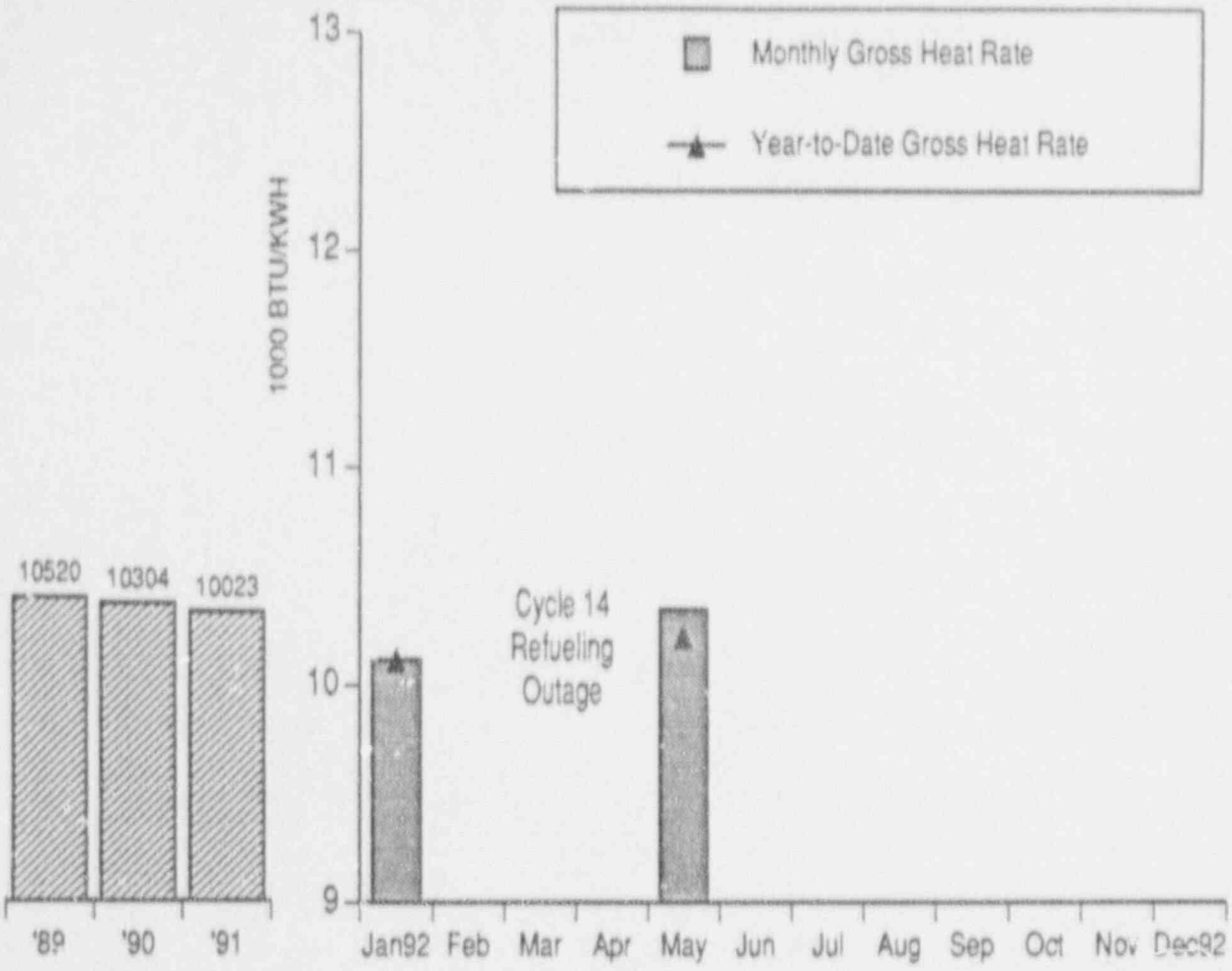
The Emergency AC Power System unavailability value year-to-date is 0.0011.

The 1992 Fort Calhoun goal for this indicator is 0.024. The 1995 INPO industry goal is 0.025 and the industry upper ten percentile value (for the three year period from 1/89 through 12/91) is approximately 0.0065.

Data Source: Jaworski/Ronning

Accountability: Jaworski/Ronning

Adverse Trend: None



GROSS HEAT RATE

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

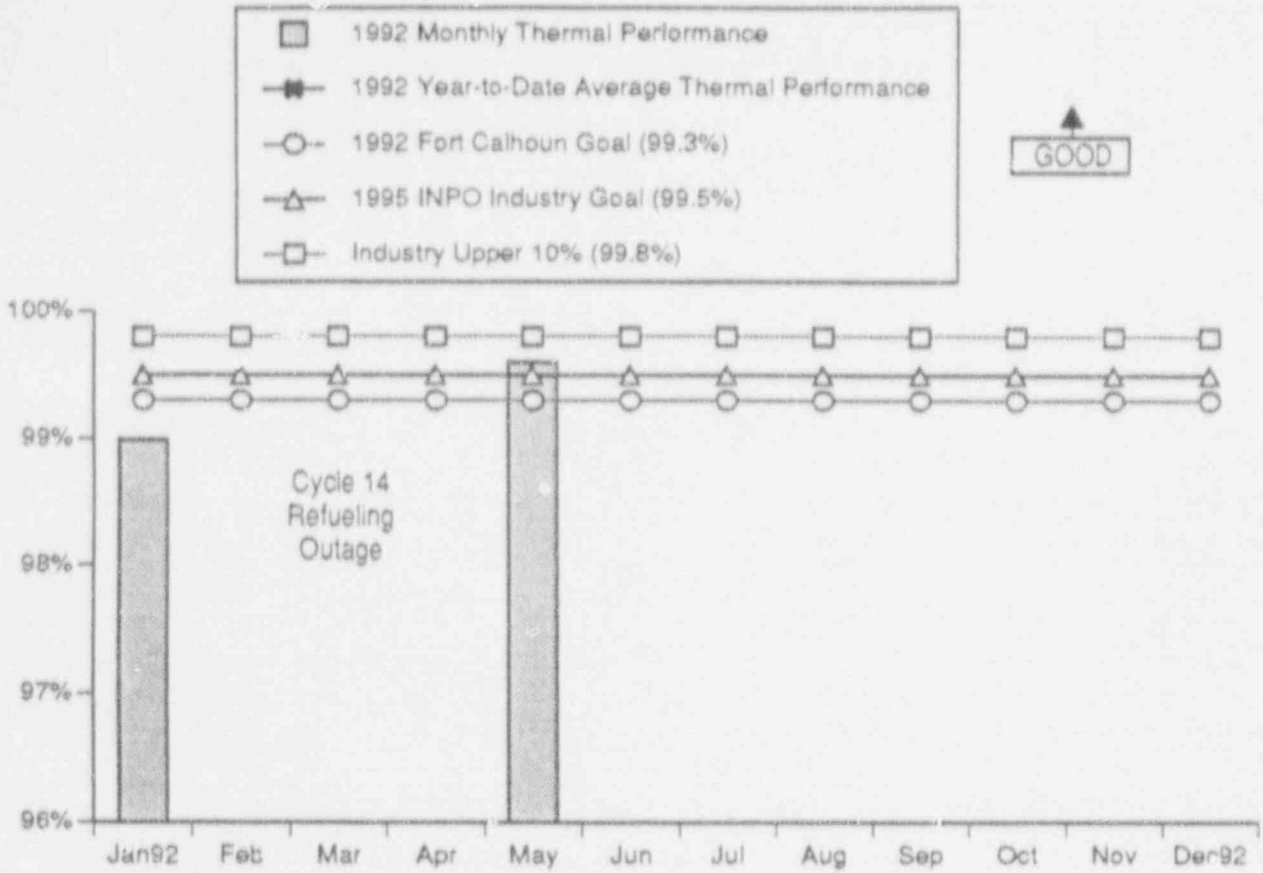
The gross heat rate for the Fort Calhoun Station was reported as 10,348 BTU/KWH during the month of May 1992.

The year-to-date gross heat rate was reported as 10,225.4 BTU/KWH.

Data Source: Holthaus/Gray (Manager/Source)

Accountability: Patterson

Adverse Trends: None



THERMAL PERFORMANCE

This indicator shows the Thermal Performance value for the reporting month, the 1992 Fort Calhoun goal, the 1995 INPO industry goal and the industry median value.

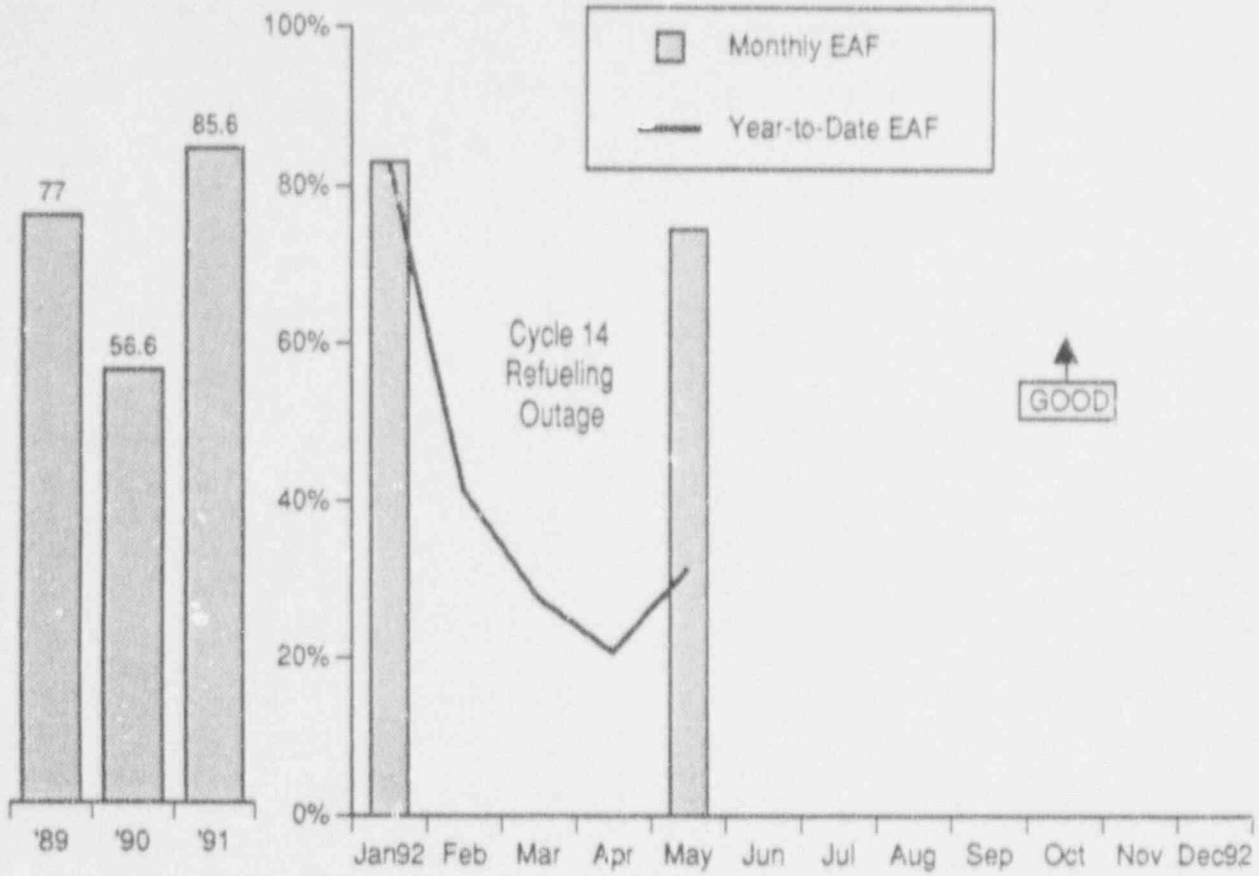
The thermal performance value for the reporting month was 99.6%.

The 1992 Fort Calhoun Goal for this indicator is 99.3%. The 1995 INPO industry goal is 99.5% and the industry upper ten percentile value (for the one year period from 1/90 through 12/91) is approximately 99.8%.

Data Source: Jaworski/Popek

Accountability: Jaworski/Popek

Adverse Trend: None



EQUIVALENT AVAILABILITY FACTOR

This indicator shows the plant monthly Equivalent Availability Factor (EAF), the year-to-date EAF for 1992, and the EAF for the previous 3 years.

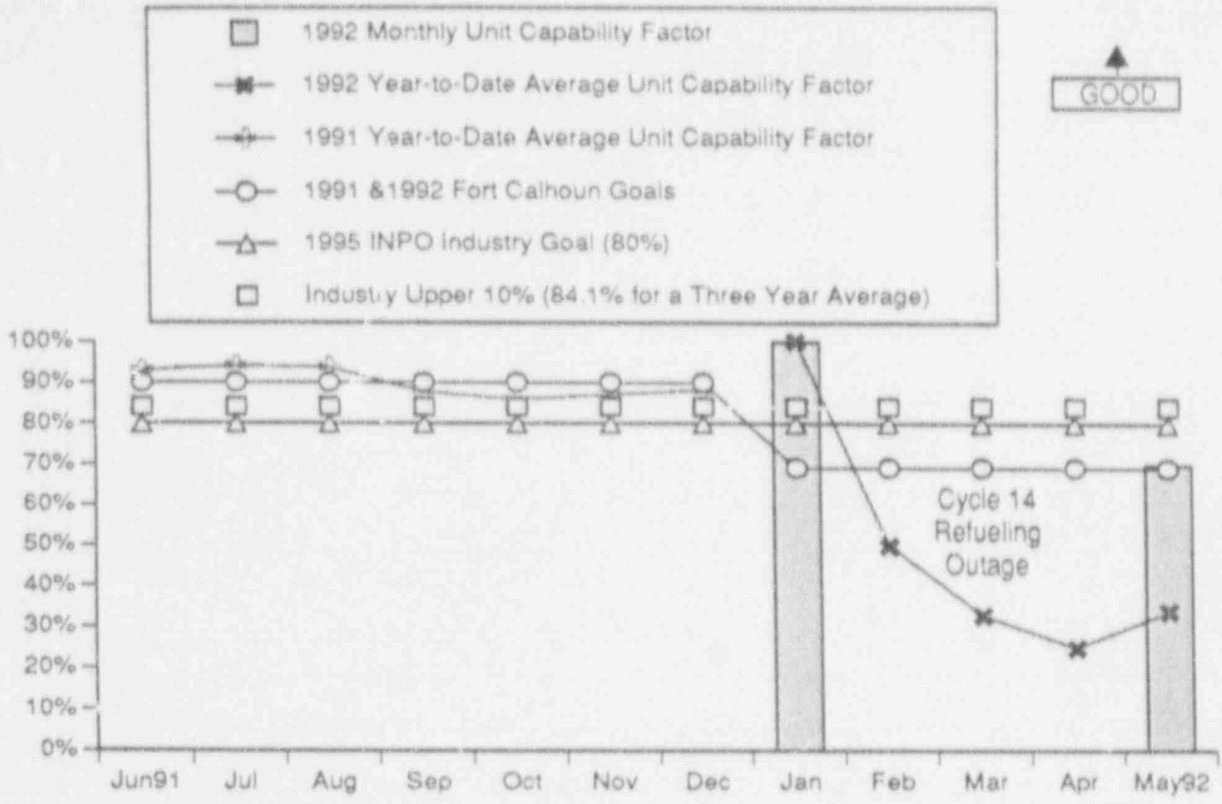
The EAF for May 1992 was reported as 74.6%.

The year-to-date EAF was reported as 31.5%.

Data Source: Dietz/Parra (Manager/Source)

Accountability: Patterson

Adverse Trend: None



UNIT CAPABILITY FACTOR

This indicator shows the plant monthly Unit Capability (UCF) Factor and the 1995 INPO industry goal. 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 was reported as 69.9% for the month of May 1992.

The year-to-date average unit capability factor was reported as 34%.

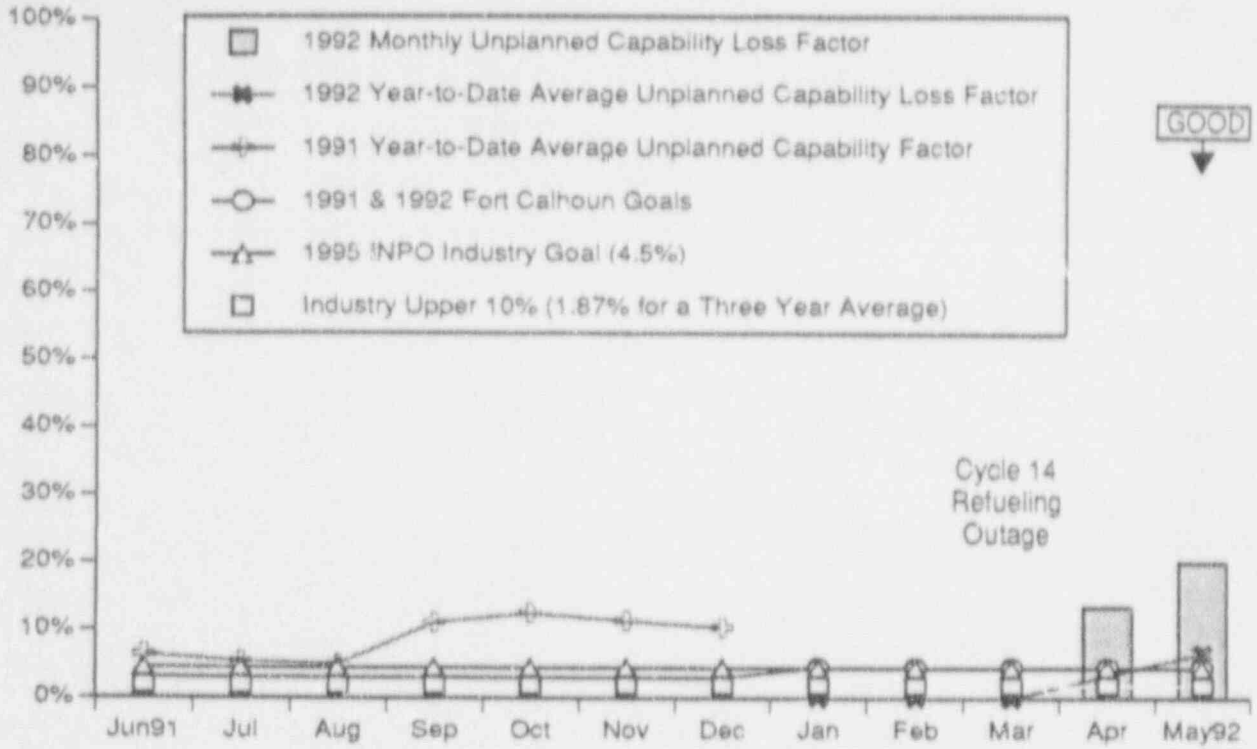
The 1995 INPO industry goal is 80% and the industry upper ten percentile value (for the three year period from 1/89 through 12/91) is approximately 84.1%.

The 1992 Fort Calhoun goal for Unit Capability Factor is 69.2%. The basis for this goal is 86 days for the Cycle 14 Refueling Outage, 20 days rampup (10 full power equivalent days), unplanned loss of 11.5 full power equivalent days, and 10 day rampup (5 full power equivalent days).

Data Source: Generation Totals Report & Monthly Operating Report

Accountability: Patterson

Adverse Trend: None



UNPLANNED CAPABILITY LOSS FACTOR

This indicator shows the plant monthly Unplanned Capability Loss Factor (UCLF) , the Fort Calhoun UCLF goal for 1992, and the 1995 INPO industry goal. 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.

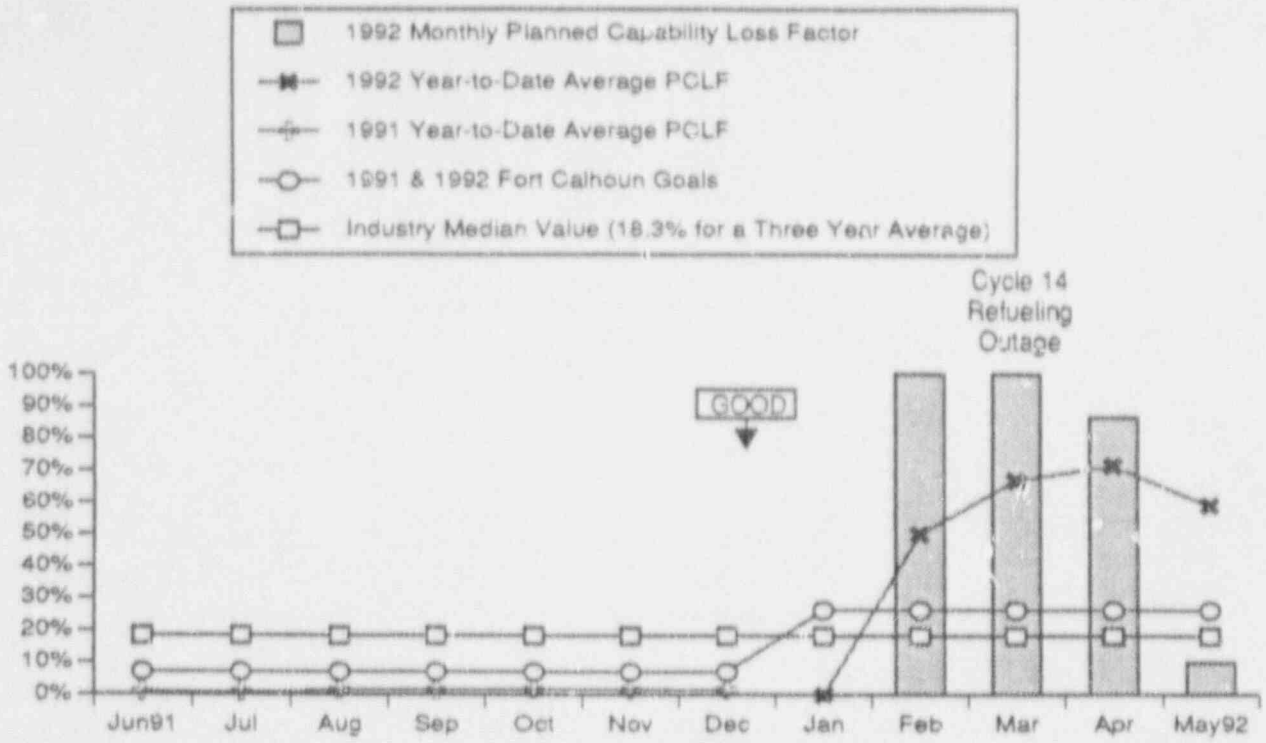
The UCLF was reported as 20.1% for the month of May 1992. Unplanned energy losses for the month were: 1) the Cycle 14 Refueling Outage extension; 2) the reduction to 58% power for the inoperable condenser valve: 3) the reactor trip; 4) the hold at 48% power for repair on a feedwater pump suction valve; and 5) the dropped control rod caused by a faulty clutch coil.

The year-to-date average UCLF is 6.7%.

The 1995 INPO industry goal is 4.5% and the industry upper ten percentile value (for the three year period from 1/89 through 12/91) is approximately 1.87%.

The Fort Calhoun goal for Unplanned Capability Loss Factor is 4.5%. The basis for this goal is an unplanned loss of 11.5 full power equivalent days and 10 day rampup (5 full power equivalent days).

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



PLANNED CAPABILITY LOSS FACTOR

This indicator shows the plant monthly Planned Capability Loss Factor (PCLF), the PCLF year-to-date average, and the Fort Calhoun yearly average goals for 1991 and 1992. PCLF is defined as the ratio of the planned 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.

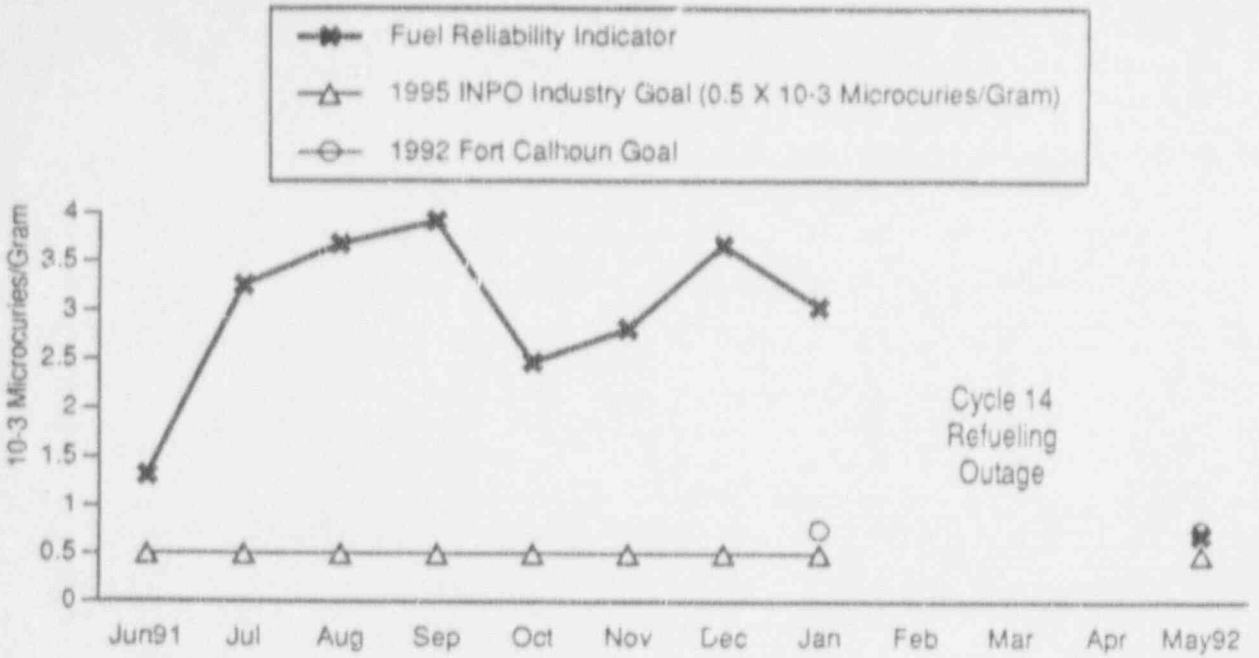
The PCLF was reported as 10.0% for the month of May 1992. Planned energy losses for the month were the rampup after the Cycle 14 Refueling outage, the hold at 30% power for chemistry control and the hold at 65% power for instrument calibration and surveillance testing.

The year-to-date-average PCLF for 1992 is 59.3%.

The 1992 Fort Calhoun yearly average Planned Capability Loss Factor goal is 26.3%. The basis for this goal is 86 days for the Cycle 14 Refueling Outage and 20 days rampup (10 full power equivalent days). The 1991 goal was 7%.

The PCLF industry median value (for the three year period from 1/89 through 12/91) is 18.3%.

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



FUEL RELIABILITY INDICATOR

The Fuel Reliability Indicator (FRI) was reported as 7.07 X 10-4 microcuries/gram for the month of May 1992. During this month the plant was in the startup mode for the beginning of full power life for the Cycle 14 core.

The May FRI was calculated using the data from May 25 through May 31. In accordance with the INPO definition of steady state operation, the plant was at power levels above 85% during this time and the power levels did not vary more than + or - 5% for at least 3 days. Only the iodine concentration values from the days that meet this steady state criteria can be factored into the INPO fuel reliability indicator.

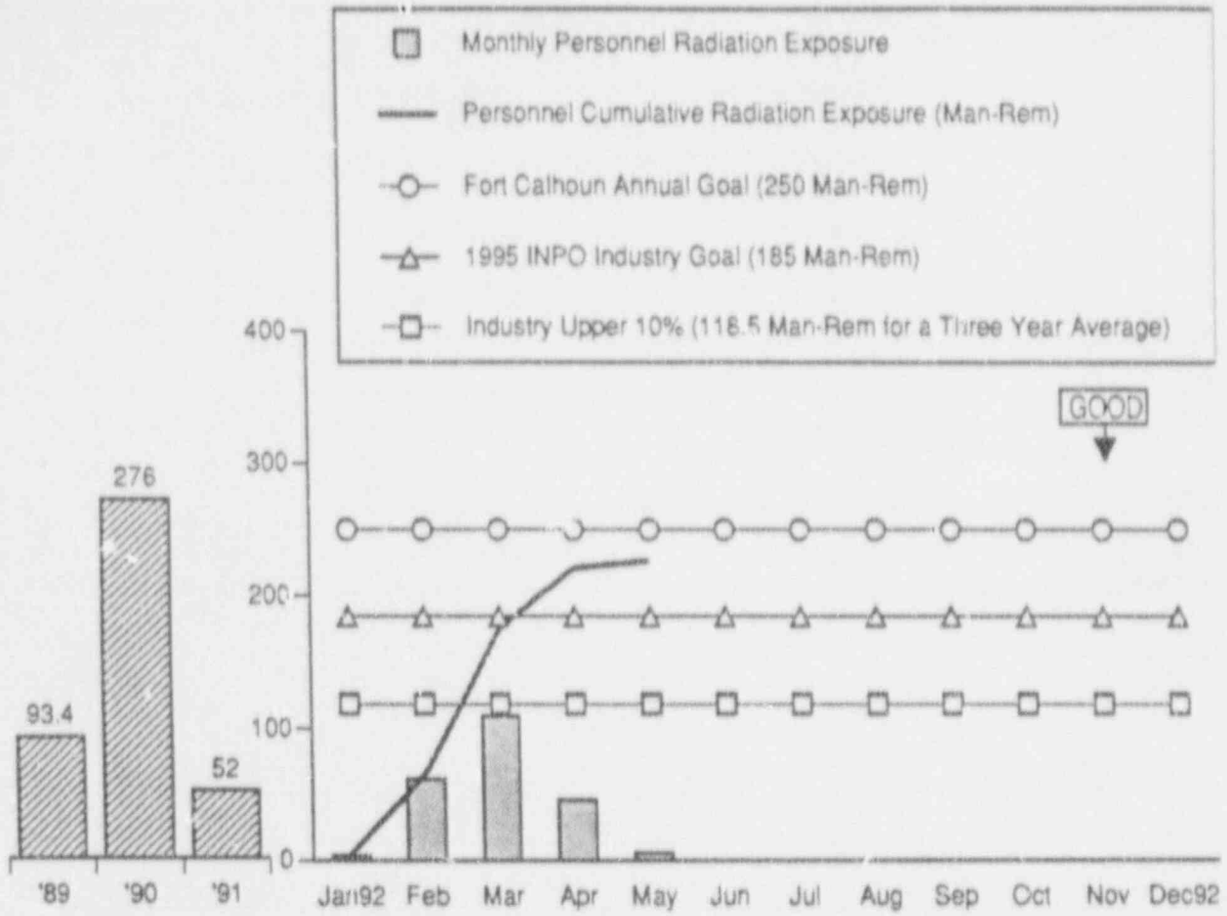
The last detected fuel failure was during Cycle 13. The FRI values observed during the later months of Cycle 13 were in the 2.5 X 10-3 to 3.9 X 10-3 microcuries/gram range.

Fuel inspection/reconstitution efforts during the last refueling outage replaced one defective rod in assembly N008 with a stainless steel pin. Fuel assembly N008 is in the Cycle 14 core. NCR 92-029 includes the justification for fuel reconstitution and the use of assembly N008 in the core.

A Fort Calhoun goal of 7.5 X 10-4 microcuries/gram will be utilized in 1992. Fort Calhoun recognizes the INPO 1995 U.S. industry goal of 5.0 X 10-4 microcuries/gram and will revise the annual FRI goal accordingly.

The FRI was not applicable while the plant was shutdown for the refueling outage in February, March and April, and was not reported during those months.

Data Source: Holthaus/Guliani
Accountability: Patterson/Spilker
Adverse Trend: None



COLLECTIVE RADIATION EXPOSURE

During May 1992, 5.584 man-rem was recorded by TLDs worn by personnel while working at the Fort Calhoun Station. The year-to-date exposure is 226.458 man-rem.

The Fort Calhoun goal for personnel radiation exposure (cumulative) during 1992 is 250 man-rem. Cumulative radiation exposure for the Cycle 14 Refueling Outage was 216.899 man-rem, which exceeds the outage goal of 210 man-rem. The goal was not achieved because the outage was longer than anticipated and there was more exposure than expected due to the stuck reactor vessel stud and the thermal shield inspection.

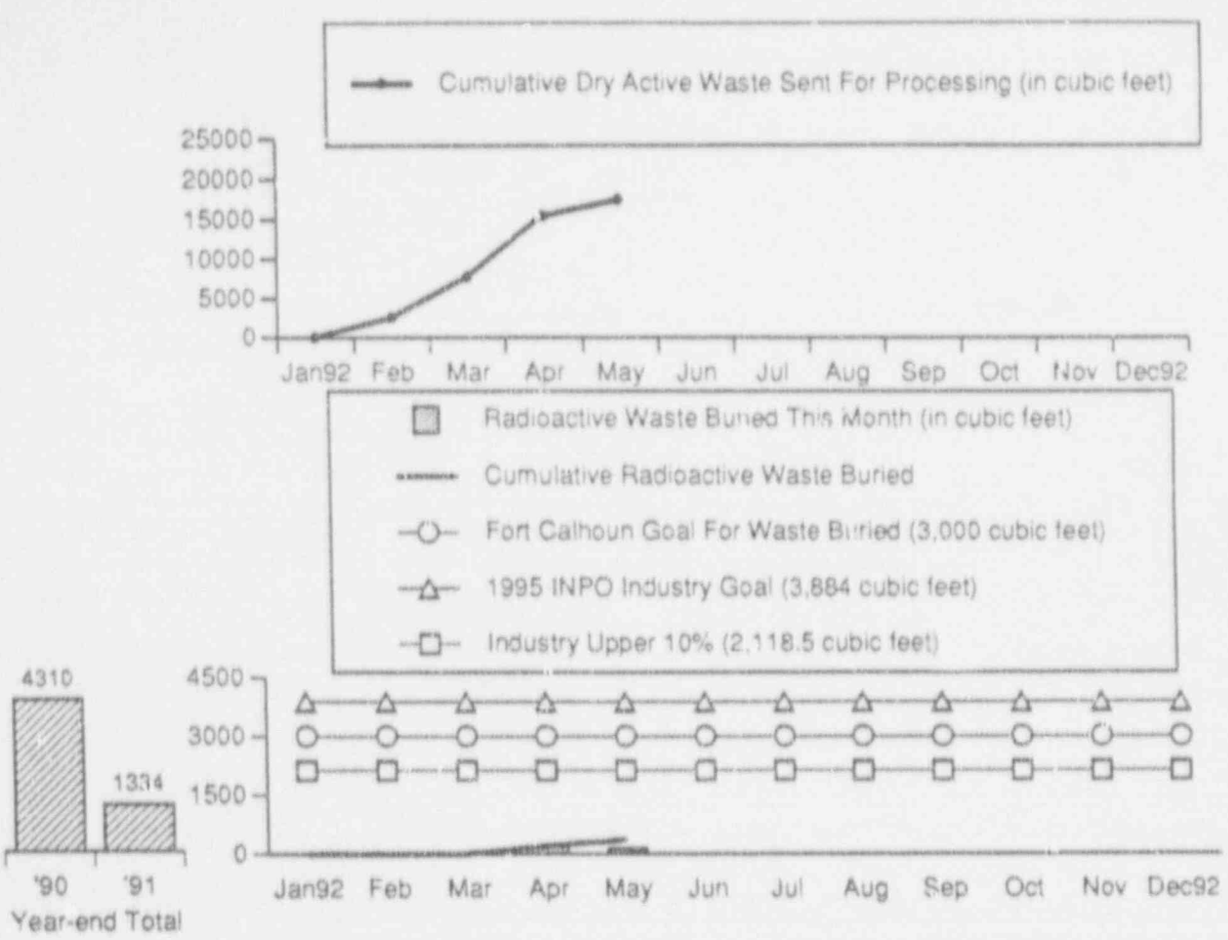
The 1995 INPO industry goal is 185 man-rem per year. The industry upper ten percentile value (for the three year period from 1/89 through 12/91) is approximately 118.5 man-rem per year. The three year average for Fort Calhoun Station from 1/89 through 12/91 is 140.4 man-rem per year.

Data Source: Patterson/Williams (Manager/Source)

Accountability: Patterson/Lovett

Adverse Trend: None

SEP 54



VOLUME OF LOW-LEVEL SOLID RADIOACTIVE WASTE

The upper graph shows the volume of radioactive oil and dry radioactive waste sent for processing. The lower graph shows the volume of the monthly radioactive waste buried, the cumulative annual total for radioactive waste buried, and the year-end totals for radioactive waste buried the previous 2 years.

Cumulative amount of solid radwaste shipped off-site for processing (cubic feet)	17,440.0
Amount of solid radwaste shipped off-site for processing during May (cubic feet)	2,080
Volume of solid radioactive waste which was buried during May (cubic feet)	146.4
Cumulative volume of solid radioactive waste buried in 1992 (cubic feet)	343.4
Amount of solid radioactive waste in temporary storage (cubic feet)	240.6

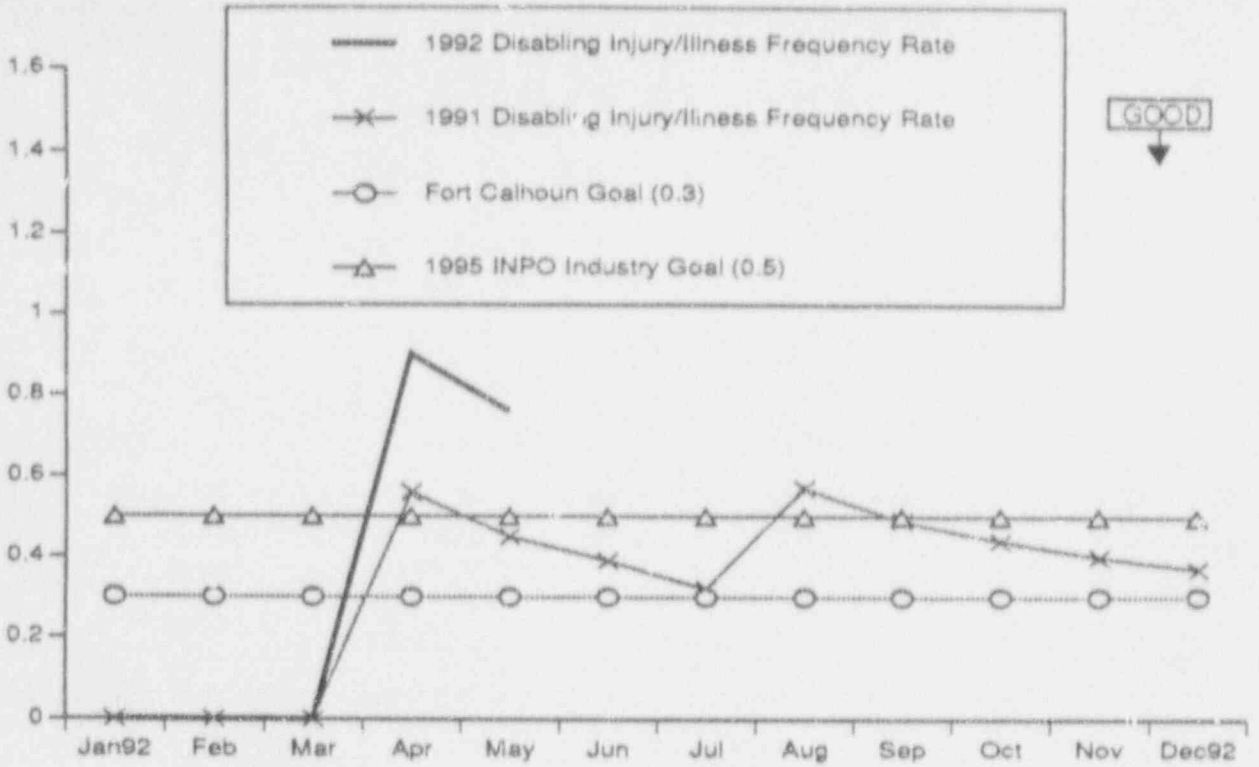
The 1992 Fort Calhoun goal for the volume of solid radioactive waste which has been buried is 3,000 cubic feet. The 1995 INPO industry goal is 110 cubic meters (3,884 cubic feet) per year. The industry upper ten percentile value is approximately 60 cubic meters (2,118.5 cubic feet) per year.

Data Source: Patterson/Breuer (Manager/Source)

Accountability: Patterson/Bilau

Adverse Trend: None

SEP 54



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

This indicator shows the 1992 monthly disabling injury/illness frequency rate in column form. The 1991 disabling injury/illness frequency rate and the 5 year average (from 1987 through 1991) of the corresponding monthly disabling injury/illness frequency rates are also shown.

The disabling injury/illness frequency rate for May was 0.76. There were no lost time accidents reported at the Fort Calhoun Station in May 1992. The total number of lost time accidents that have been reported during 1992 is 2. The 1992 disabling injury/illness frequency rate goal was set at 0.30. The 1995 INPO Industry goal is 0.50.

The disabling injury/illness frequency rate for the past twelve months is 0.68.

The industry upper ten percentile disabling injury/illness frequency rate is 0.16.

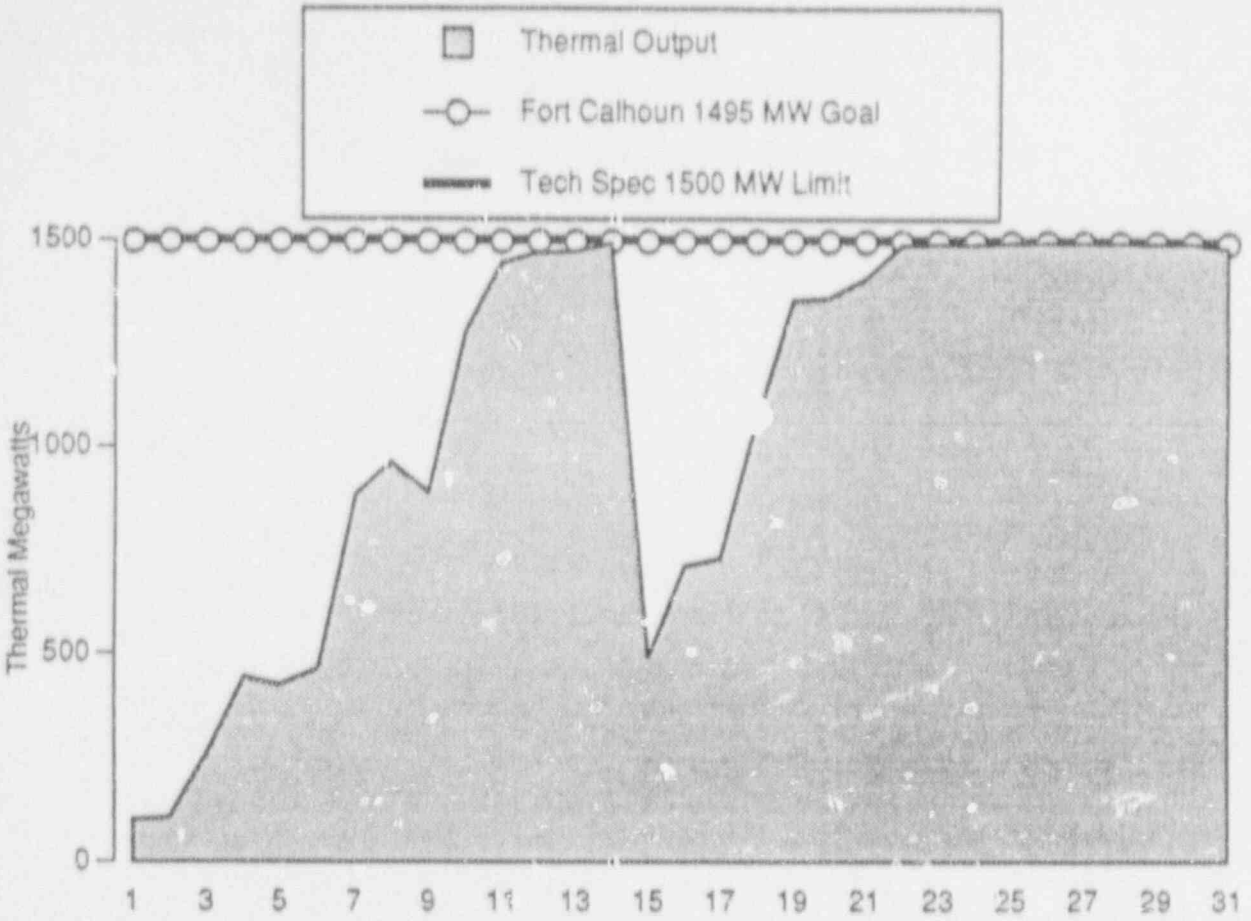
Year	Year-End Rate
1989	0.4
1990	0.5
1991	0.4

Data Source: Sorenson/Skaggs (Manager/Source)

Accountability: Patterson/Richard

Adverse Trend: None

SEP 25 & 26



DAILY THERMAL OUTPUT

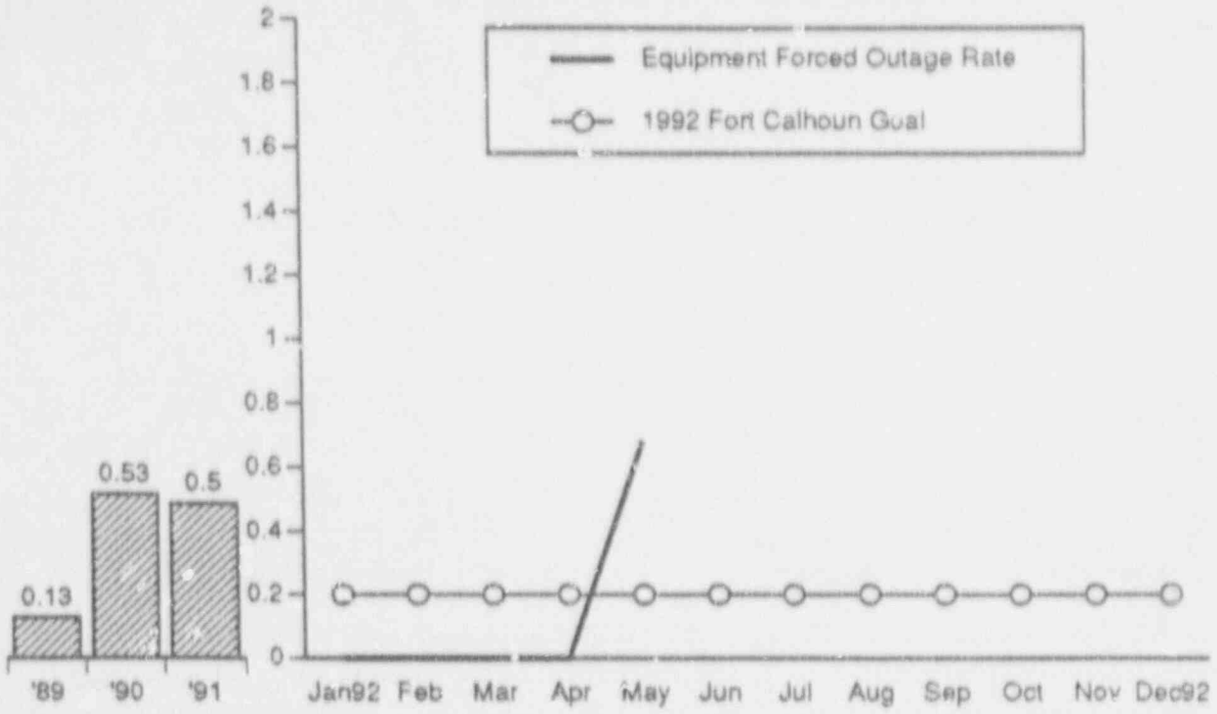
The above thermal output graph displays the daily operating power level during May 1992, the 1500 thermal megawatt average technical specification limit, and the 1495 thermal megawatt Fort Calhoun goal.

The power level declined after rampup from the Cycle 14 Refueling Outage due to the automatic reactor scram which occurred on May 14 when the turbine generator tripped on a false high level moisture separator trip signal which caused a simultaneous reactor trip. The power level began to decline on May 31 at 2255 when Control Element No. 35 dropped into the reactor core.

Data Source: Holthaus/Gray (Manager/Source)

Accountability: Patterson/Trausch

Adverse Trend: None



EQUIPMENT FORCED OUTAGES PER 1,000 CRITICAL HOURS

The equipment forced outage rate per 1,000 critical hours was 0.68 for the months from January through May 1992.

There was one equipment forced outage during May. This equipment forced outage occurred on May 14 when the turbine generator tripped on a false high level moisture separator trip signal which caused a simultaneous reactor trip.

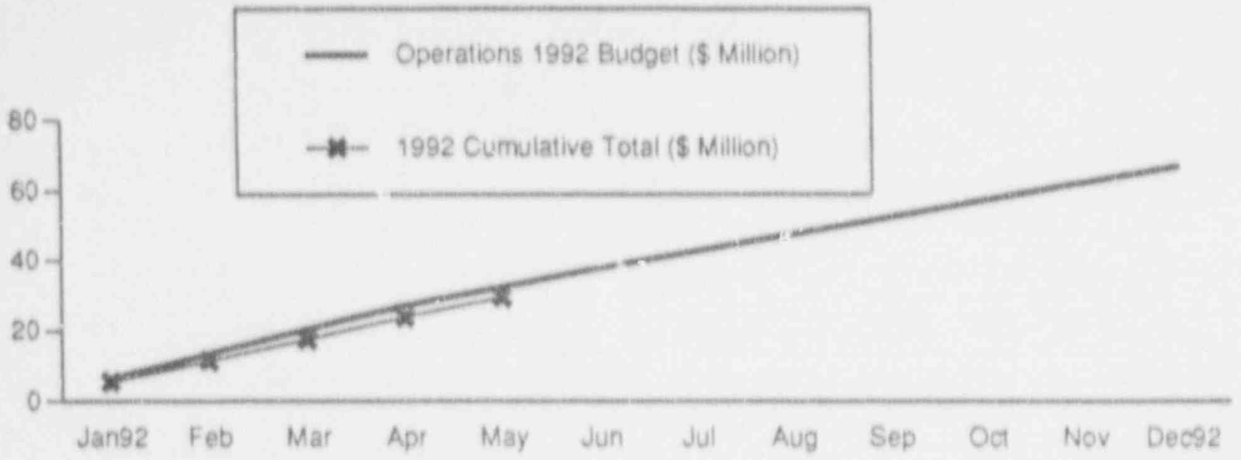
The station batteries were declared inoperable in September through October 1991. In addition, two forced outages occurred during the month of October 1991: on 10/18/91 the generator was taken off line due to a steam leak on a turbine control valve before seat drain line; on 10/25/91 the generator was taken off line due to a steam leak from an instrument tap on the high pressure turbine.

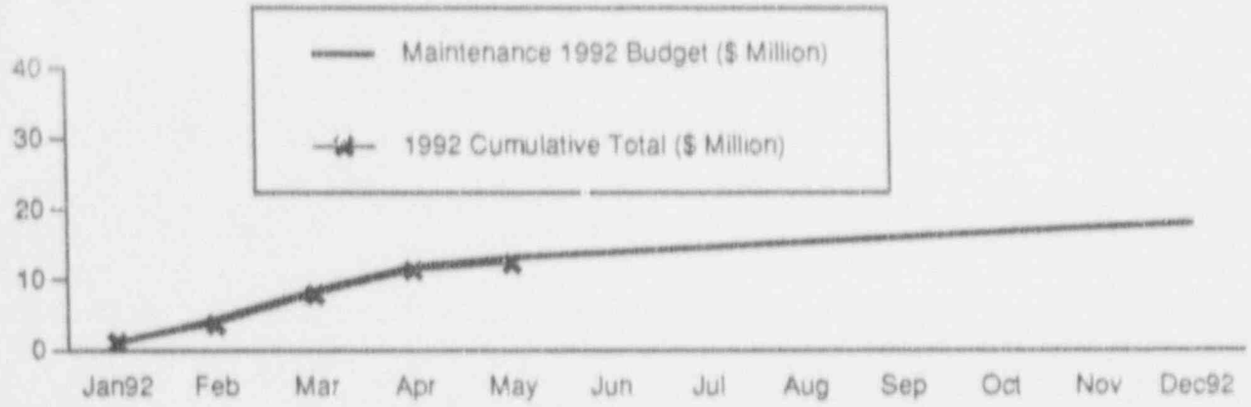
One equipment forced outage occurred during the month of August 1991. The outage was required to replace a failed potential transformer (PT). This PT converted 345 KV to 120 V for use in the breaker synchronization circuit.

One equipment forced outage occurred in the month of January 1991 due to the December CEDM housing leak which carried outage time into January.

The 1992 Fort Calhoun goal for this indicator is 0.2.

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





OPERATIONS AND MAINTENANCE BUDGET

The Operations and Maintenance Budget Indicator shows the budget year-to-date as well as the actual expenditures for operations and maintenance for the Fort Calhoun Station.

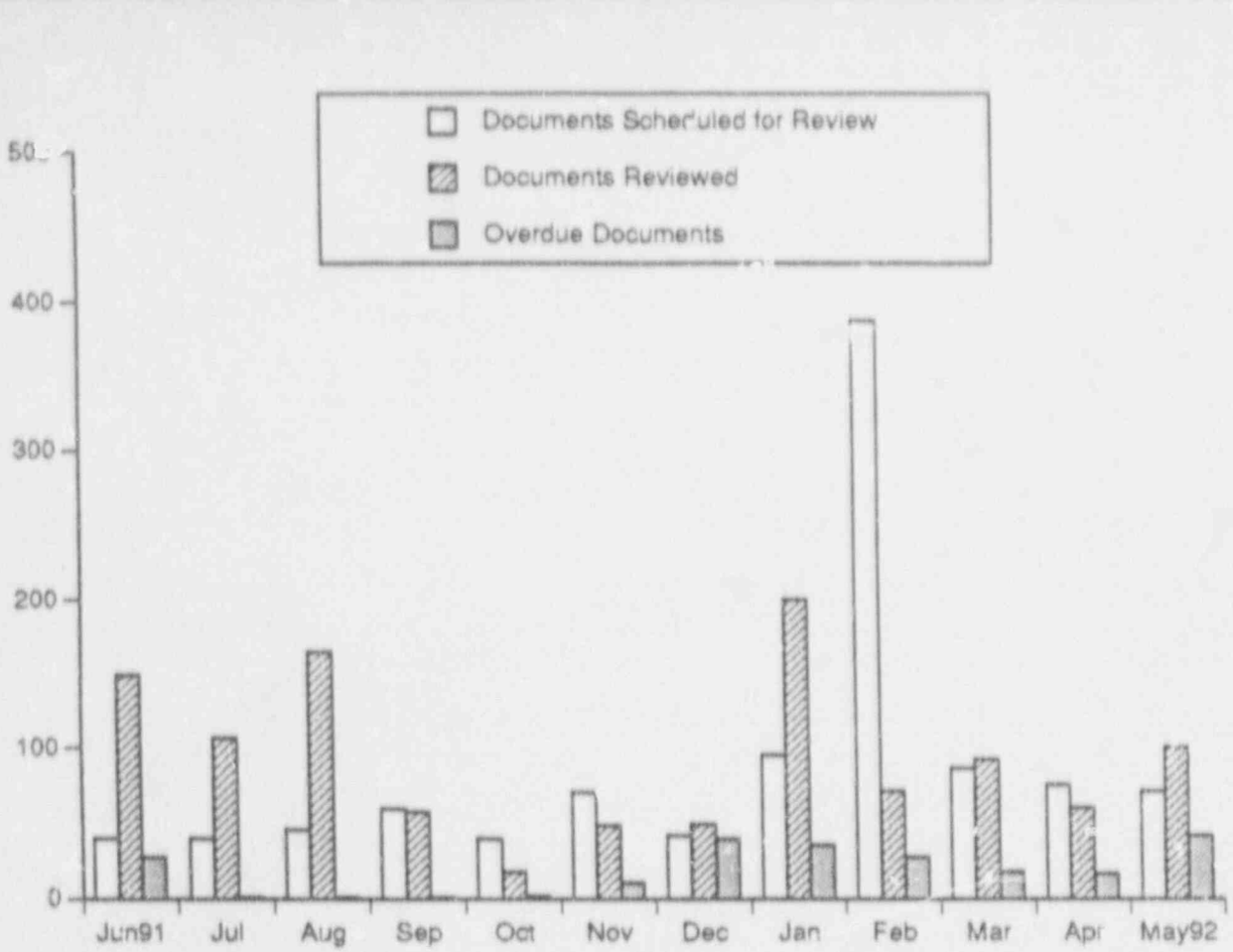
The budget year-to-date for Operations was 32,055,400 dollars for May 1992 while the actual cumulative expenditures through May totaled 29,221,612 dollars. The 1992 year-end budget for operations has been revised to 66,560,800 dollars, which is a reduction of 100,000 dollars.

The budget year-to-date for Maintenance was 13,138,000 dollars for May 1992 while the actual cumulative expenditures through May totaled 12,318,630 dollars.

Data Source: Gleason/Parent (Manager/Source)

Accountability: Scofield

Adverse Trend: None



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 mo. . 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 1992 there were 101 document reviews completed while 72 document reviews were scheduled. At the end of May, there were 42 document reviews overdue.

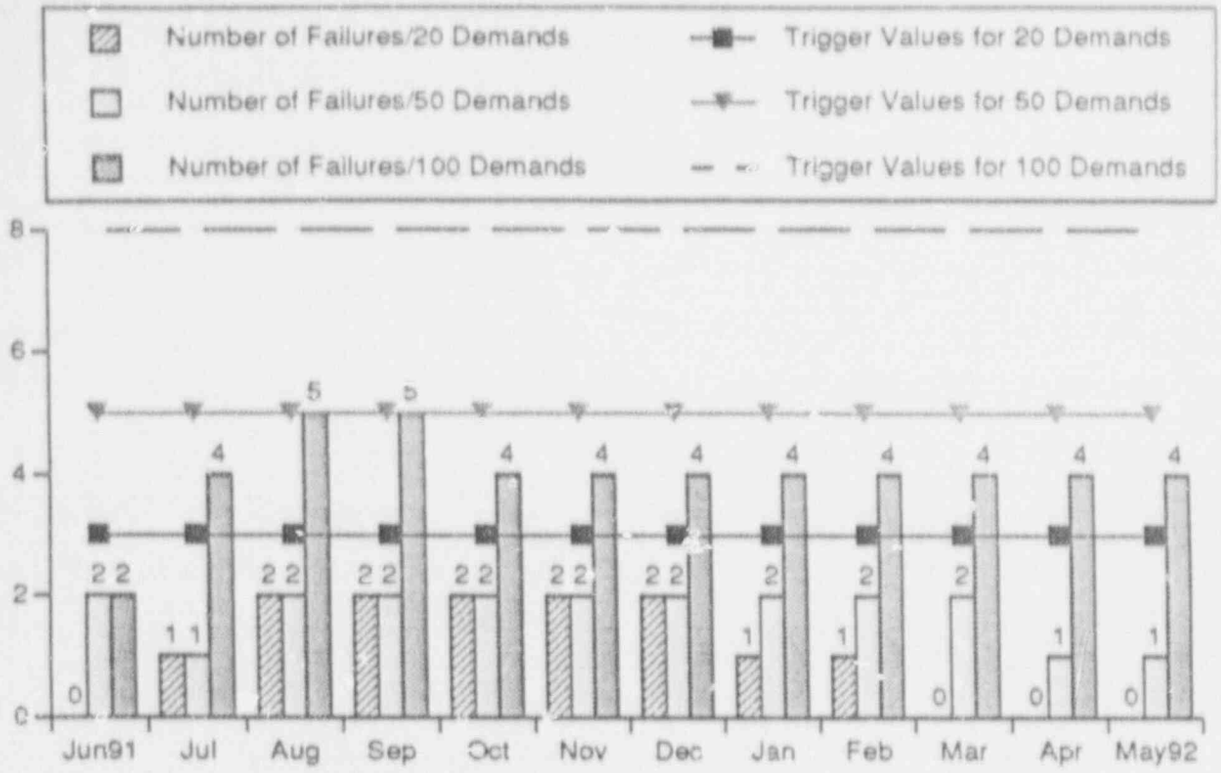
During the month of May there were 10 new or renamed documents reviewed. These new or renamed documents will need to be reviewed again in 1994.

Data Source: Patterson/McKay (Manager/Source)

Accountability: Patterson/Jaworski

Adverse Trend: None

SEP 46



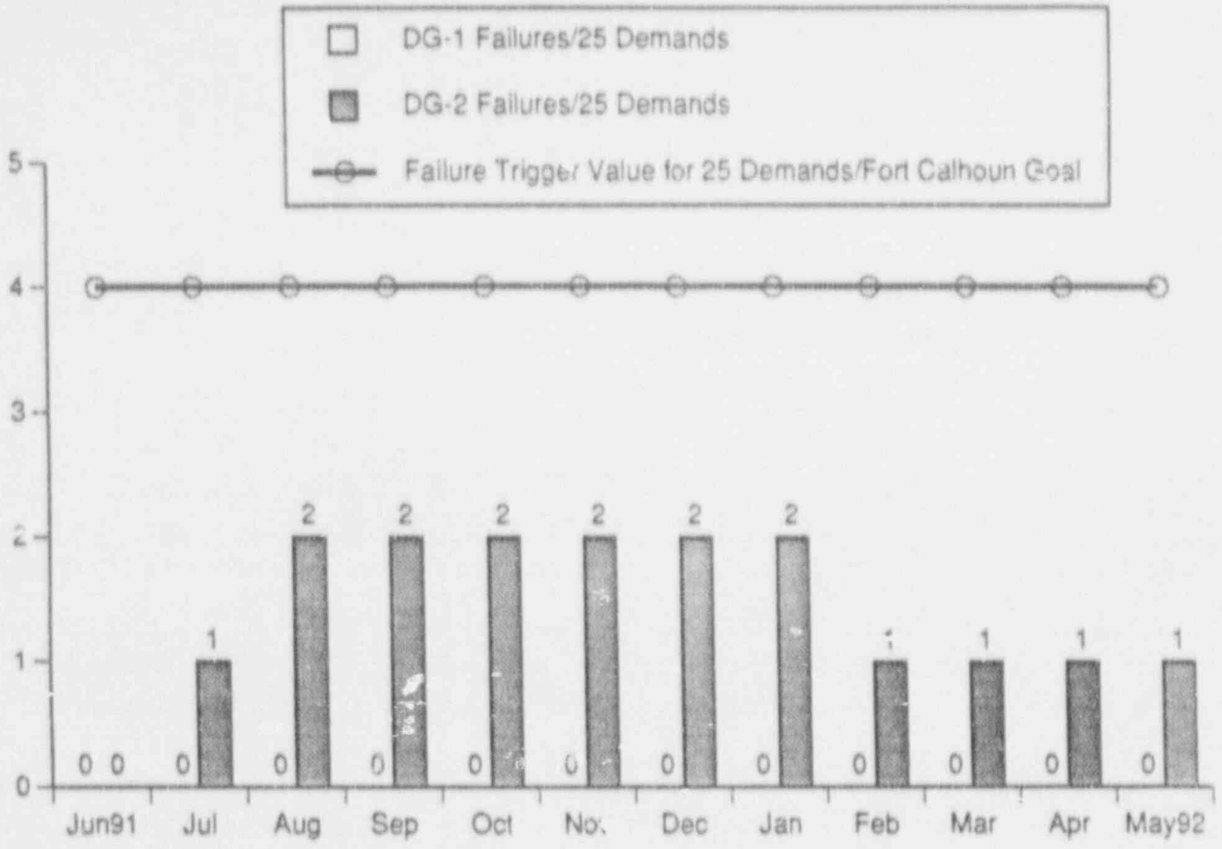
EMERGENCY DIESEL GENERATOR UNIT RELIABILITY

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. These trigger values are the Fort Calhoun 1992 goal.

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).

The demand failure which occurred during the month of August for DG-2 was due to a seal failure on the jacket water pump.

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



DIESEL GENERATOR RELIABILITY (25 DEMANDS)

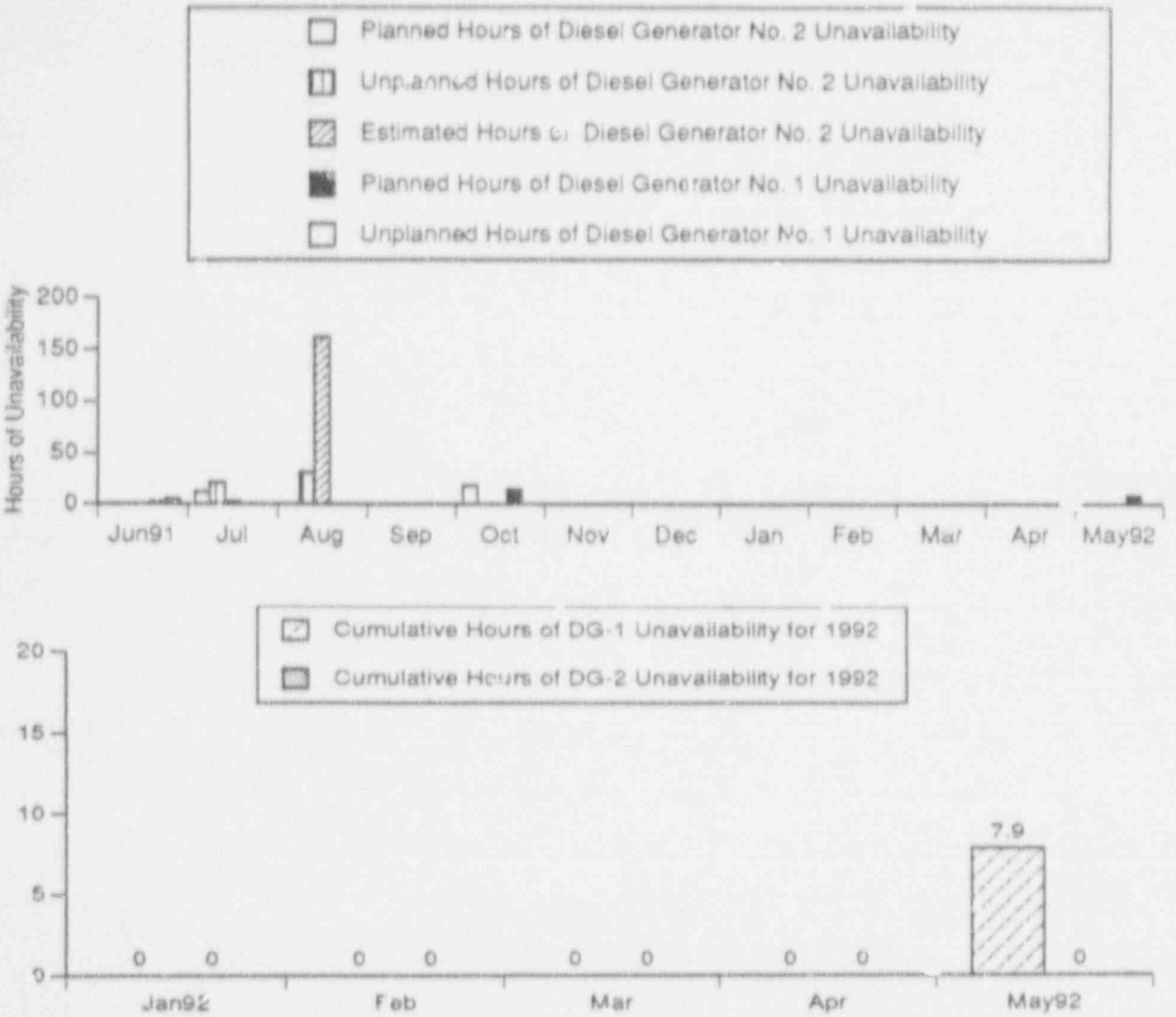
This indicator shows the number of failures experienced by each emergency diesel generator during the last 25 start demands and the last 25 load-run demands. A trigger value of 4 failures within the last 25 demands is also shown. This trigger value of 4 failures within 25 demands is the Fort Calhoun goal for 1991.

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 Definition Section. A Standing Order has been drafted 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 experienced one failure during the last 25 demands on the unit. A seal failed on a jacket water pump in August 1991.

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



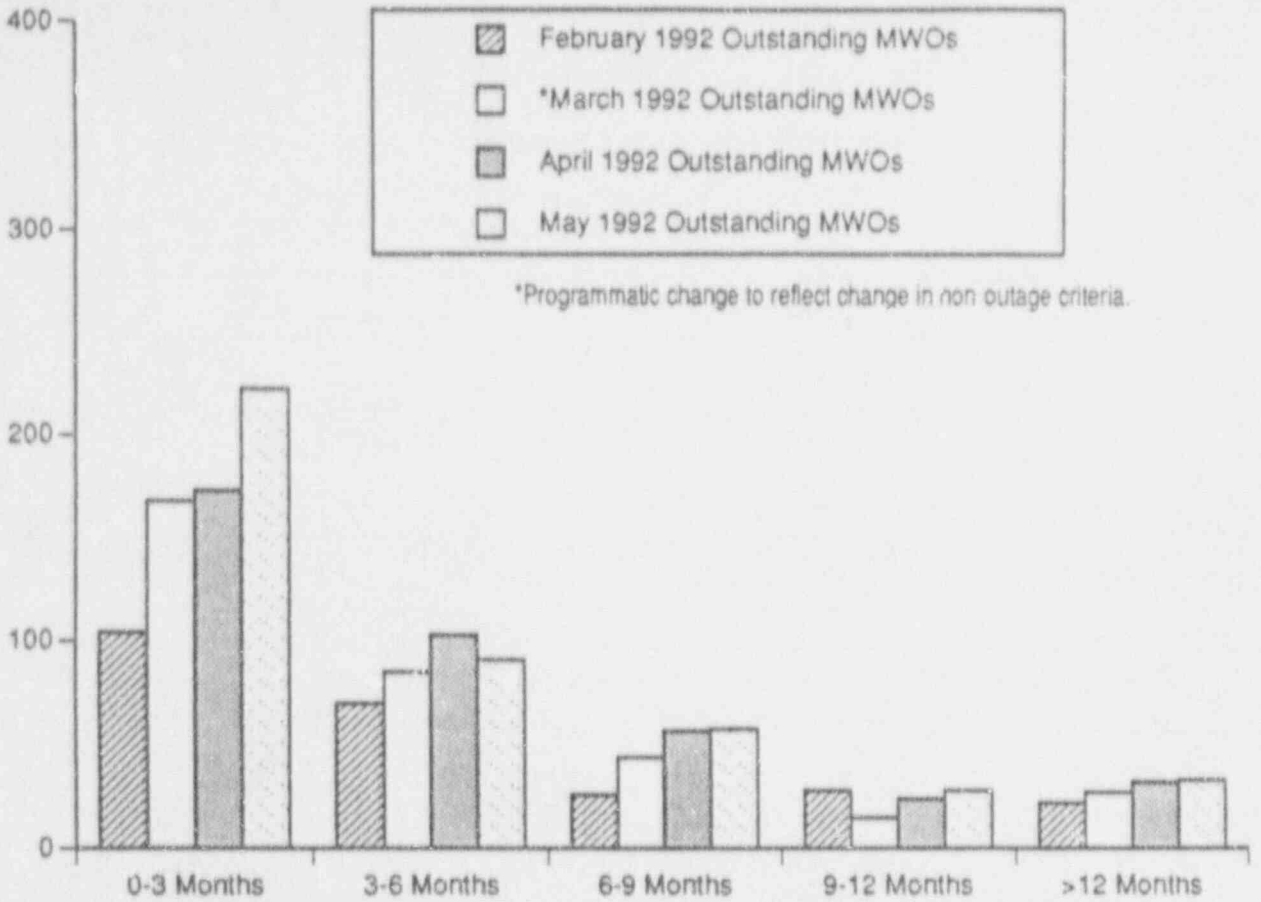
DIESEL GENERATOR UNAVAILABILITY

This indicator provides a monthly illustration of diesel generator unavailability. The top graph shows the diesel generator planned, unplanned, and estimated unavailable hours for DG-1 and DG-2 for each month. The lower graph shows the cumulative hours of unavailability for each diesel generator for each month.

On May 26, there were 7.9 hours of planned unavailability for DG-1 to tighten the fan blades and repair a starting air solenoid valve.

The 1992 Fort Calhoun goal is a maximum of 210.82 hours of unavailability for each diesel generator.

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



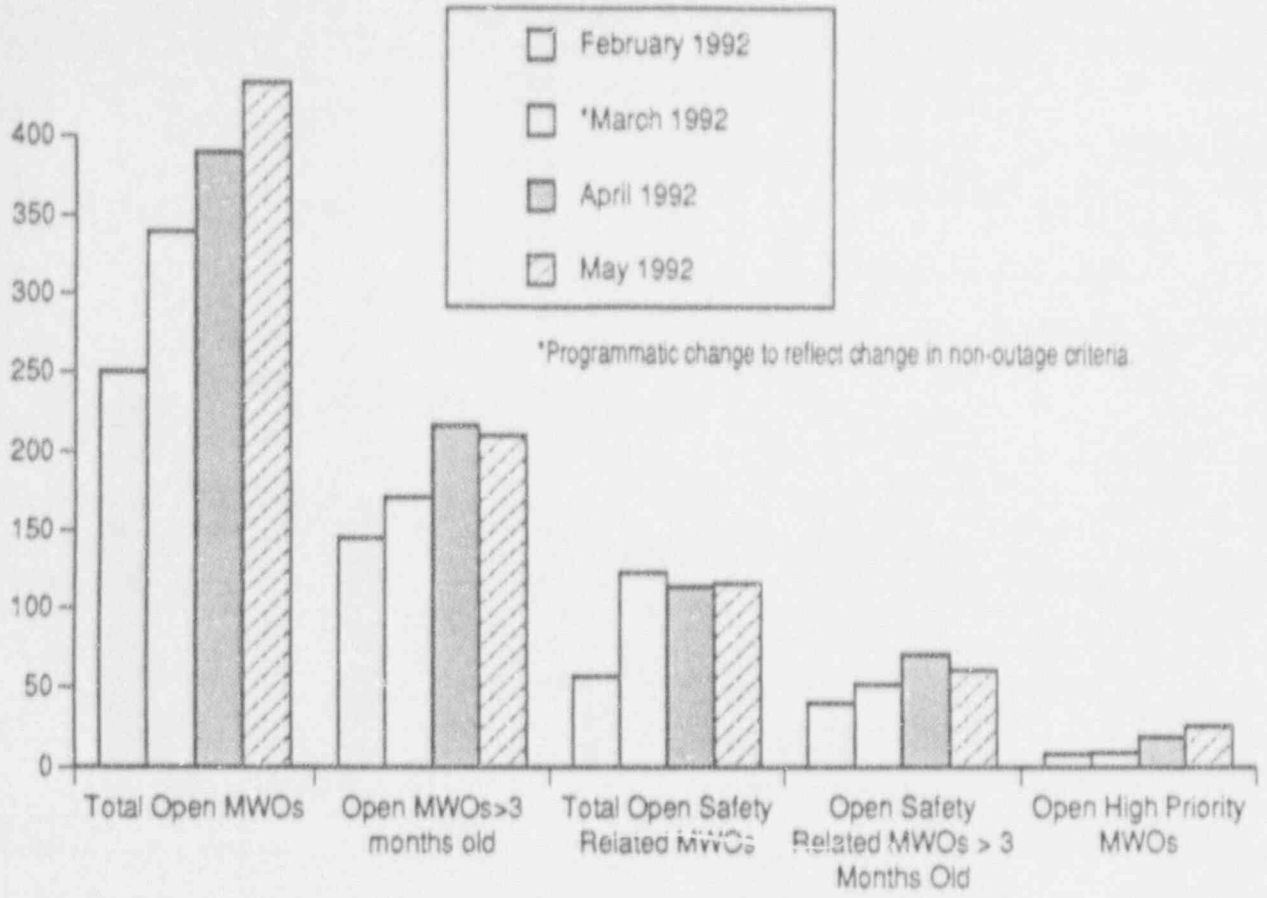
AGE OF OUTSTANDING MAINTENANCE WORK ORDERS (CORRECTIVE NON-OUTAGE)

This indicator shows the age of corrective non-outage maintenance work orders (MWOs) remaining open at the end of the reporting month.

Data Source: Patterson/Schmitz (Manager/Source)

Accountability: Patterson/ Bobba

Adverse Trend: An adverse trend is indicated based on increasing values for three consecutive months for outstanding MWOs 0-3 months old and >12 months old. This trend is due to the Cycle 14 Refueling Outage during February, March, and April.



MAINTENANCE WORK ORDER BREAKDOWN (CORRECTIVE NON-OUTAGE)

This indicator shows the total number of corrective non-outage MWOs remaining open at the end of the reporting month, along with a breakdown by several key categories.

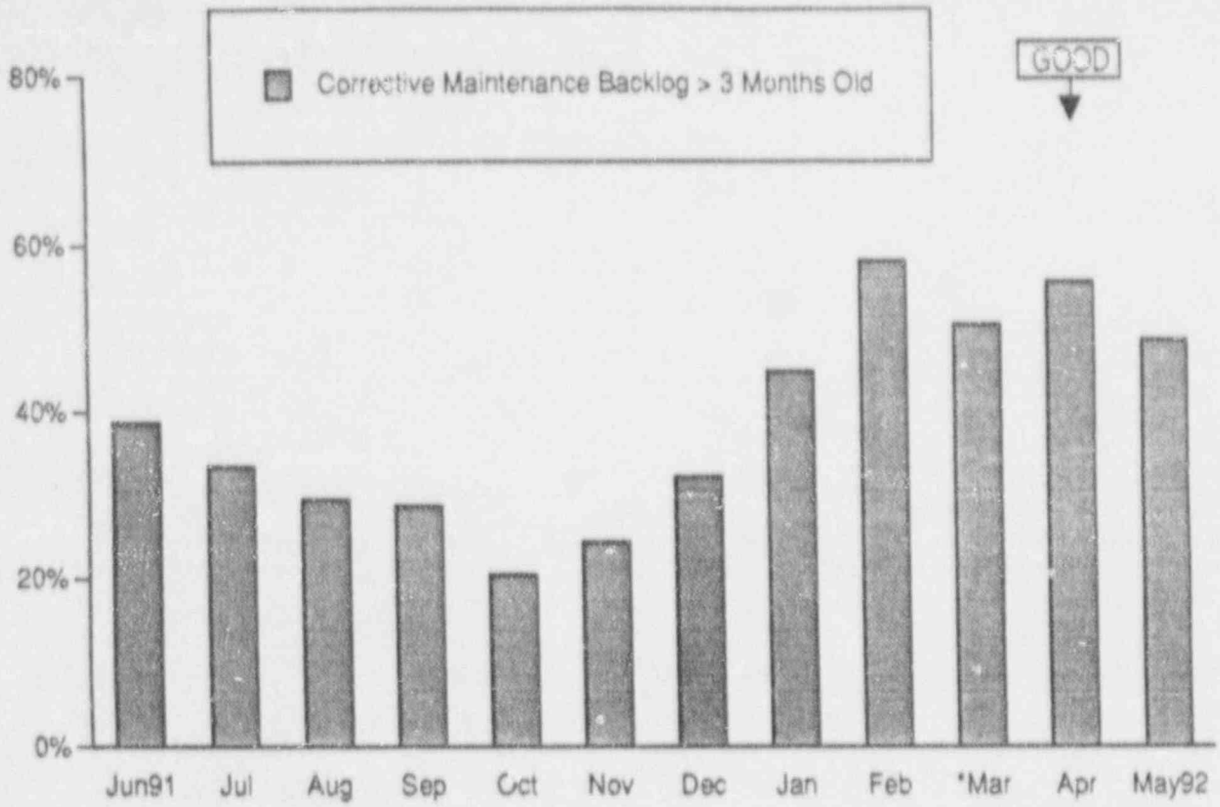
The number of open MWOs >3 months old increased during February, March, and April because on-line activities had to be scheduled beyond the end of the Cycle 14 Refueling Outage.

Data Source: Patterson/Schmitz (Manager/Source)

Accountability: Patterson/ Bobba

Adverse Trend: An adverse trend is indicated based on increasing values for three consecutive months for total corrective non-outage MWOs and open high priority MWOs. This trend is due to the Cycle 14 Refueling Outage during February, March, and April.

SEP 36



*Programmatic change to reflect change in non-outage criteria.

CORRECTIVE MAINTENANCE BACKLOG GREATER THAN 3 MONTHS OLD (NON-OUTAGE)

This indicator shows the percentage of open corrective non-outage maintenance work orders that were greater than three months old at the end of the reporting month.

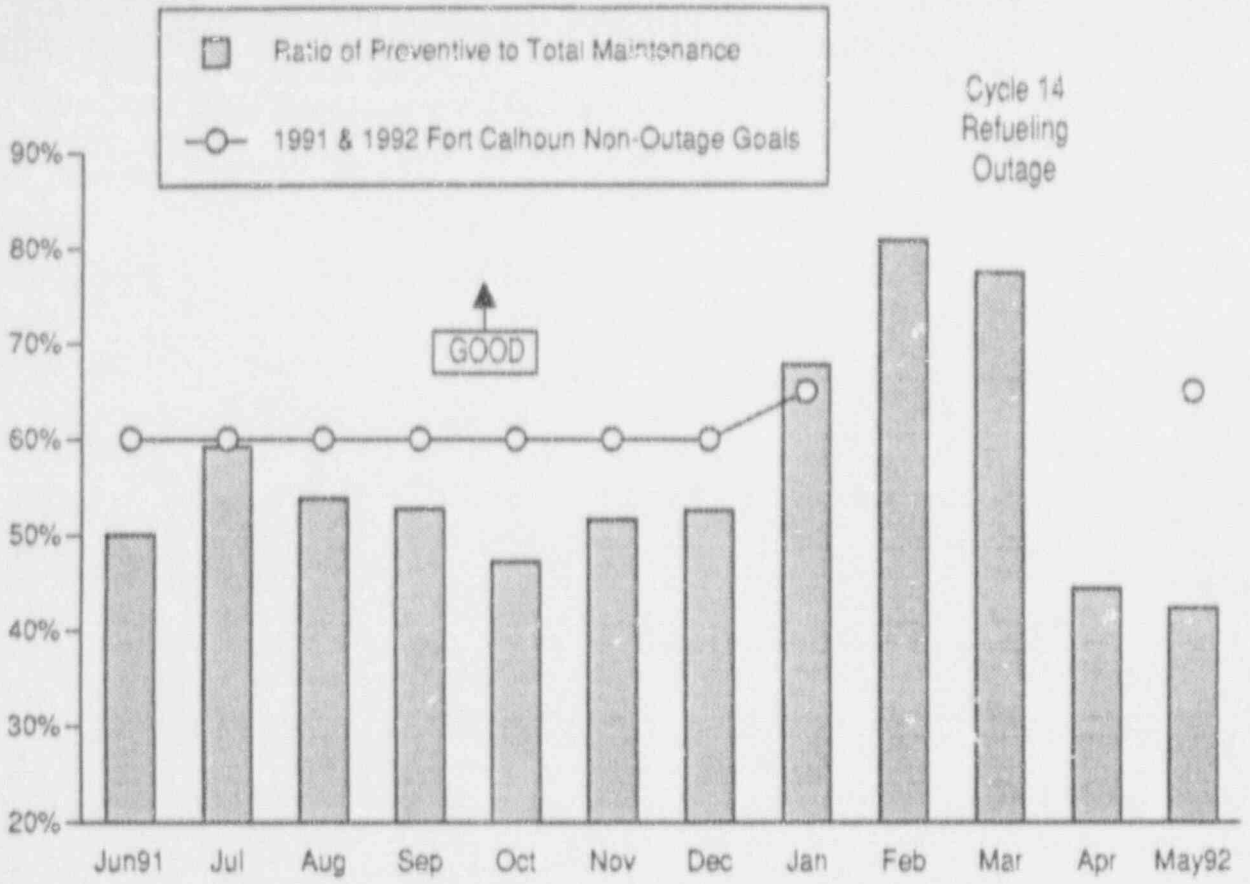
The percentage of open corrective non-outage maintenance work orders that were greater than three months old at the end of May 1992 was reported as 48.6%.

Data Source: Patterson/Schmitz (Manager/Source)

Accountability: Patterson/ Bobba

Adverse Trend: None

SEP 36



RATIO OF PREVENTIVE TO TOTAL MAINTENANCE

This indicator shows the ratio of completed non-outage preventive maintenance to total completed non-outage maintenance.

The ratio of preventive to total maintenance was 42.4% in May 1992.

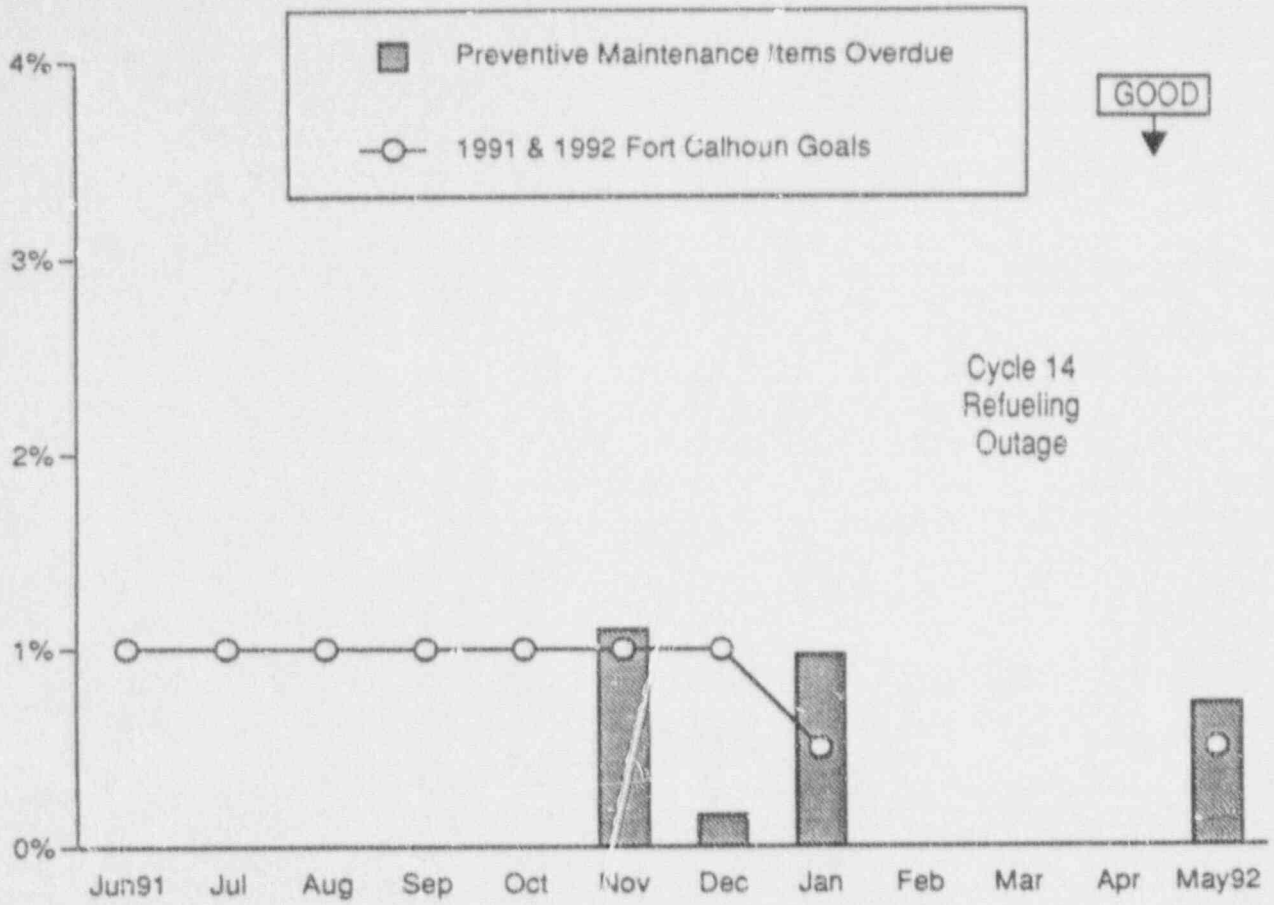
The 1992 Fort Calhoun goal is to attain a ratio of preventive to total maintenance non-outage greater than 65%. The 1991 Fort Calhoun goal was to attain a ratio of preventive to total maintenance greater than 60%.

Accountability: Patterson/ Bobba

Data Source: Patterson/Schmitz (Manager/Source)

Adverse Trend: None

SEP 41



PREVENTIVE MAINTENANCE ITEMS OVERDUE

The purpose of this indicator is to monitor progress in the administration and execution of preventive maintenance (PM) programs. A small percentage of preventive maintenance items overdue indicates a station commitment to the preventive maintenance program and an ability to plan, schedule, and perform preventive maintenance tasks as programs require.

During May 1992, 559 PM items were completed. 4 PM items (0.72% of the total 559) were not completed within the allowable grace period.

The percentage of preventive maintenance items overdue was higher in November because of a scheduling problem resulting in a delay in completing PM task paperwork.

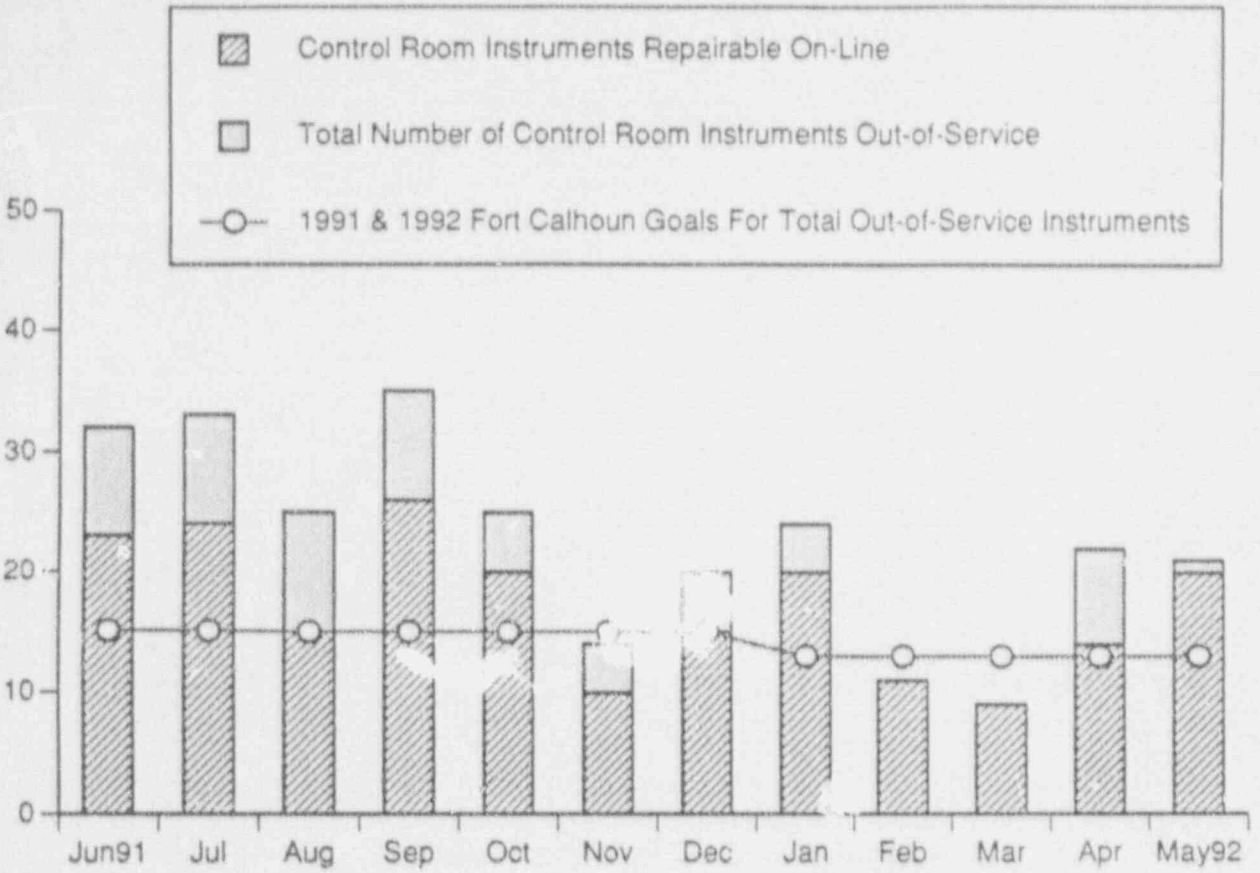
The 1992 Fort Calhoun goal is to have less than 0.5% per month of the preventive maintenance items overdue. The 1991 Fort Calhoun goal was to have less than 1% per month of the preventive maintenance items overdue.

Data Source: Patterson/Brady (Manager/Source)

Accountability: Patterson/ Bobba

Adverse Trend: None

SEP 41



NUMBER OF OUT-OF-SERVICE CONTROL ROOM INSTRUMENTS

This indicator shows the number of out-of-service control room instruments, the number of instruments repairable during plant operations (on-line), and the 1991 and 1992 Fort Calhoun goals.

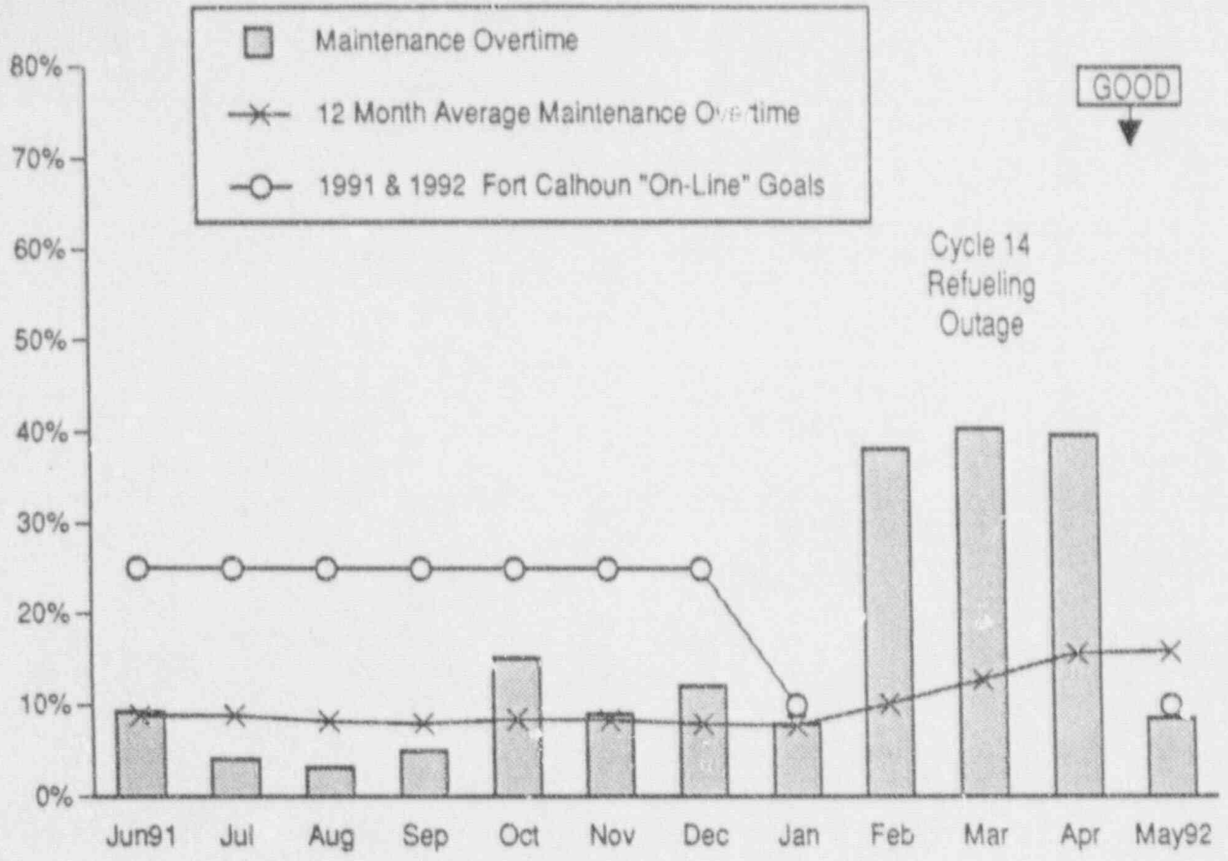
There was a total of 20 out-of-service control room instruments at the end of May 1992. 1 of these instruments requires a plant outage to repair.

The 1992 Fort Calhoun goal is to have less than 13 out-of-service control room instruments. The 1991 Fort Calhoun goal was to have less than 14 out-of-service control room instruments.

Data Source: Patterson/Spilker (Manager/Source)

Accountability: Patterson/ Bobba

Adverse Trend: None



MAINTENANCE OVERTIME

The Maintenance Overtime Indicator monitors the ability to perform the desired maintenance activities with the allotted resources. Excessive overtime indicates insufficient resource allocation and can lead to errors due to fatigue.

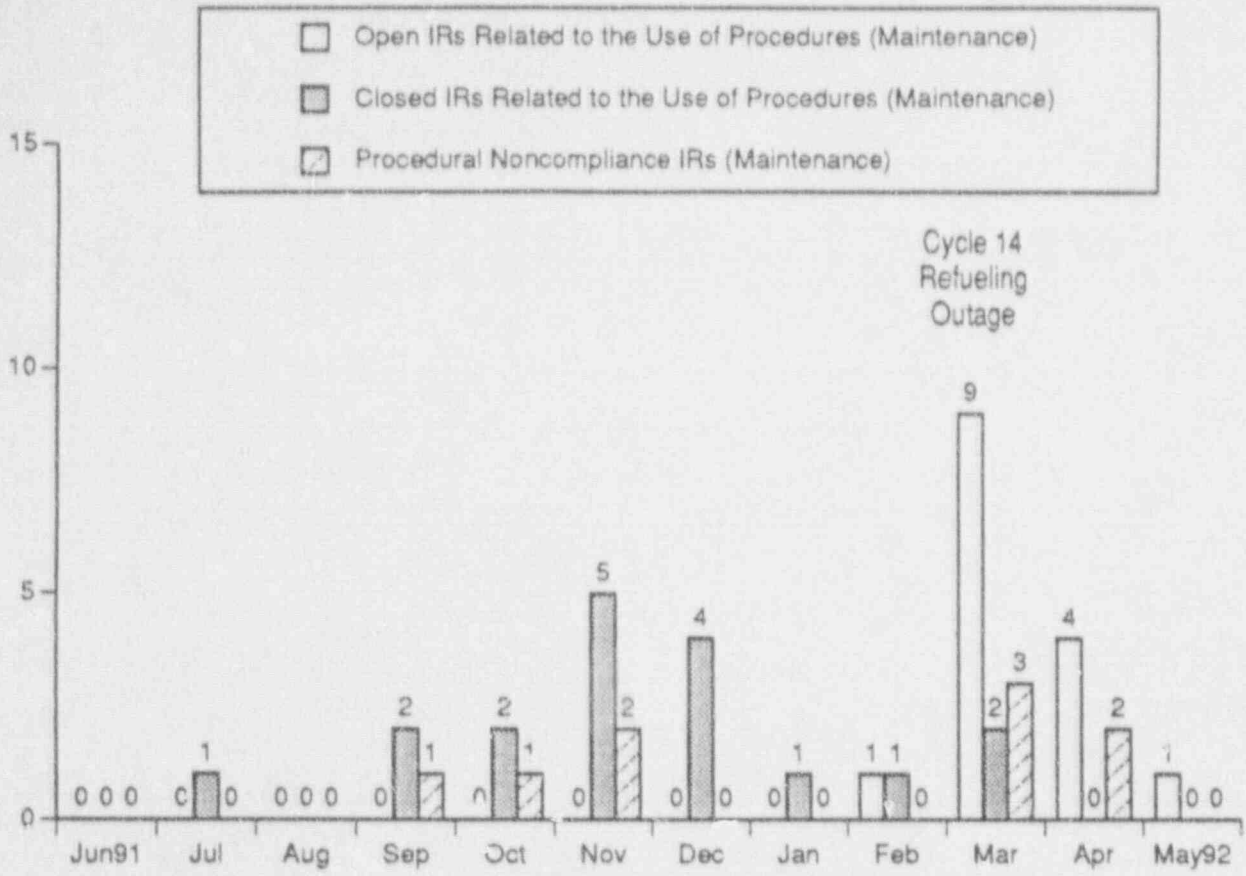
The percent of overtime hours with respect to normal hours was reported as 8.6% during the month of May 1992. The 12 month average percentage of overtime hours with respect to normal hours was reported as 16.0 %.

The 1992 Fort Calhoun goal for the "on-line" percentage of maintenance overtime hours worked is 10%.

Data Source: Patterson/Schmitz (Manager/Source)

Accountability: Patterson/ Bobba

Adverse Trend: None



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.

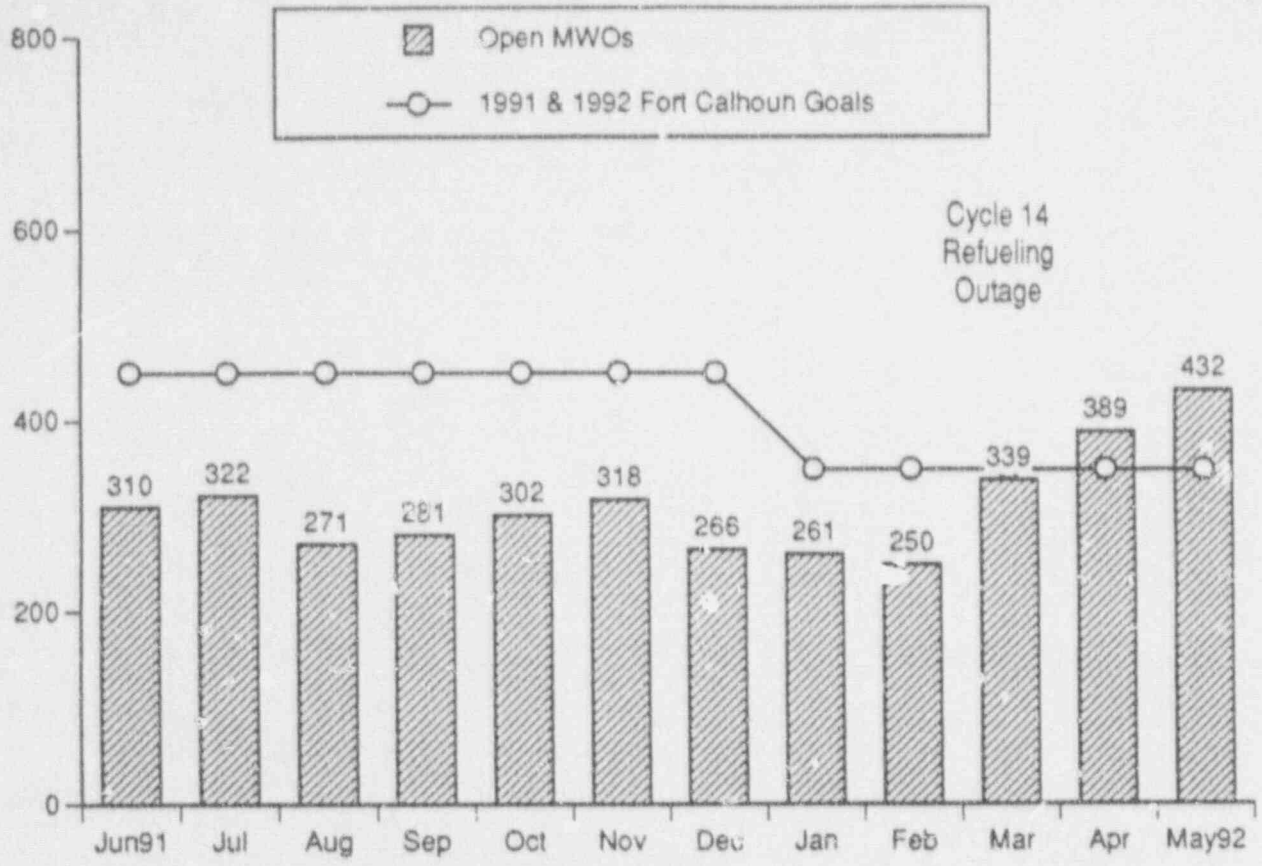
There were no procedural noncompliance incidents for maintenance reported for the month of May 1992.

Data Source: Patterson/McKay (Manager/Source)

Accountability: Patterson/Bobba

Positive Trend

SEP 15, 41 & 44



MAINTENANCE WORK ORDER BACKLOG
(CORRECTIVE NON-OUTAGE MAINTENANCE)

This indicator shows the number of corrective non-outage Maintenance Work Orders (MWOs) that were open at the end of the reporting month.

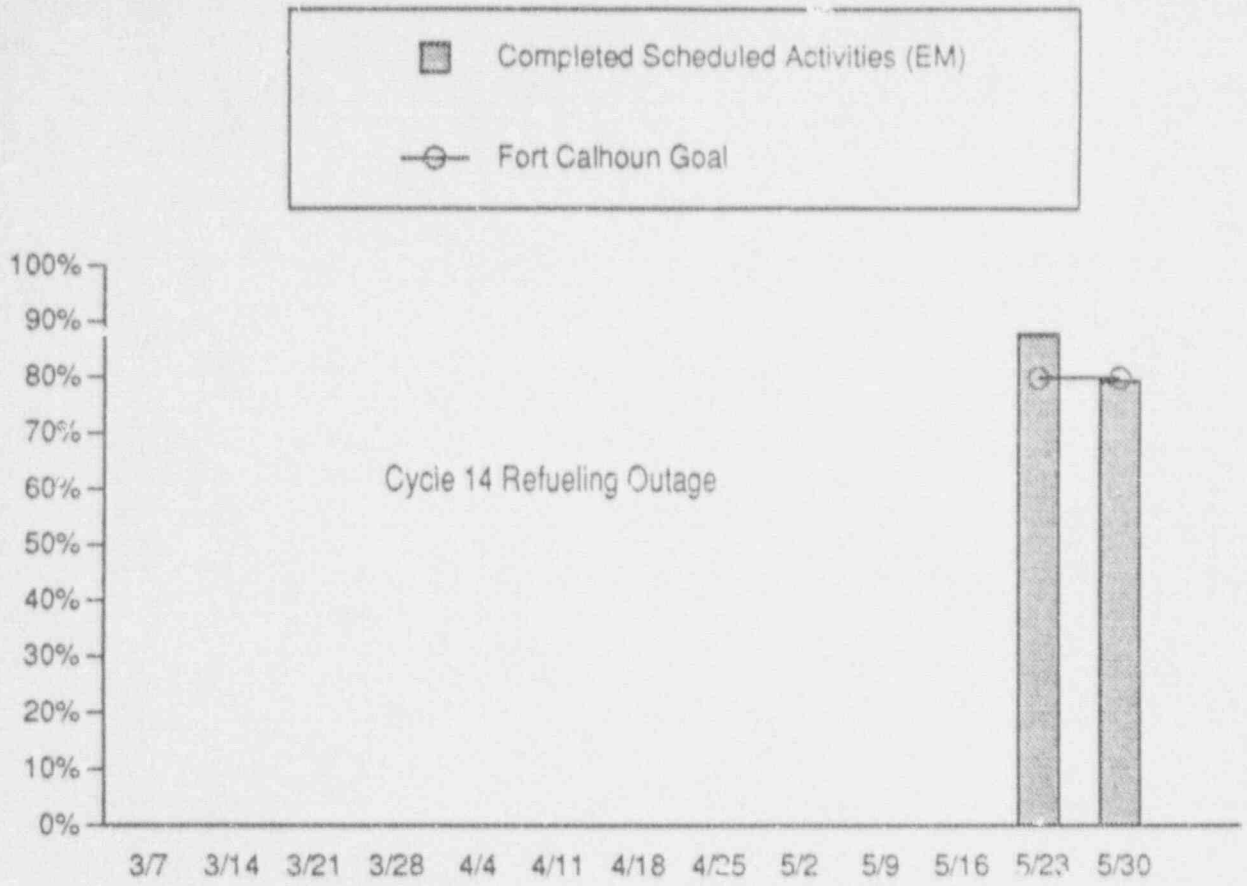
The 1992 goal for this indicator is to have less than 350 corrective non-outage maintenance work orders remaining open. The 1991 goal for this indicator was to have less than 450 corrective non-outage maintenance work orders remaining open.

Data Source: Patterson/Schmitz (Manager/Source)

Accountability: Patterson/Bobba

Adverse Trend: An adverse trend is indicated based on three consecutive months of increasing values for corrective non-outage MWOs.

SEP 36



PERCENT OF COMPLETED SCHEDULED MAINTENANCE ACTIVITIES (ELECTRICAL MAINTENANCE)

This indicator shows the percent of the number of completed maintenance activities as compared to the number of scheduled maintenance activities concerning Electrical Maintenance. Maintenance activities include MWRs, MWOs, STs, PMOs, calibrations, and miscellaneous maintenance activities.

Data for this indicator was not tracked during the Cycle 14 Refueling Outage.

The Fort Calhoun Station goal for this indicator is 80%.

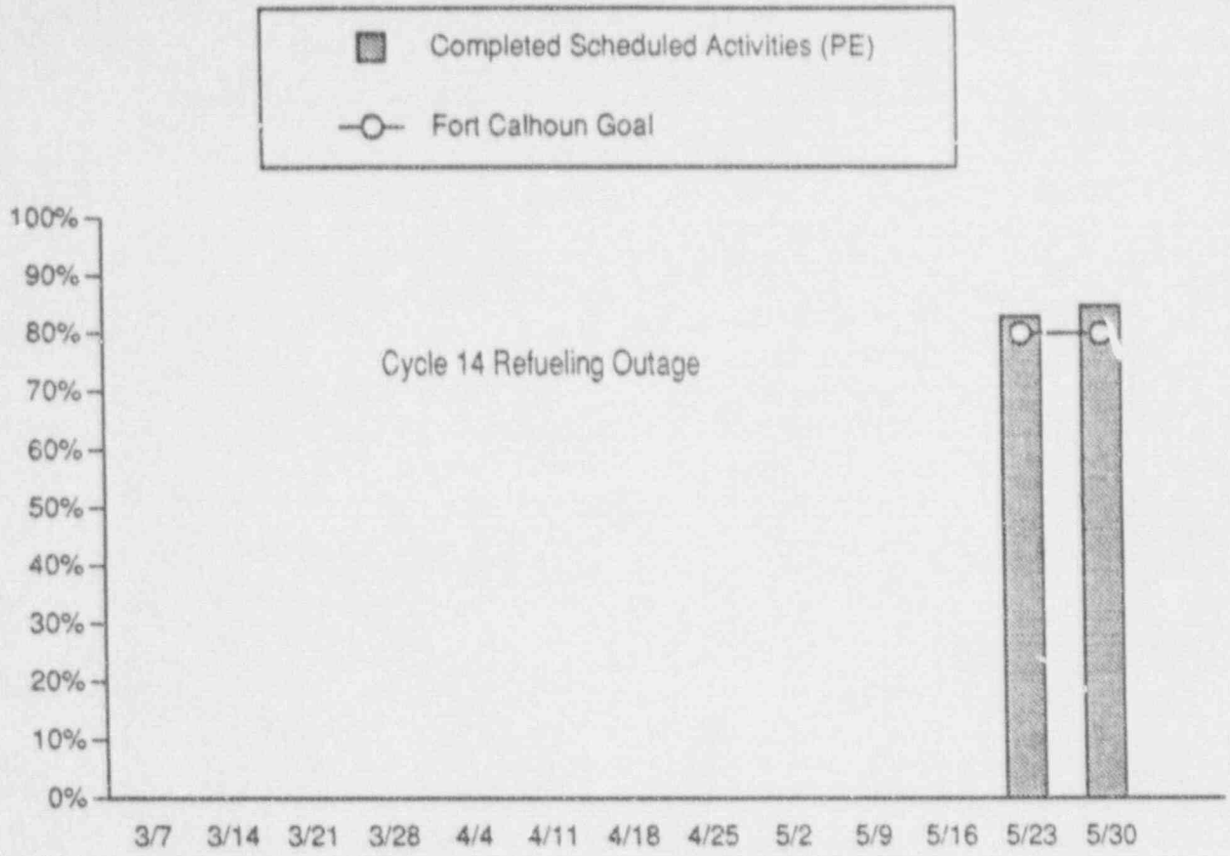
Reporting Month	Completed Scheduled Activities
Week 3	87.8%
Week 4	79.5%

Data Source: Patterson/Schmitz (Manager/Source)

Accountability: Patterson/Bobba

Adverse Trend: None

SEP 33



PERCENT OF COMPLETED SCHEDULED MAINTENANCE ACTIVITIES (PRESSURE EQUIPMENT)

This indicator shows the percent of the number of completed maintenance activities as compared to the number of scheduled maintenance activities concerning Pressure Equipment Maintenance. Maintenance activities include MWRs, MWOs, STs, PMOs, calibrations, and miscellaneous maintenance activities.

Data for this indicator was not tracked during the Cycle 14 Refueling Outage.

The Fort Calhoun Station goal for this indicator is 80%.

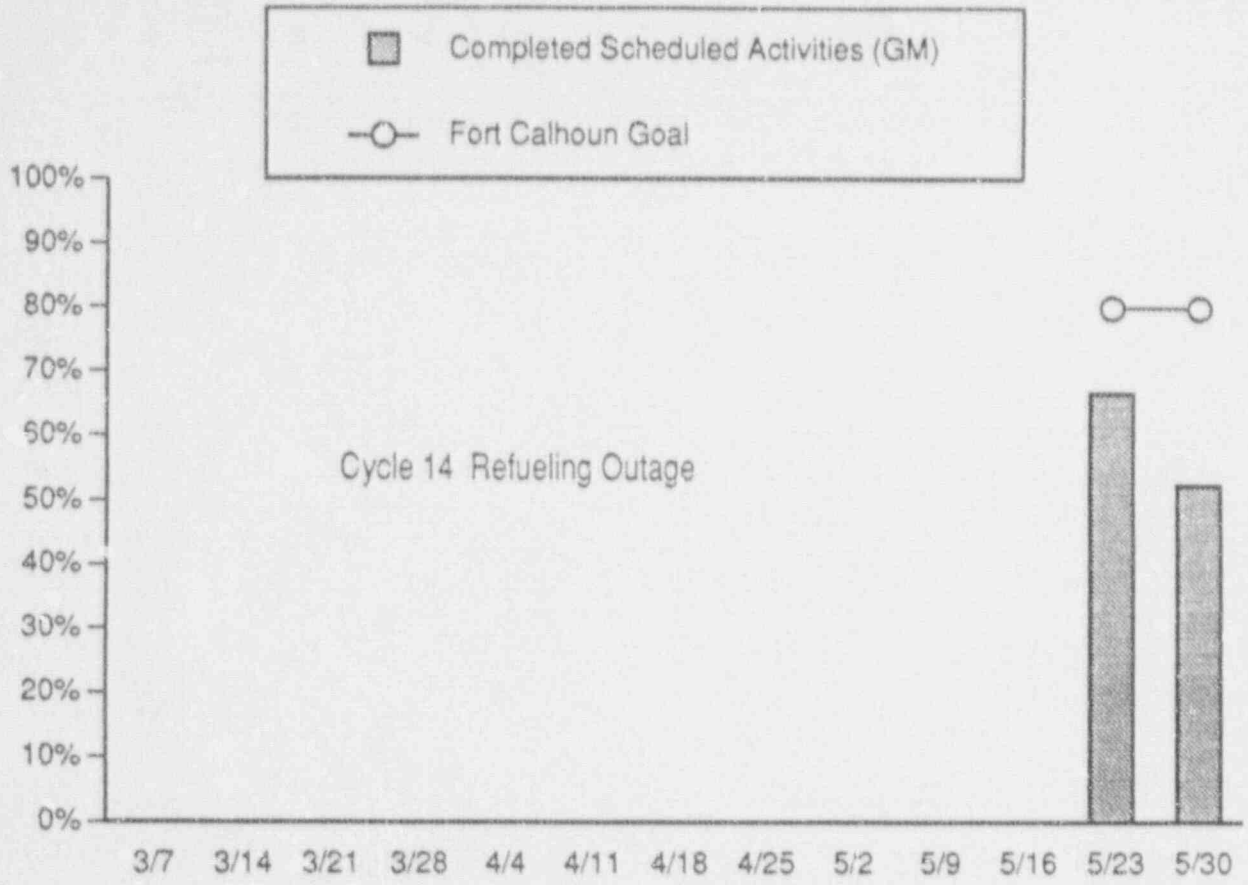
Reporting Month	Completed Scheduled Activities
Week 3	82.9%
Week 4	84.7%

Data Source: Patterson/Schmitz (Manager/Source)

Accountability: Patterson/Bobba

Adverse Trend: None

SEP 33



PERCENT OF COMPLETED SCHEDULED MAINTENANCE ACTIVITIES (GENERAL MAINTENANCE)

This indicator shows the percent of the number of completed maintenance activities as compared to the number of scheduled maintenance activities concerning General Maintenance. Maintenance activities include MWRs, MWOs, STs, PMOs, calibrations, and miscellaneous maintenance activities.

Data for this indicator was not tracked during the Cycle 14 Refueling Outage.

The Fort Calhoun Station goal for this indicator is 80%.

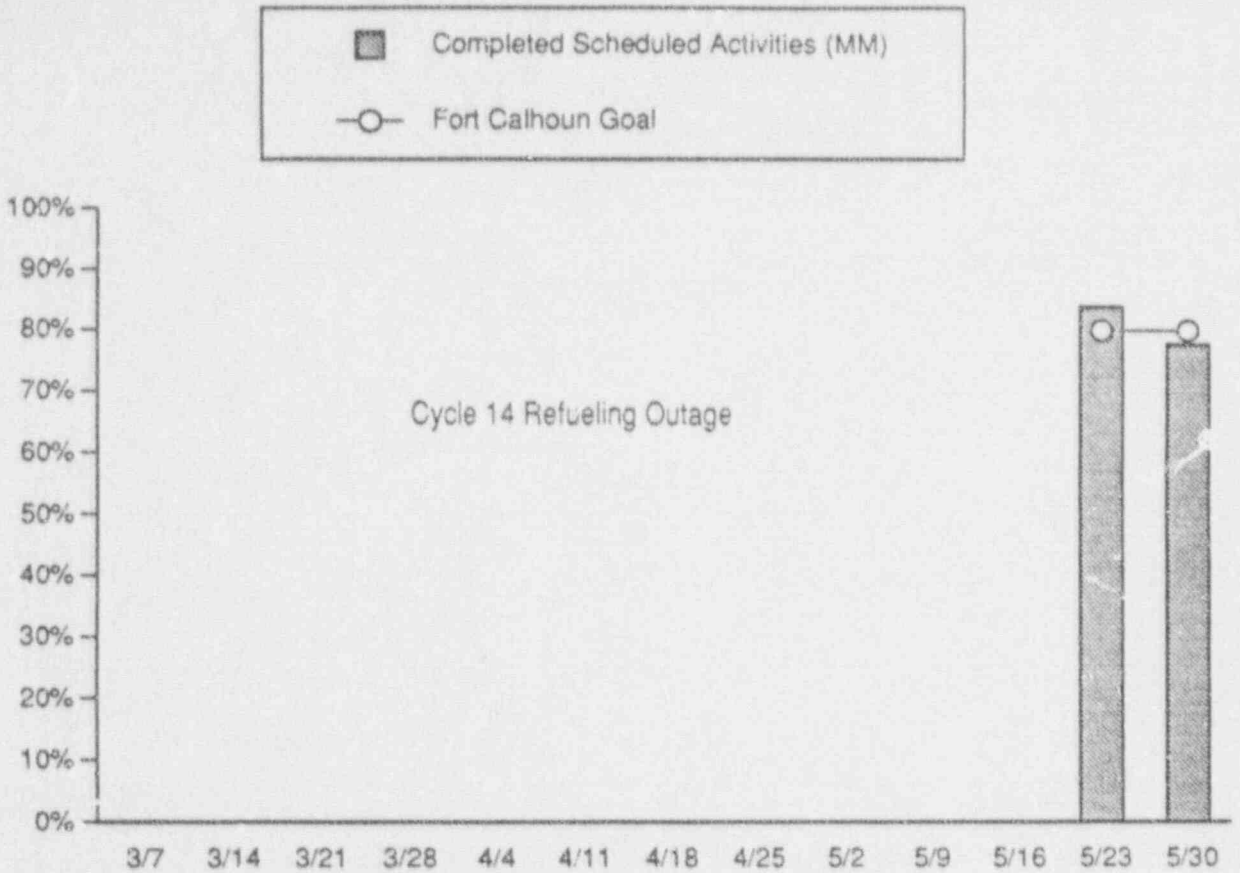
Reporting Month	Completed Scheduled Activities
Week 3	66.7%
Week 4	52.6%

Data Source: Patterson/Schmitz (Manager/Source)

Accountability: Patterson/Bobba

Adverse Trend: None

SEP 33



PERCENT OF COMPLETED SCHEDULED MAINTENANCE ACTIVITIES (MECHANICAL MAINTENANCE)

This indicator shows the percent of the number of completed maintenance activities as compared to the number of scheduled maintenance activities concerning Mechanical Maintenance. Maintenance activities include MWRs, MWOs, STs, PMOs, calibrations, and miscellaneous maintenance activities.

Data for this indicator was not tracked during the Cycle 14 Refueling Outage.

The Fort Calhoun Station goal for this indicator is 80%.

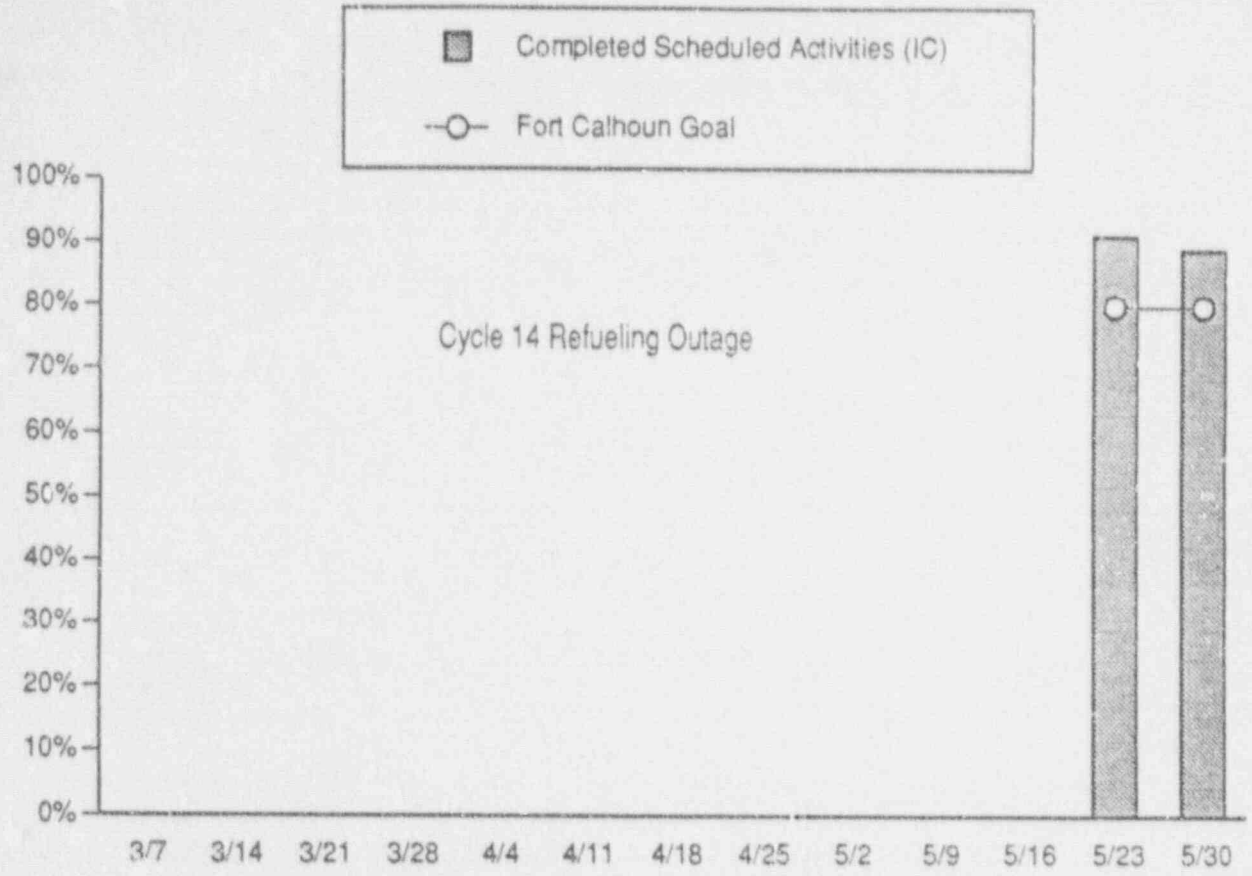
Reporting Month	Completed Scheduled Activities
Week 3	83.8%
Week 4	77.6%

Data Source: Patterson/Schmitz (Manager/Source)

Accountability: Patterson/Bobba

Adverse Trend: None

SEP 33



PERCENT OF COMPLETED SCHEDULED MAINTENANCE ACTIVITIES (INSTRUMENTATION & CONTROL)

This indicator shows the percent of the number of completed maintenance activities as compared to the number of scheduled maintenance activities concerning Instrumentation & Control. Maintenance activities include MWRs, MWOs, STs, PMOs, calibrations, and miscellaneous maintenance activities.

Data for this indicator was not tracked during the Cycle 14 Refueling Outage.

The Fort Calhoun Station goal for this indicator is 80%.

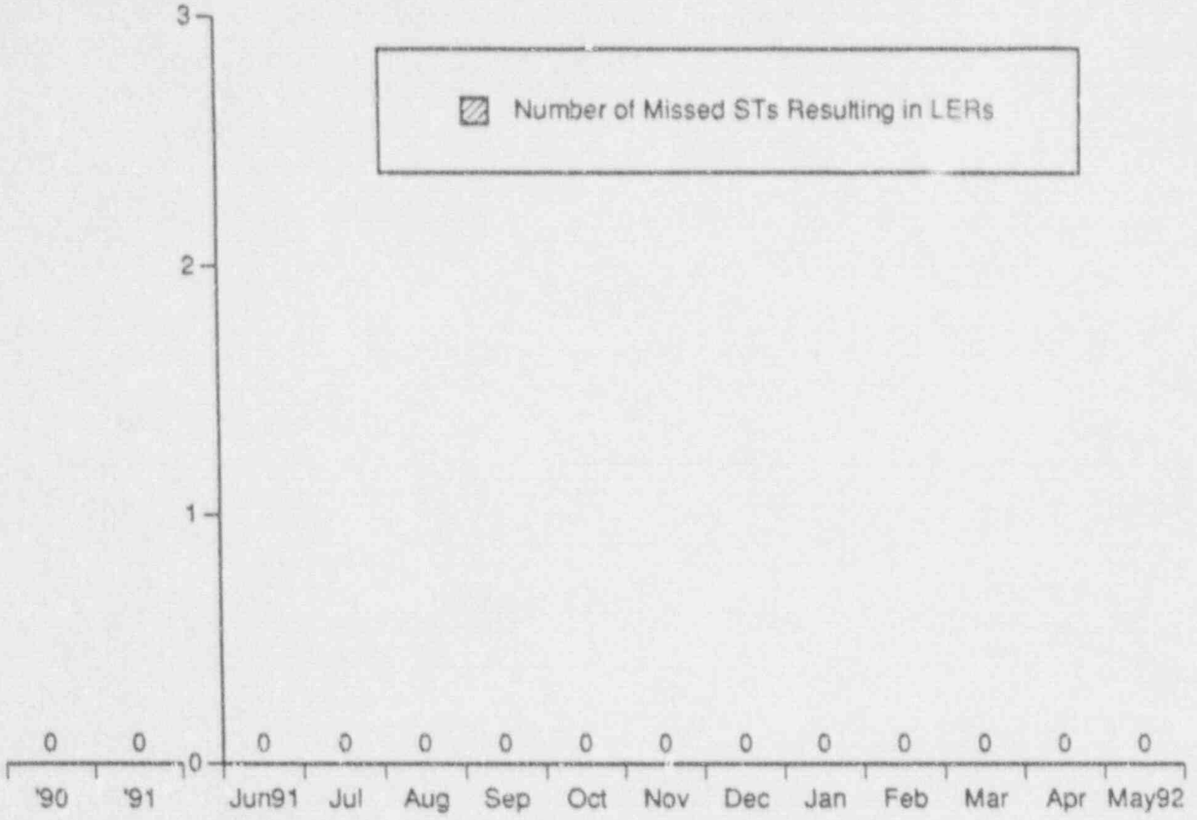
Reporting Month	Completed Scheduled Activities
Week 3	91.1%
Week 4	89.0%

Data Source: Patterson/Schmitz (Manager/Source)

Accountability: Patterson/Bobba

Adverse Trend: None

SEP 33



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.

During the month of May 1992, there were no missed STs that resulted in LERs.

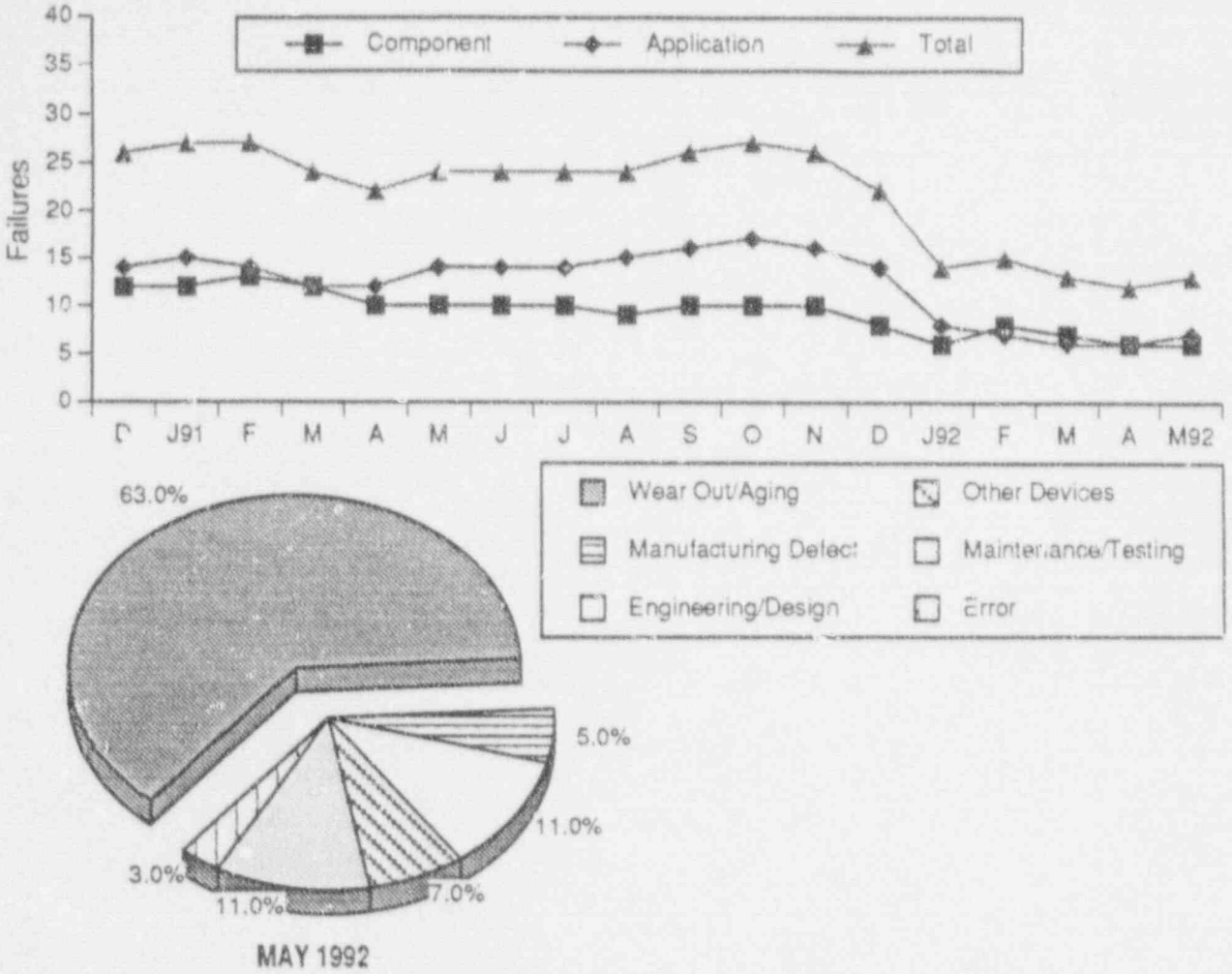
The 1991 & 1992 Fort Calhoun goals for this indicator are zero.

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

Accountability: Patterson/Jaworski

Adverse Trend: None

SEP 60 & 61



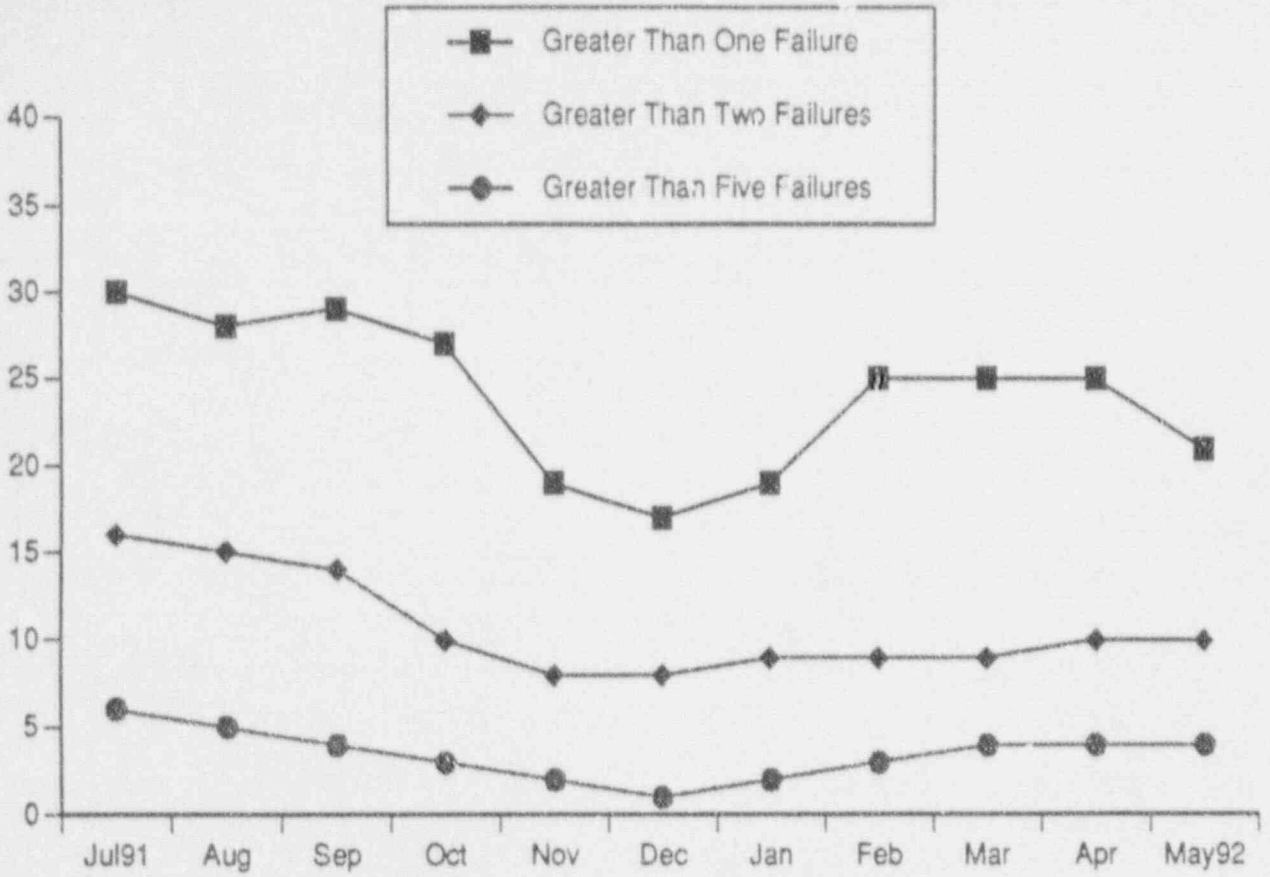
COMPONENT FAILURE ANALYSIS REPORT (CFAR) SUMMARY

This indicator shows the number of items with high failure rates for the 18 months from December 1990 through May 1992. The top chart illustrates the component, application and total failures for each month in the 18 month time period. The lower chart depicts the breakdown by cause categories (see the "Definitions" section of this report for descriptions of these cause categories) for each type of failure for the reporting month.

The "component" portion of this indicator tracks the number of component categories (i.e. reciprocating pumps, feedwater pumps, motor operated valves, etc.) in which the Fort Calhoun Station has a higher failure rate than the rest of the industry. For the month of May, this value is 6.

The "application" portion of this indicator tracks the number of application categories (i.e. charging pumps, feedwater pump discharge valves, etc.) in which the Fort Calhoun Station has a higher failure rate than the rest of the industry. For the month of May this value is 7.

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

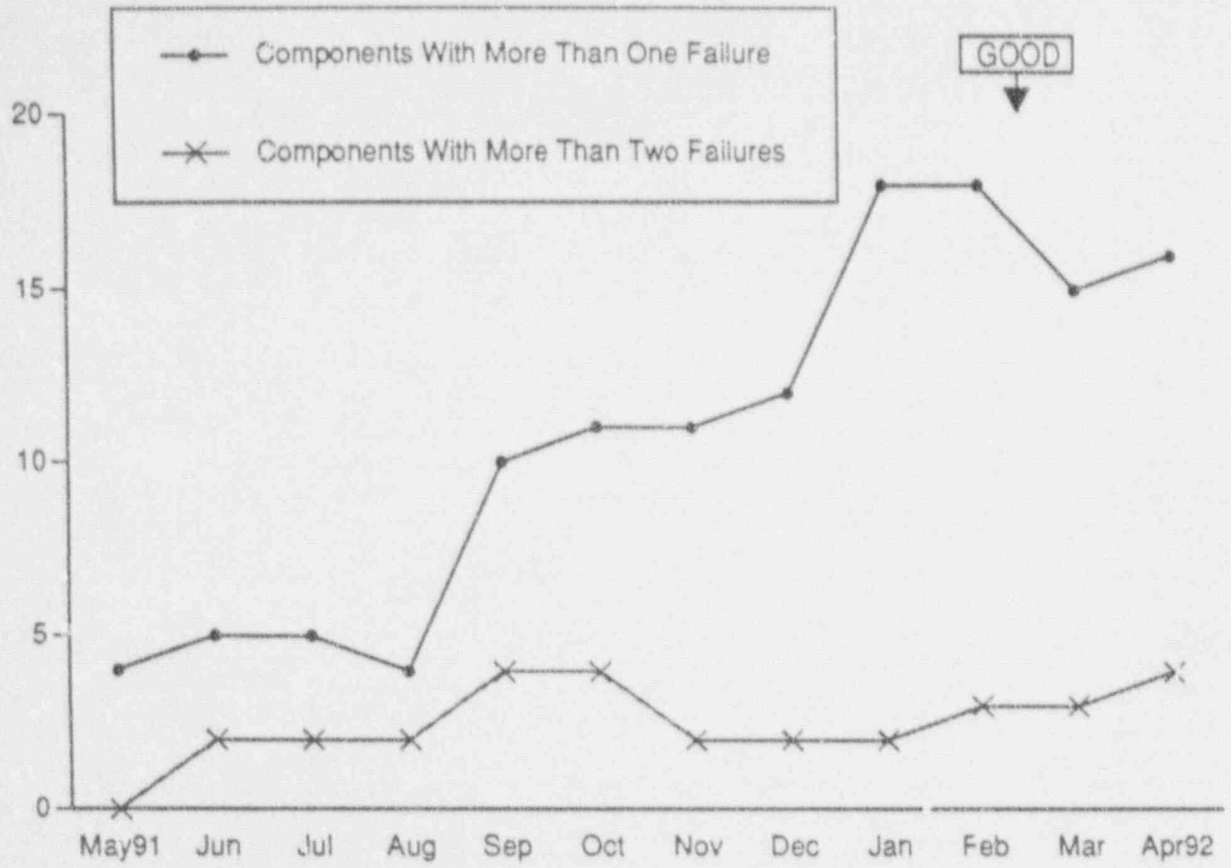


NUMBER OF NPRDS MULTIPLE FAILURES

This indicator shows the number of multiple NPRDS reportable failures over the preceding eighteen months sorted by component manufacturer and model number. The indicator is divided into three parts: manufacturer model numbers with more than one failure in eighteen months, manufacturer model numbers with more than two failures in eighteen months, and manufacturer model numbers with more than five failures in eighteen months.

During the past eighteen months, there were 21 model types that had more than one failure in eighteen months. 10 of these had more than two failures. 4 component types, General Electric 50-570-01 power supplies, Gaulin P18 pumps, Byron Jackson 28RXL pumps and Jayco Incorporated 150 valves had more than five failures. The model types with more than two failures are: General Electric AK-2A-25 circuit breakers (3 failures), the QSPDS (3 failures), Faulk Type Y couplings (3 failures), Byron-Jackson 28RXL pumps (6 failures), Gaulin P18 pumps (11 failures), General Electric 50-570 power supplies (4 failures), General Electric 50-570-01 power supplies (8 failures), General Electric 12HEA61 relays (3 failures), Jayco Incorporated 150 valves (6 failures) and the pressurizer (4 failures).

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



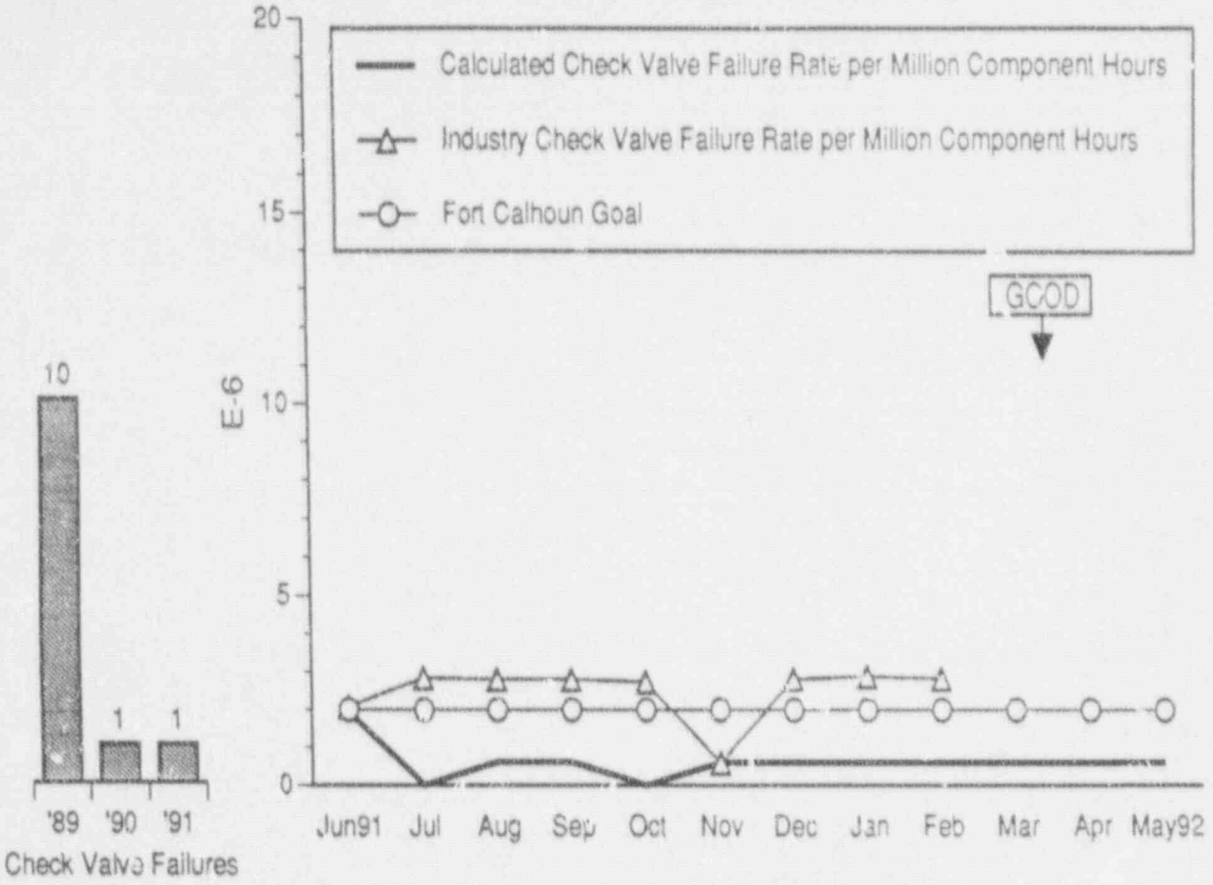
MAINTENANCE EFFECTIVENESS

The Maintenance Effectiveness Indicator was developed following guidelines set forth by the Nuclear Regulatory Commission's Office for Analysis and Evaluation of Operational Data (NRC/AEOD). The NRC/AEOD is currently developing and verifying a maintenance effectiveness indicator using the Nuclear Plant Reliability Data System (NPRDS) component failures.

This indicator has been revised to show the number of NPRDS components with more than one failure during the last eighteen months and the number of NPRDS components with more than two failures during the last eighteen months. The number of NPRDS components with more than two failures in an eighteen month period should indicate the effectiveness of plant maintenance. (This change applies only to the September 1991 through May 1992 data. The data for June through August 1991 is based on a twelve month interval.)

During the last 18 reporting months there were 13 NPRDS components with more than 1 failure. 4 of the 13 had more than two failures. The tag numbers of the components with more than two failures are B/PQ-905, CH-1A, CH-1B, and RC-4.

Data Source: Jaworski/Dowdy (Manager/Source)
Accountability: Patterson/Bobba
Adverse Trend: None



CHECK VALVE FAILURE RATE

This indicator shows the Fort Calhoun check valve failure rate, the Fort Calhoun goal and the industry check valve failure rate. This rate is based upon failures during the previous 18 months. The check valve failures at Fort Calhoun Station for the previous two years are shown on the left.

The data for the indust y check valve failure rate is three months behind the reporting month due to the time involved in collecting and processing the data.

For February 1992, the Fort Calhoun Station reported an actual check valve failure rate of 6.09 E- 7, while the industry reported an actual failure rate of 2.83 E- 6. At the end of May 1992, the Fort Calhoun Station reported a calculated check valve failure rate of 6.07 E-7.

The 1992 Fort Calhoun goal for this indicator is a failure rate of 2.00 E-6.

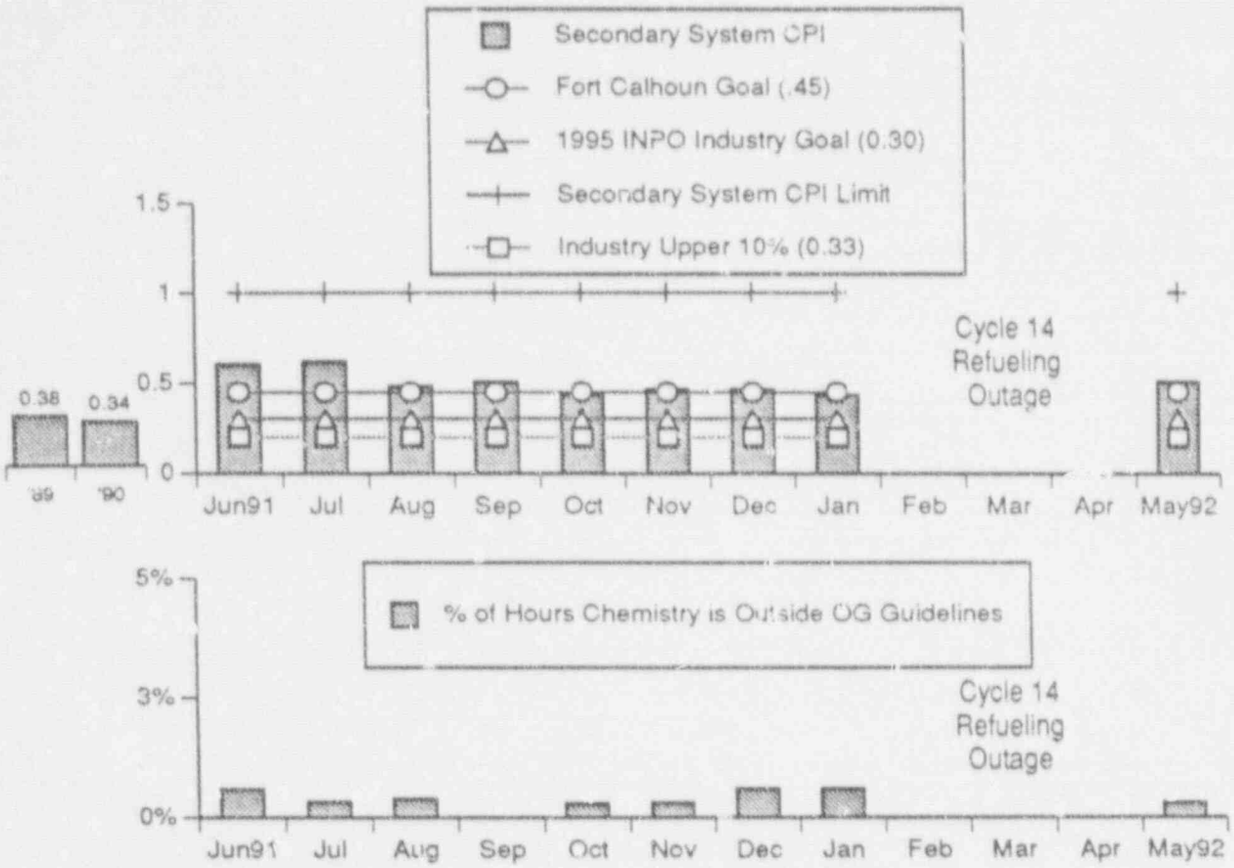
Data Source: Jaworski/Dowdy (Manager/Source)

Accountability: Jaworski/Rollins

Adverse Trend: None

SEP 43

1



SECONDARY SYSTEM CHEMISTRY

The top graph, Secondary System Chemistry Performance Index (CPI), is calculated using the following three parameters: cation conductivity in steam generator blowdown, sodium in steam generator blowdown, and condensate pump discharge dissolved oxygen. The bottom graph shows the percent of total hours of 13 parameters exceeding the Owners Group (OG) guidelines during power operation.

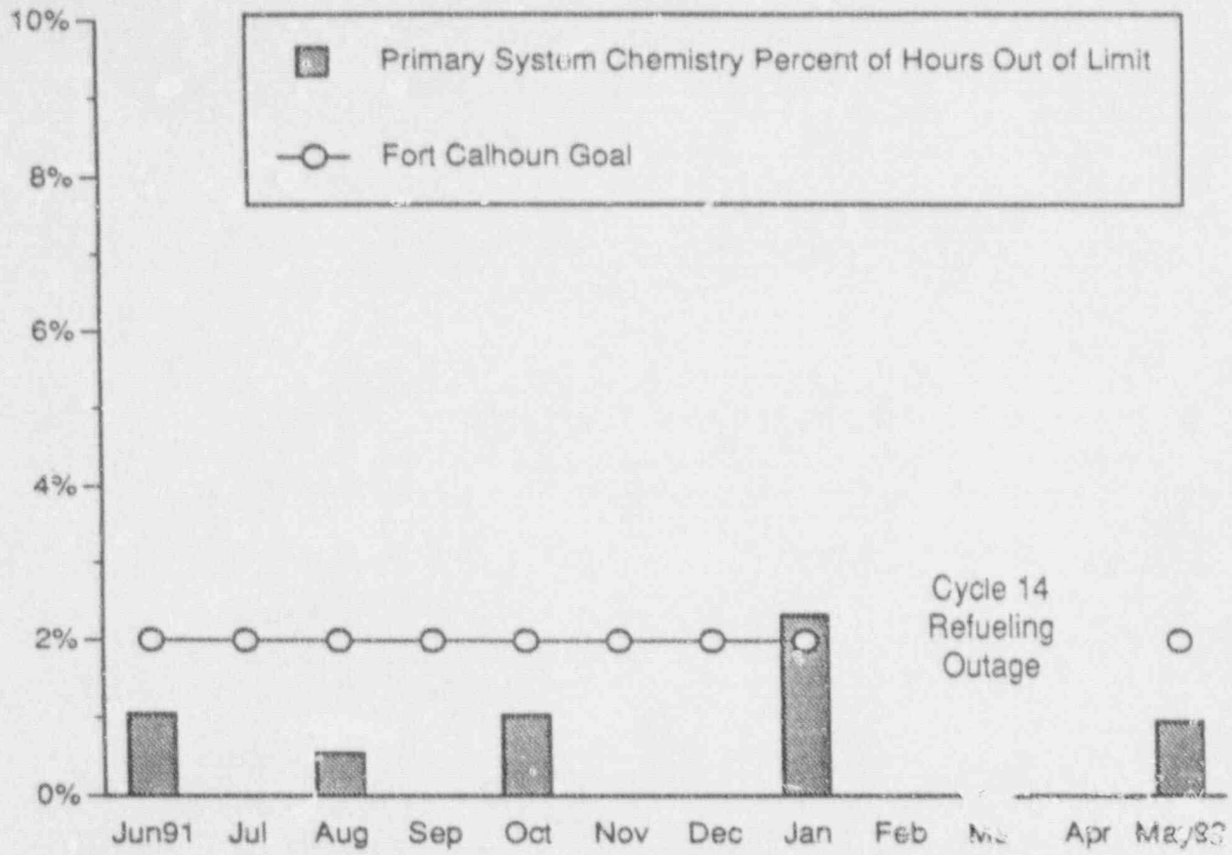
The percent of hours outside the OG guidelines was reported as 0.31% for the month of May 1992. The CPI was reported as 0.505 for the month of May 1992.

The 1991 & 1992 Fort Calhoun goals for the CPI are 0.45. The INPO 1995 Industry goal is 0.30. The industry upper ten percentile value for this indicator was approximately 0.20 for 1991.

Data source: Franco/Glantz (Manager/Source)

Accountability: Patterson/Schmidt

Adverse Trend: None



PRIMARY SYSTEM CHEMISTRY PERCENT OF HOURS OUT OF LIMIT

The Primary System Chemistry - Percent of Hours Out of Limit indicator tracks the primary system chemistry performance by monitoring six key chemistry parameters. Typically, lithium is the parameter that is out of limit. 100% equates to all six parameters being out of limit for the month.

The Primary System Chemistry Percent of Hours Out of Limit was reported as 0.96% for the month of May 1992.

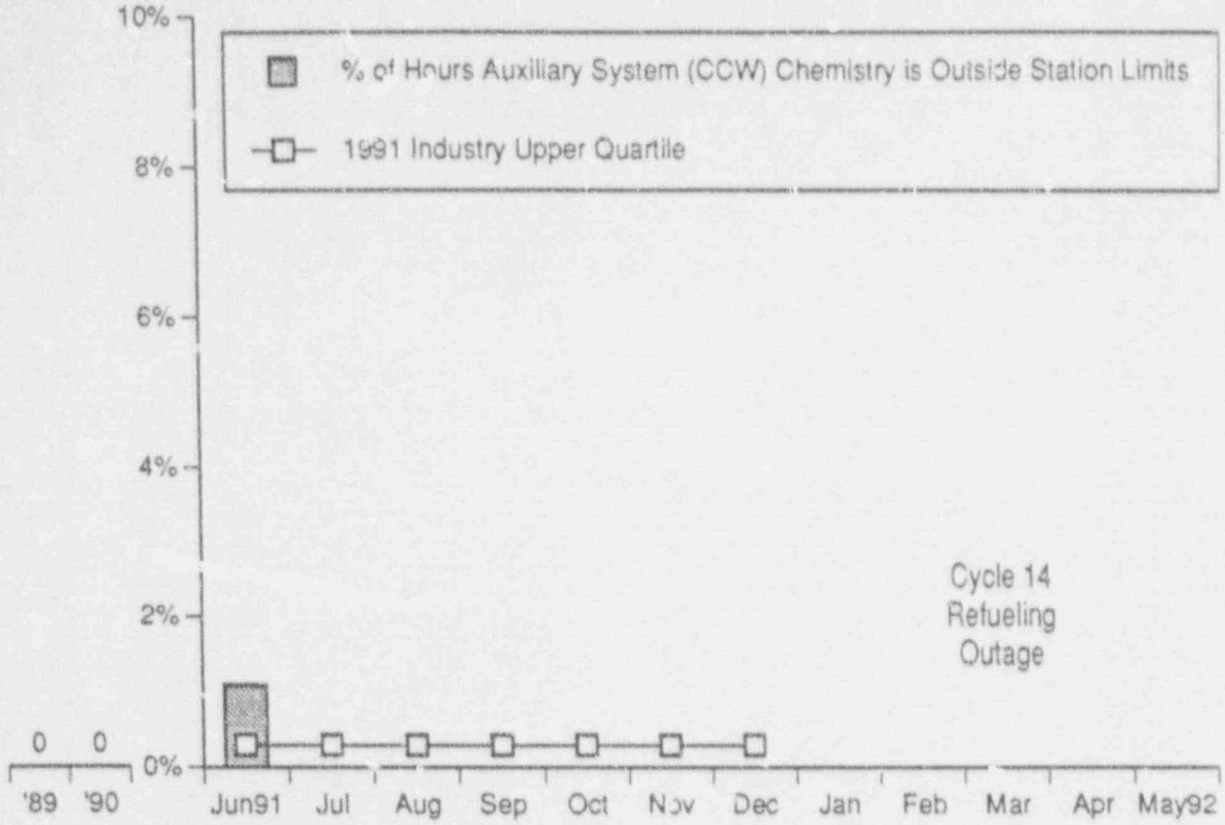
A plant outage in November and December 1990 resulted in a higher percentage of hours out of limit.

The 1992 Fort Calhoun goal for this indicator is 2%. The 1991 goal was 2%.

Data Source: Franco/Glantz (Manager/Source)

Accountability: Patterson/Smith

Adverse Trend: None



AUXILIARY SYSTEM (CCW) CHEMISTRY PERCENT OF HOURS OUTSIDE STATION LIMITS

The Auxiliary System Chemistry Percent of Hours Outside Station Limits indicator tracks the monthly hours that the Component Cooling Water (CCW) system is outside the station chemistry limit.

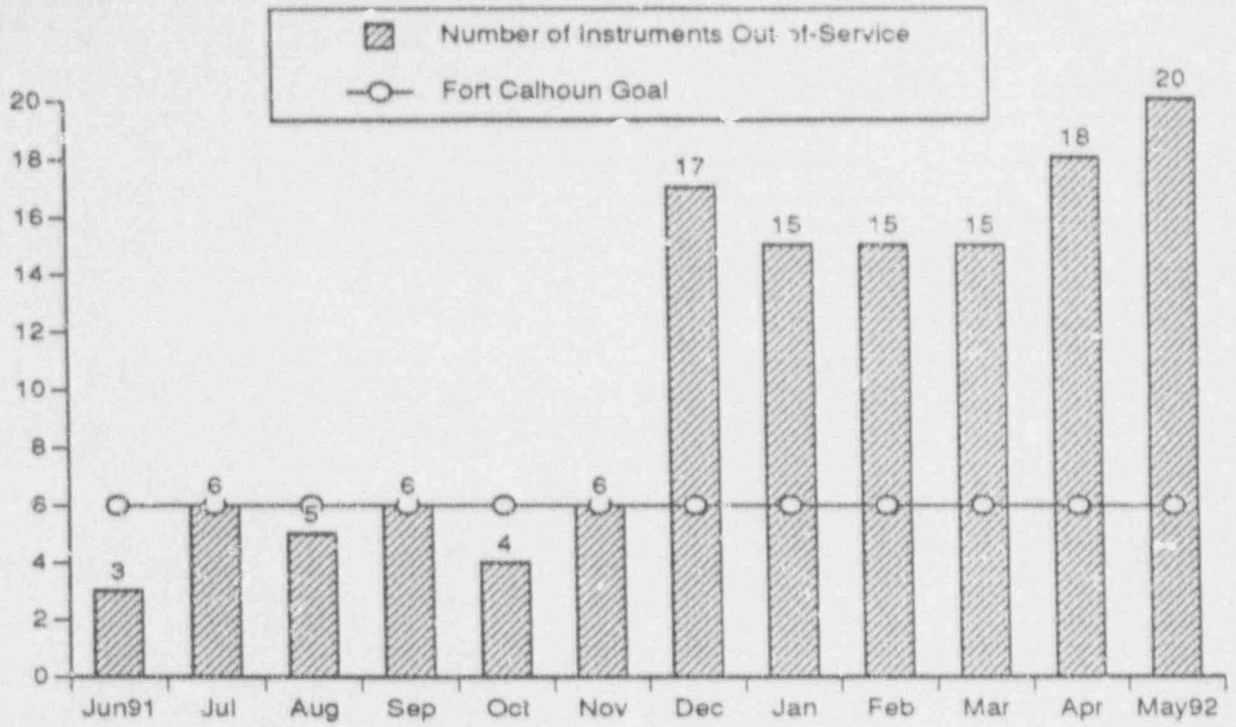
The auxiliary system chemistry percent of hours outside station limits was reported as 0% for the month of May 1992. The last out of station limits condition occurred in June 1991 and was due to a low nitrite level in CCW coolant.

The 1991 Fort Calhoun goal for this indicator was a maximum of 2%.

Data Source: Franco/Glantz (Manager/Source)

Accountability: Patterson/Smith

Adverse Trend: None



IN-LINE CHEMISTRY INSTRUMENTS OUT-OF-SERVICE

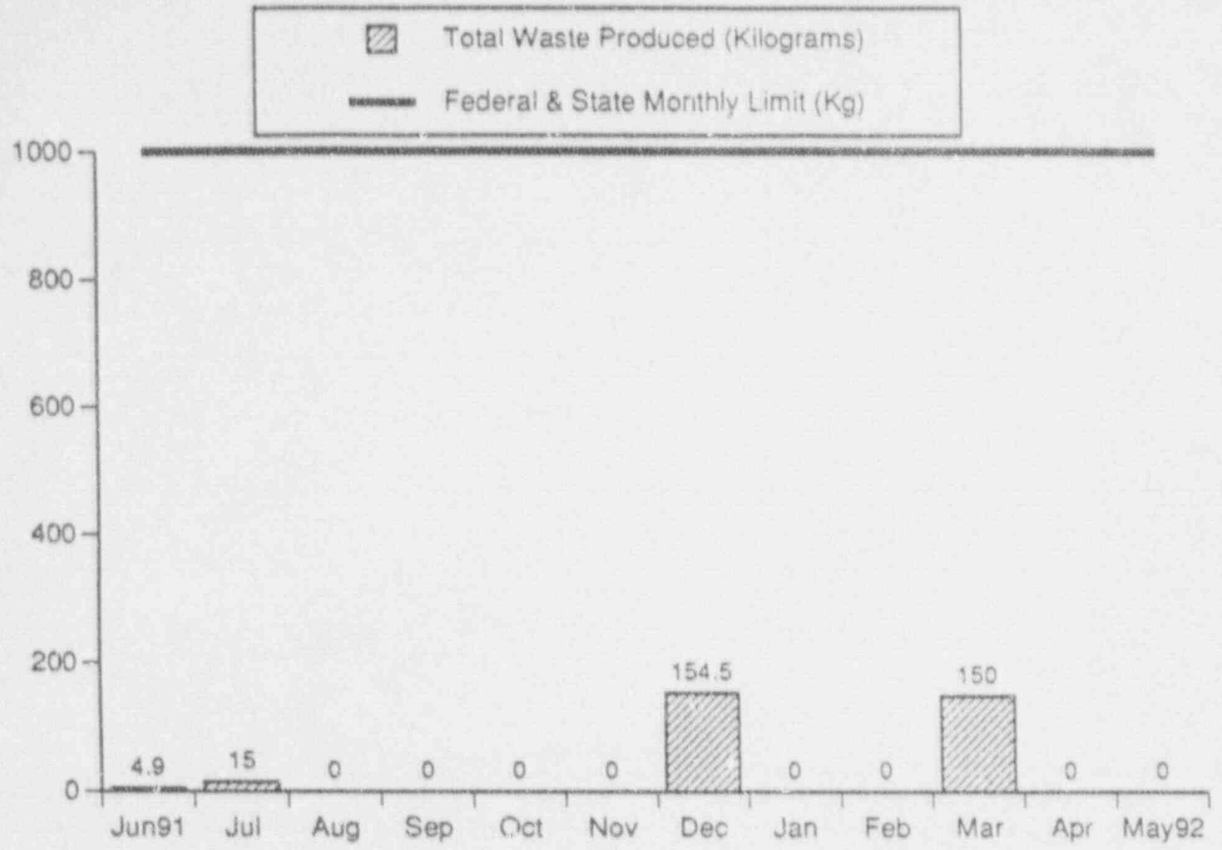
This indicator shows the total number of in-line chemistry system instruments that are out-of-service at the end of the reporting month. The chemistry systems involved in this indicator include the Secondary System and the Post Accident Sampling System (PASS).

At the end of May there was a total of 20 in-line chemistry instruments that were out-of-service. Of these 20 instruments, 18 were from the Secondary System and 2 were from PASS. Most of the out-of-service instruments are at the secondary sample panel due to a combination of alarms not being operable and failure of two of the actual instruments.

The increase that occurred after November 1991 in the number of Secondary instruments out of service is due to a new method of determining if an instrument is out of service. The entire instrument channel is considered inoperative if: 1) the instrument is inoperative, 2) the chart recorder associated with the instrument is inoperative, 3) the alarm function associated with the instrument is inoperative. This change was made because if any of the functions named above are not operational, then the instrument is not performing its intended function.

The 1992 Fort Calhoun goal for the number of in-line chemistry system instruments that are out-of-service has been set at 6. Six out-of-service chemistry instruments make up 10% of all the chemistry instruments that are counted for this indicator.

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



HAZARDOUS WASTE PRODUCED

This indicator shows the total amount of hazardous waste produced by Fort Calhoun each month. This hazardous waste consists of non-halogenated hazardous waste, halogenated hazardous waste, and other hazardous waste produced.

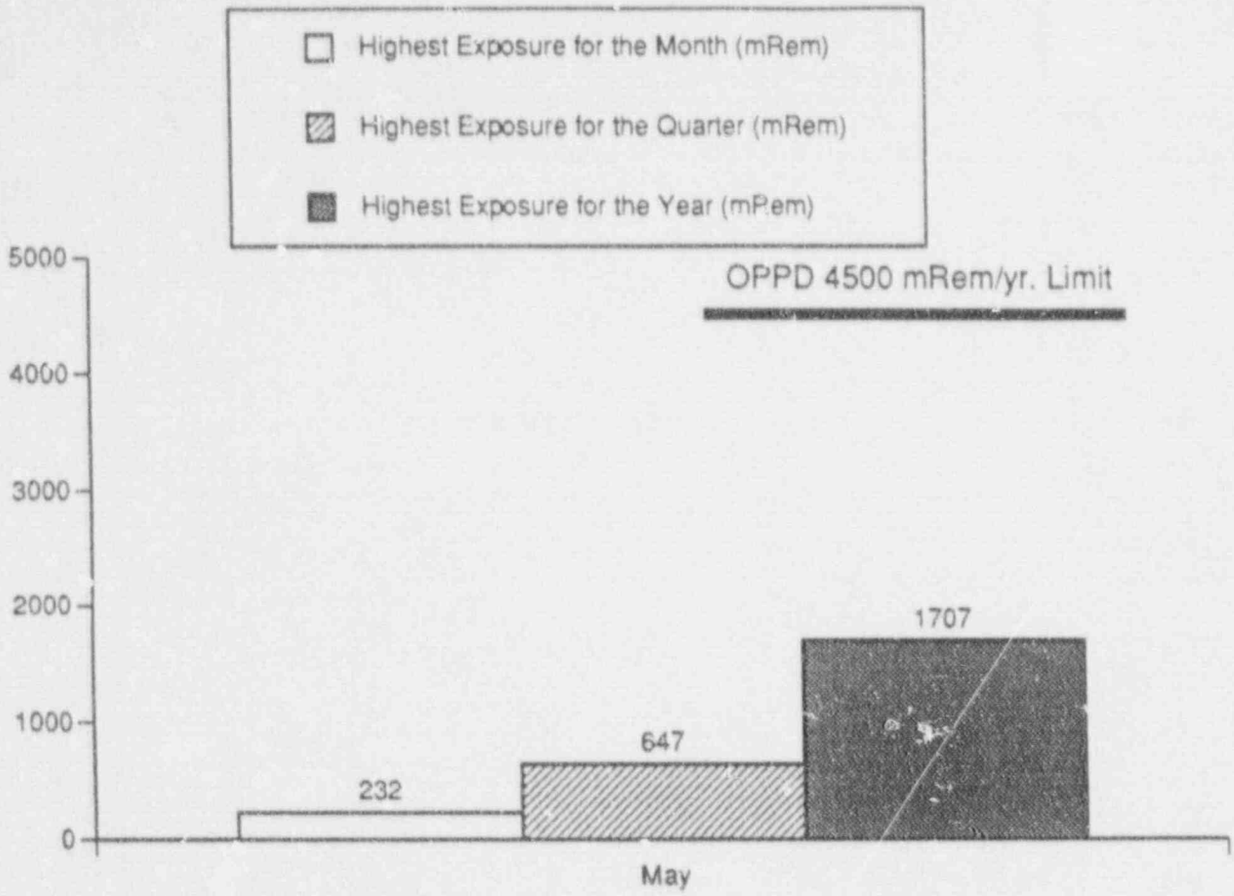
During the month of May 1992, 0.0 kilograms of non-halogenated hazardous waste was produced, 0.0 kilograms of halogenated hazardous waste was produced, and 0.0 kilograms of other hazardous waste was produced.

The amount of halogenated hazardous waste increased in December 1991 because of a change in the method of record keeping. Hazardous waste is no longer counted on a monthly basis. It is counted based upon a full drum of waste.

Date Source: Patterson/Henning (Manager/Source)

Accountability: Patterson/Henning

Adverse Trend: None



MAXIMUM INDIVIDUAL RADIATION EXPOSURE

During May 1992, an individual accumulated 232 mRem which was the highest individual exposure for the month.

The maximum individual exposure to date for the second quarter of 1992 was 647 mRem.

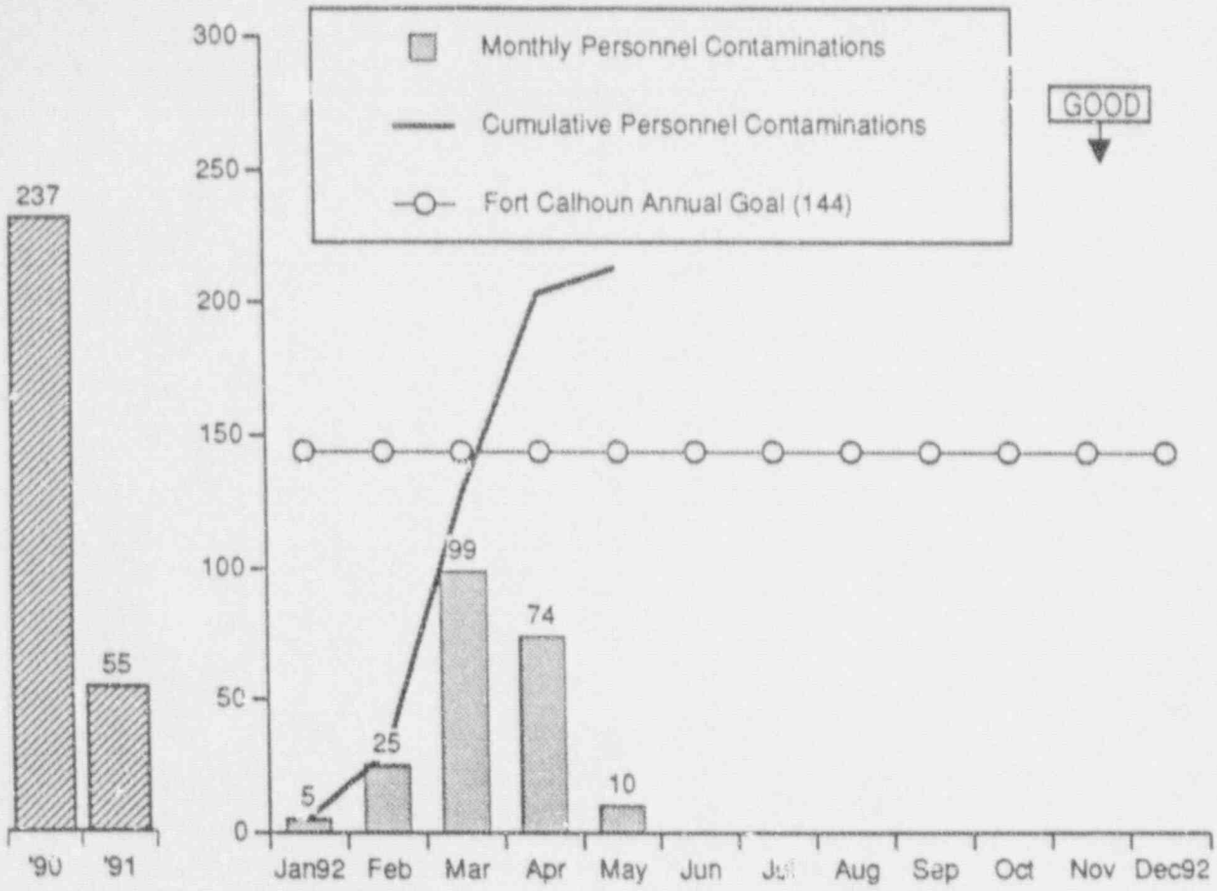
The maximum individual exposure reported for the year 1992 was 1,707 mRem.

The OPPD limit for the maximum yearly individual radiation exposure is 4,500 mRem/year. The 1992 Fort Calhoun goal is 1,500 mRem/year.

Date Source: Patterson/Williams (Manager/Source)

Accountability: Patterson/Lovett

Adverse Trend: None



TOTAL SKIN AND CLOTHING CONTAMINATIONS

This indicator shows the number of skin and clothing contaminations for the reporting month. A total of 213 contaminations have occurred during 1992.

There was a total of 55 skin and clothing contaminations in 1991.

There was a total of 237 skin and clothing contaminations in 1990.

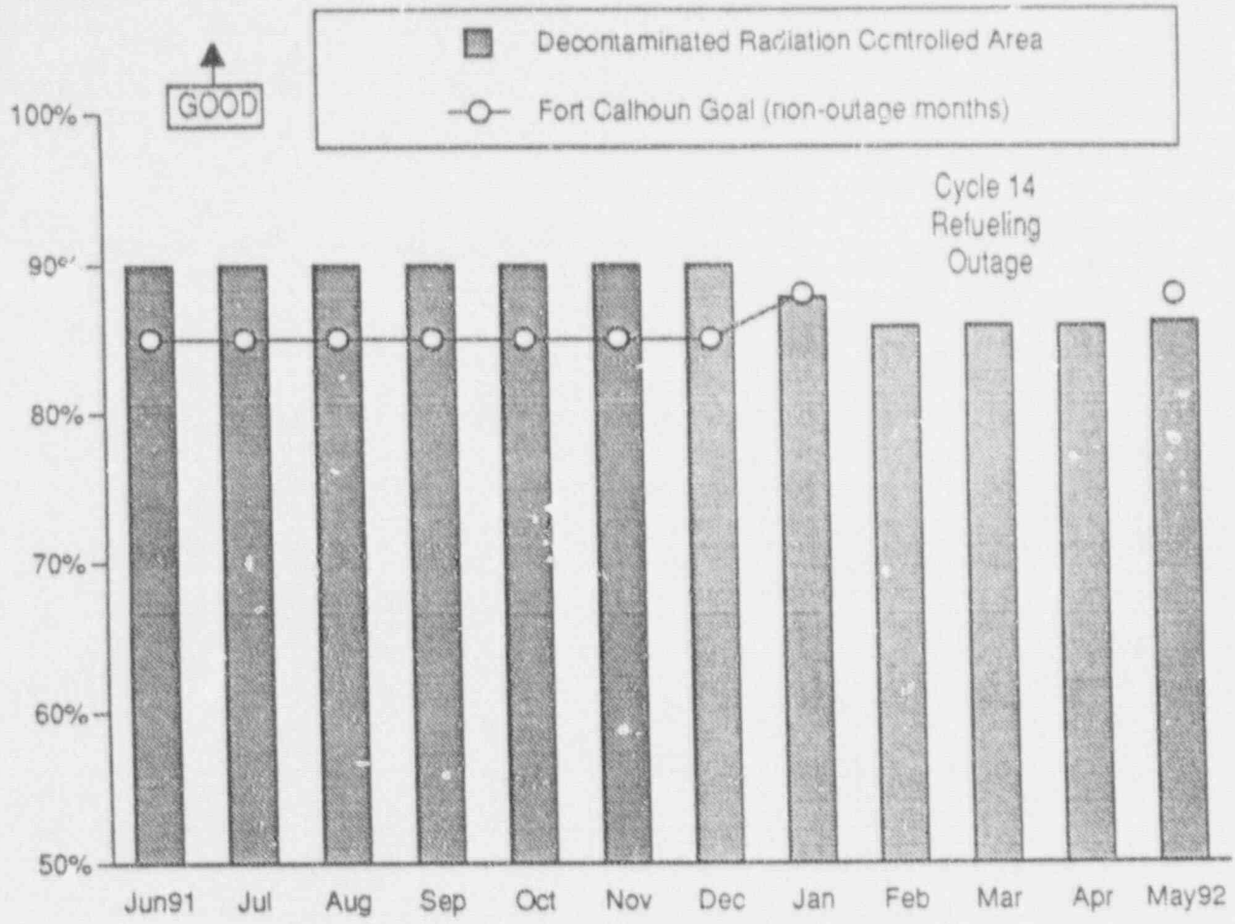
The 1992 goal for skin and clothing contaminations is 144.

Data Source: Patterson/Williams (Manager/Source)

Accountability: Patterson/Lovett

Adverse Trend: None

SEP 15 & 54



DECONTAMINATED RADIATION CONTROLLED AREA

This indicator shows the percentage of the RCA that is decontaminated (clean) based on the total square footage, a 1991 Fort Calhoun goal of 85% decontaminated RCA for non-outage months and a 1992 goal of 88% decontaminated RCA for non-outage months.

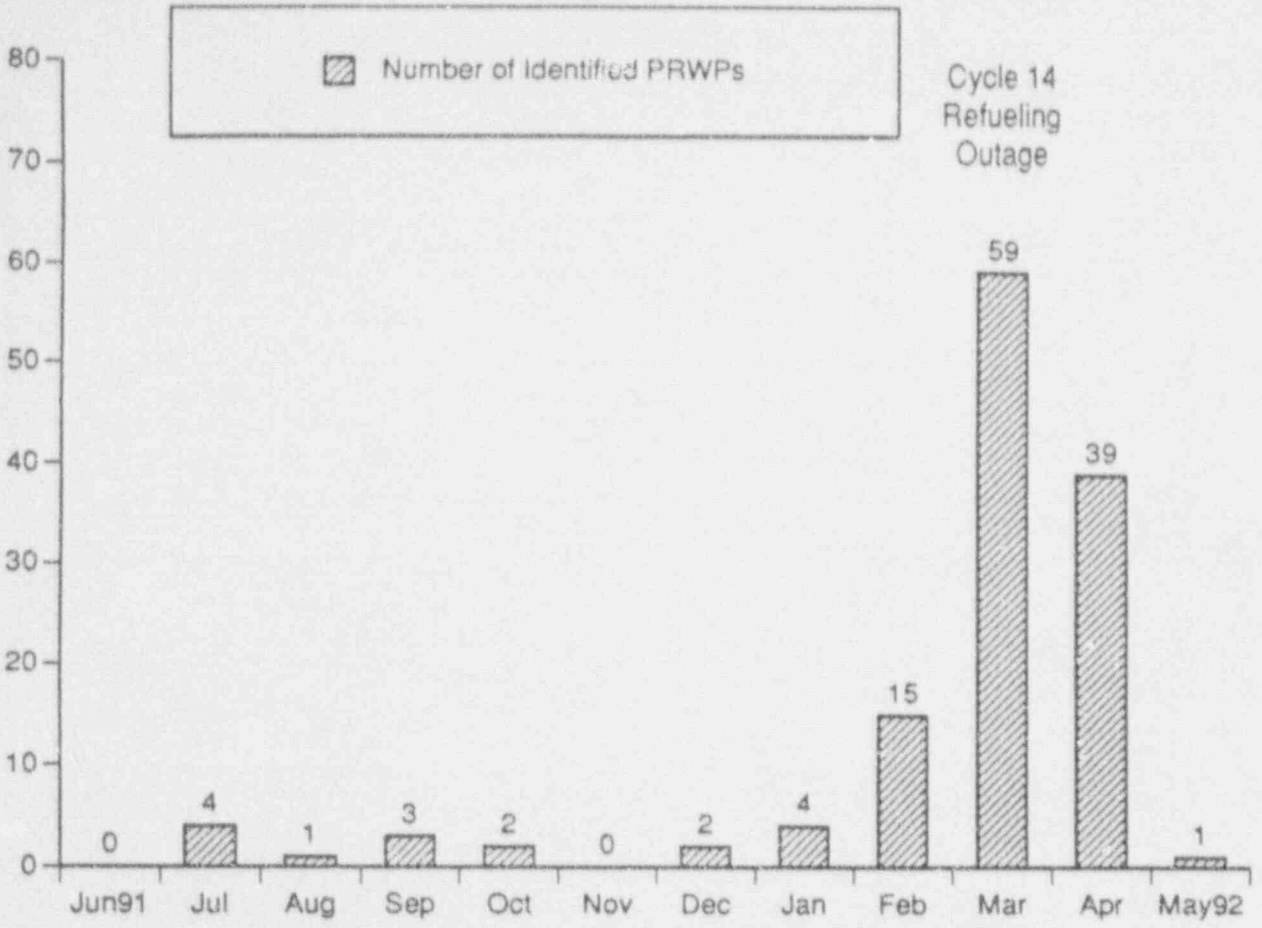
At the end of the reporting month, 86.2% of the total square footage of the RCA was decontaminated.

Date Source: Patterson/Gundal (Manager/Source)

Accountability: Patterson/Lovett

Adverse Trend: None

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 PRWPs are identified through a review of the monthly Radiological Occurrance Reports and Personnel Contamination Reports.

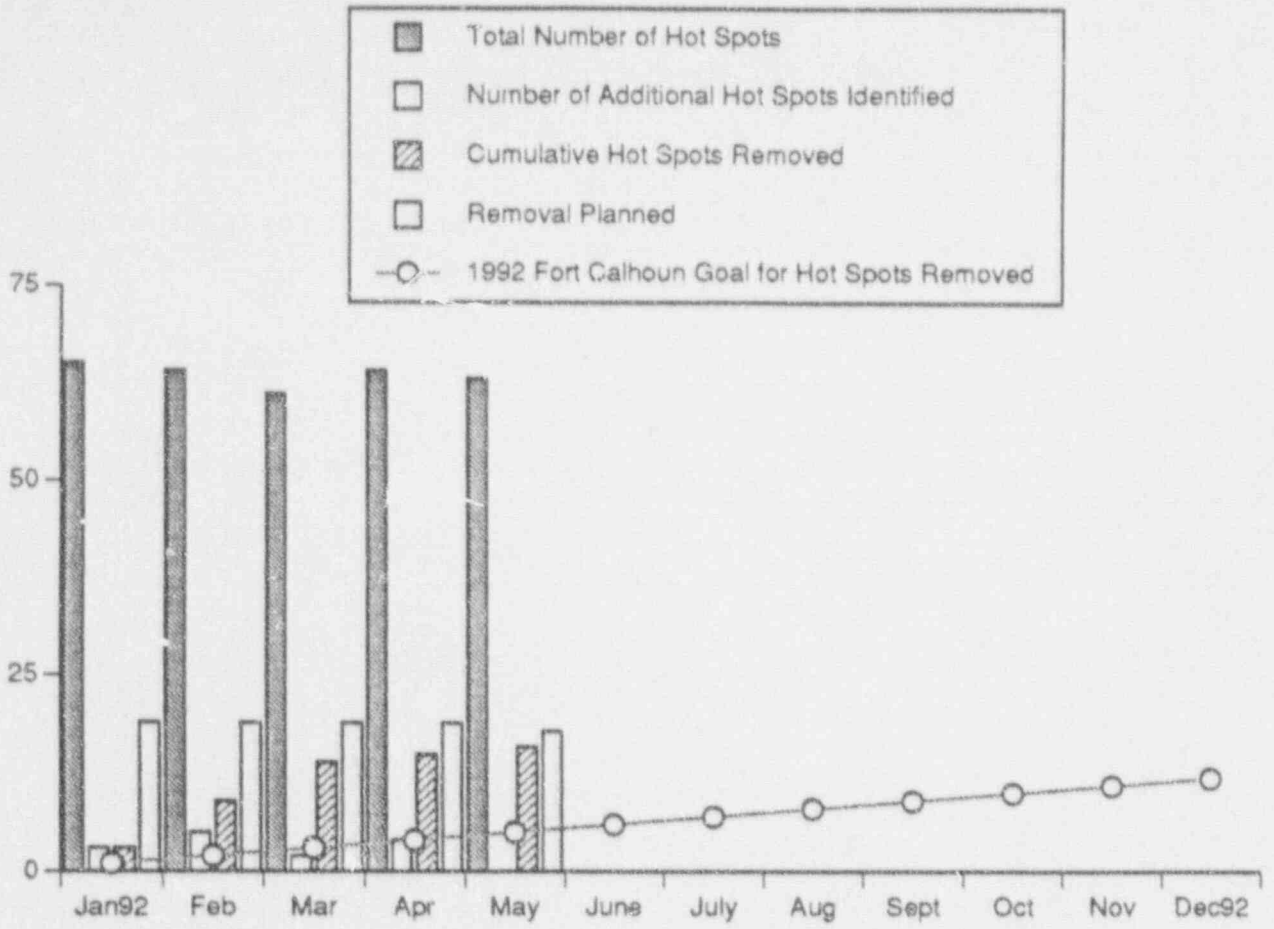
The number of PRWPs which are identified each month should indirectly provide a means to qualitatively assess supervisor accountability for their workers' radiological performance.

During the month of May 1992, 1 PRWP was identified. The numbers of PRWPs for the months of February, March and April are higher than the numbers reported for previous months due to the Cycle 14 Refueling Outage.

Data Source: Patterson/Williams (Manager/Source)

Accountability: Patterson/Lovett

Positive Trend SEP 52



NUMBER OF HOT SPOTS

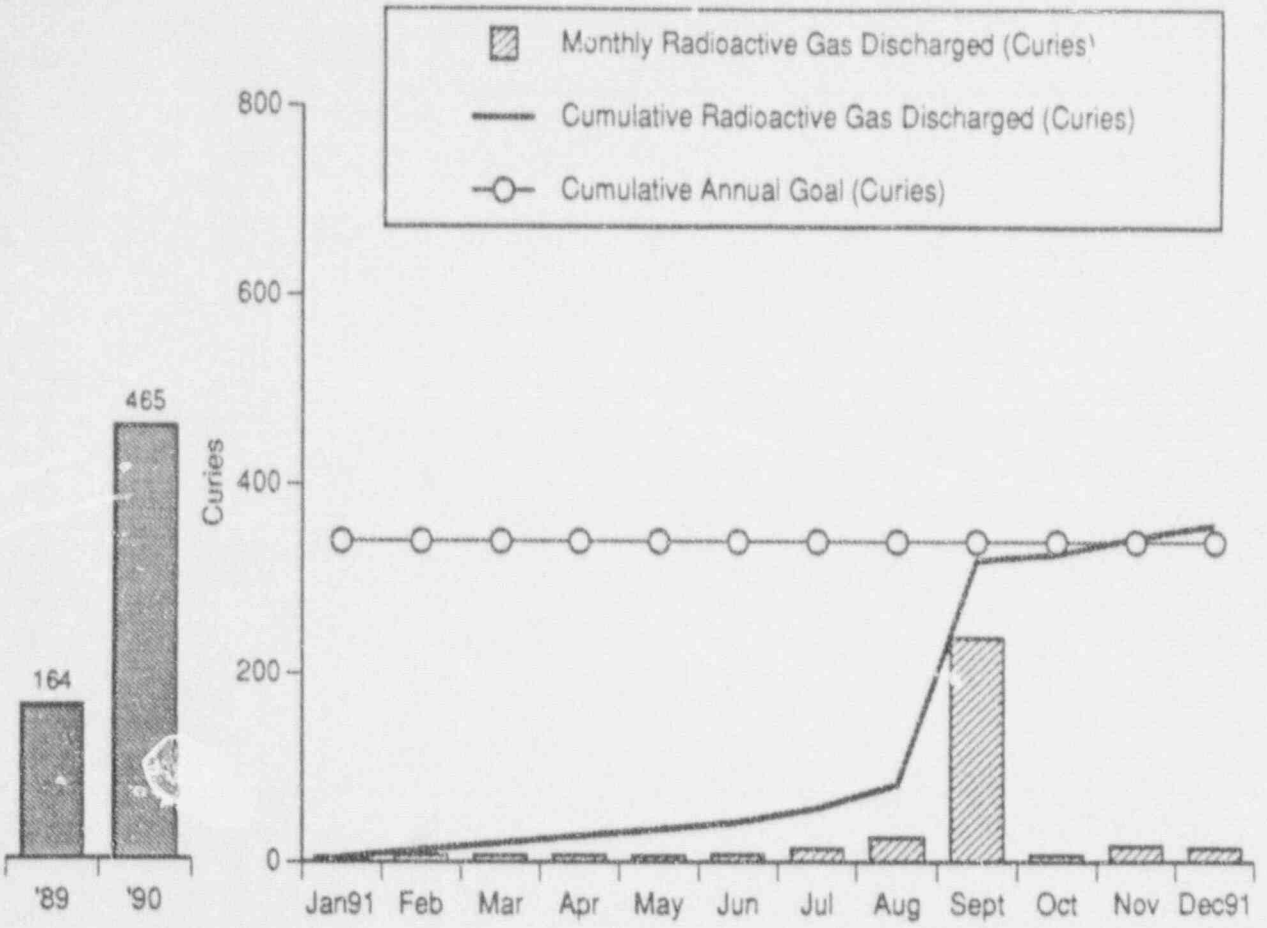
This indicator shows the total number of hot spots which have been identified to exist in the Fort Calhoun Station and have been documented through the use of a hot spot identification sheet. A hot spot is defined as a small localized source of high radiation. A hot spot occurs when the contact dose rate of an item or piece of equipment is at least 5 times the General Area dose rate and the item or piece of equipment's dose rate is equal to or greater than 100 mRem/hour.

At the end of May, there were 63 hot spots identified. 33 of these hot spots were considered permanent, i.e. hot spots which are not significant dose contributors or are cost prohibitive for removal. 1 hot spot was removed in the boric acid storage tank area and no new hot spots were identified during the month.

Removal is planned for 18 hot spots. 12 hot spots are still under evaluation.

The 1992 Fort Calhoun goal is to remove one hot spot per month.

Data Source: Patterson/Williams (Manager/Source)
Accountability: Patterson/Lovett
Adverse Trend: None



GASEOUS RADIOACTIVE WASTE BEING DISCHARGED TO THE ENVIRONMENT.

The gaseous radioactive waste being discharged to the environment is shown for January 1, 1991 through December 31, 1991. A total of 358.5 curies have been released to the environment during this time.

In September, 238.236 curies of gaseous radioactive waste was released to the environment due to containment purges required during the unscheduled maintenance outage. Most of the radioactive waste was released in the form of Xenon-133.

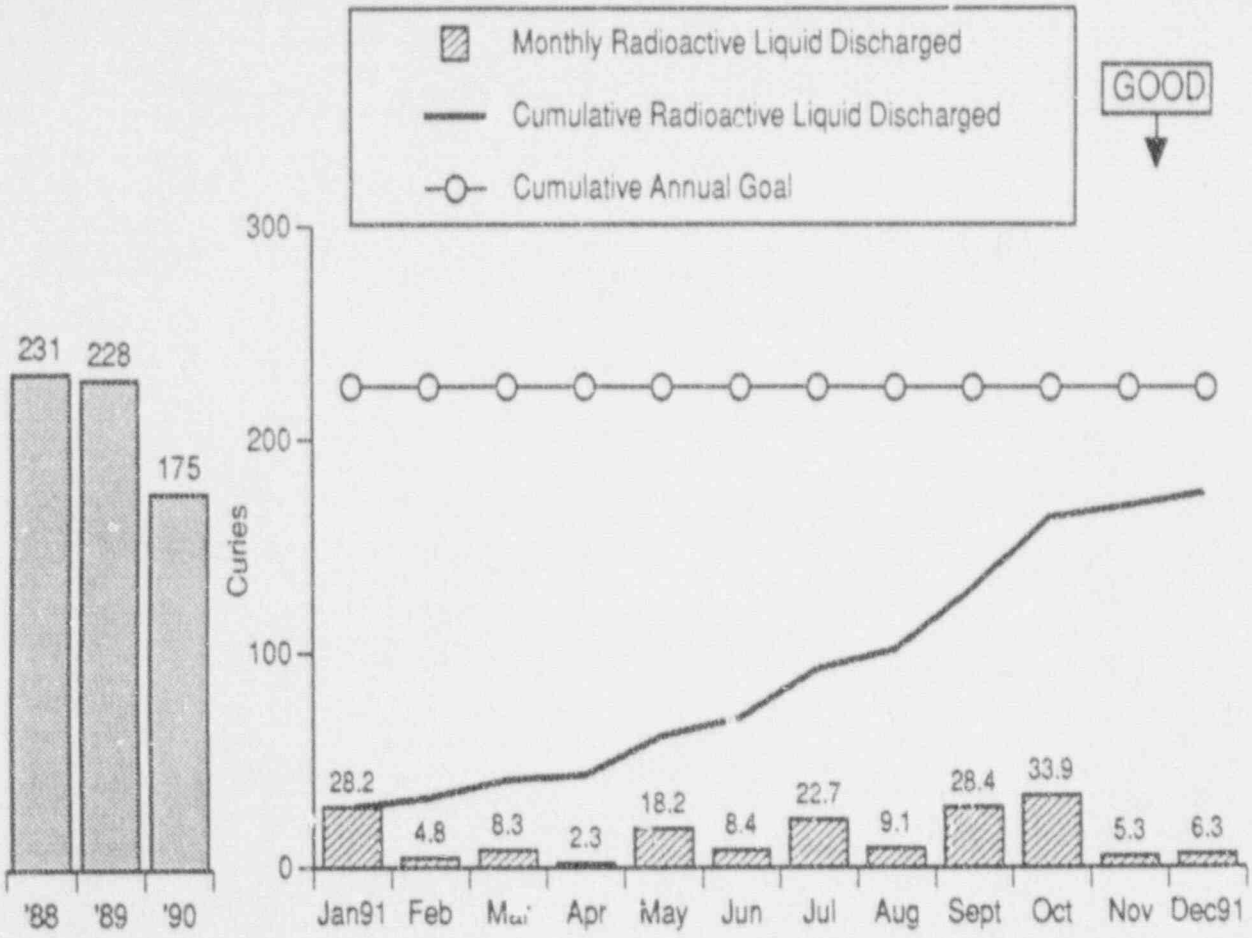
The Fort Calhoun Station cumulative annual goal for 1991 was 340 curies for this indicator.

The gaseous radioactive waste being discharged to the environment is calculated every six months.

Data Source: Franco/Krist (Manager/Source)

Accountability: Patterson/Trausch

Adverse Trend: None



LIQUID RADIOACTIVE WASTE BEING DISCHARGED TO THE ENVIRONMENT

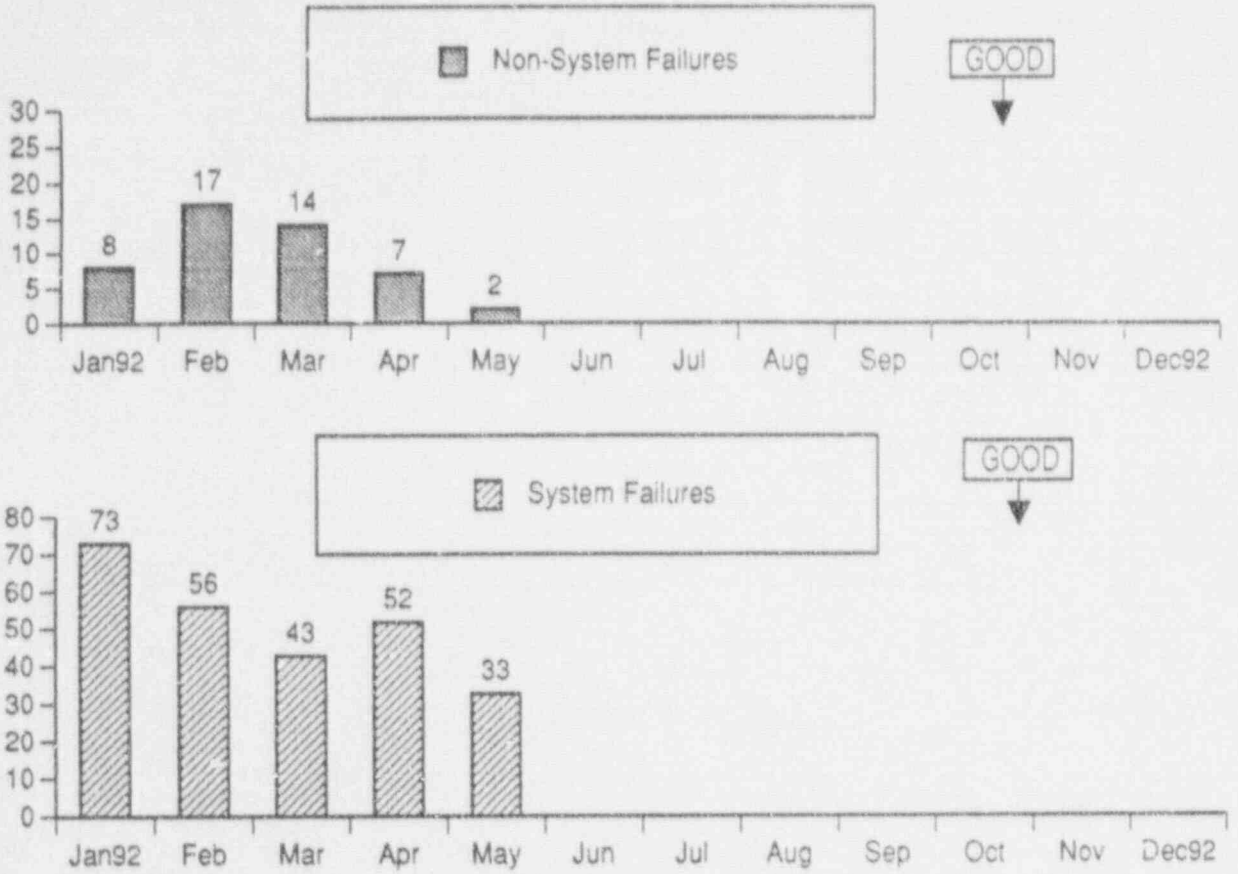
The liquid radioactive waste being discharged to the environment is shown for January 1, 1991 through December 31, 1991. The liquid radioactive waste that was discharged to the environment from all sources totaled 176.1 curies during this time. The Fort Calhoun Station cumulative annual goal for 1991 was 225 curies.

The liquid radioactive waste being discharged to the environment is calculated every six months.

Data Source: Franco/Krist (Manager/Source)

Accountability: Patterson/Lovett

Adverse Trend: None



LOGGABLE/REPORTABLE INCIDENTS (SECURITY)

The Loggable/Reportable Incidents (Security) Indicator is depicted in two separate graphs. The first graph depicts the total number of loggable/reportable non-system failures concerning Security Badges, Access Control and Authorization, and 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.

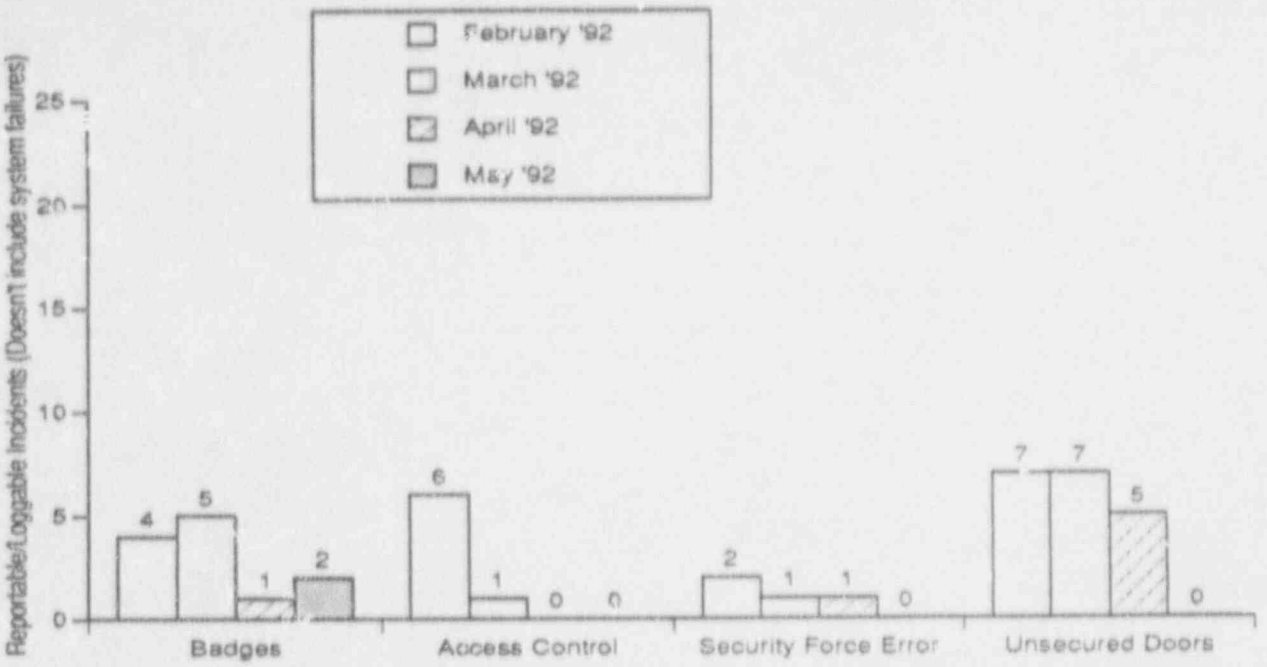
During the month of May 1992, there were 35 loggable/reportable incidents identified. System failures accounted for 33 (94%) of the loggable/reportable incidents, and 8 (24%) of these were environmental failures. Of the 12 microwave alarm failures identified, 10 were attributed to one zone. The problem was caused by a faulty transmitter which has been identified and repaired. Of significance were door hardware incidents which declined dramatically during May (from 16 to 4).

Data Source: Sefick/Woerner (Manager/Source)

Accountability: Sefick

Adverse Trend: None

SEP 58



SECURITY NON-SYSTEM FAILURES

This indicator shows the number of loggable/reportable non-system failures for the reporting month. These items include: Security Badges, Access Control and Authorization, Security Force Error, and Unsecured Doors.

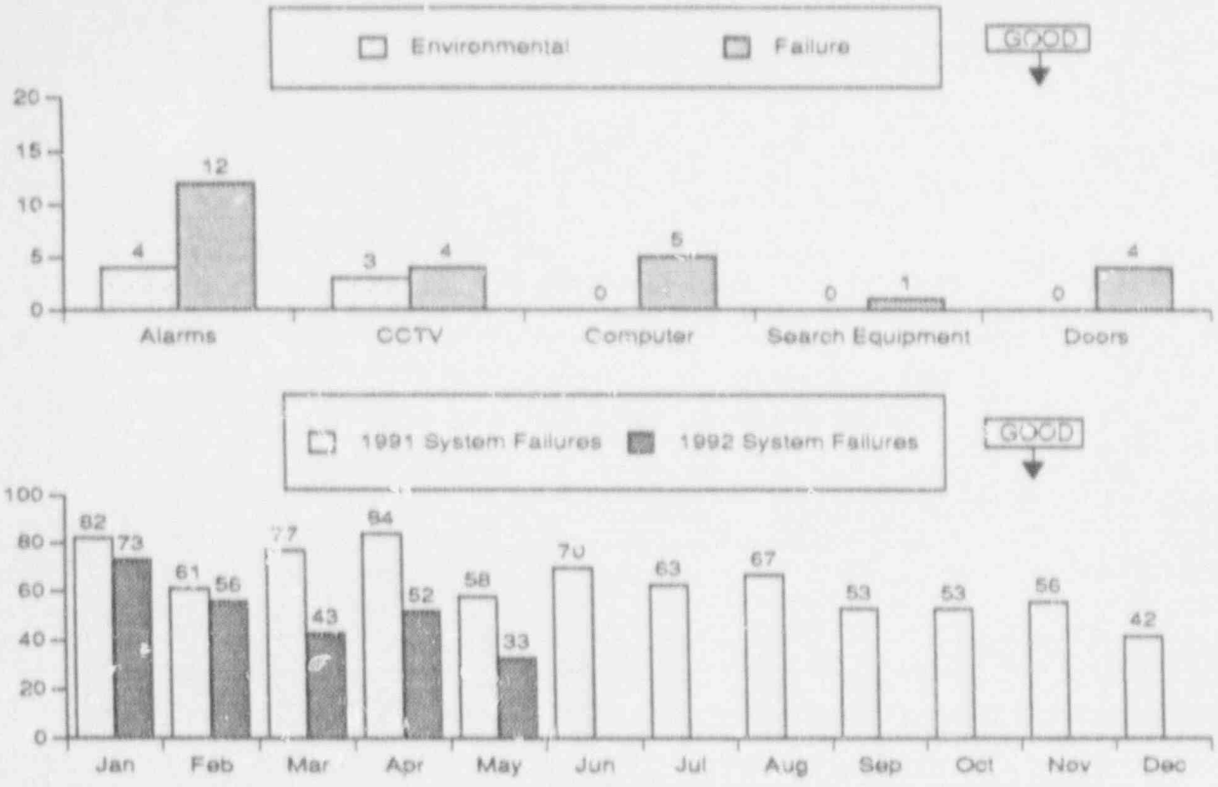
Non-System Failures	Number of Incidents	
	May '92	Apr. '92
Security Badges	2	1
Access Control and Authorization	0	0
Security Force Error	0	1
Unsecured Doors	0	5
Total	2	7

Data Source: Sefick/Woerner (Manager/Source)

Accountability: Sefick

Adverse Trend: None

SEP 58



SECURITY SYSTEM FAILURES

This indicator shows the number of loggable/reportable system failures for the reporting month. These items include: Alarm System Failures, CCTV failures, Security Computer Failures, Search Equipment Failures and Door Hardware Failures. Alarm systems and CCTV failures will be divided into two categories: environmental failures and failures as defined in the performance indicator definitions. Also, the 1991 and 1992 System Failures will be compared on a monthly basis.

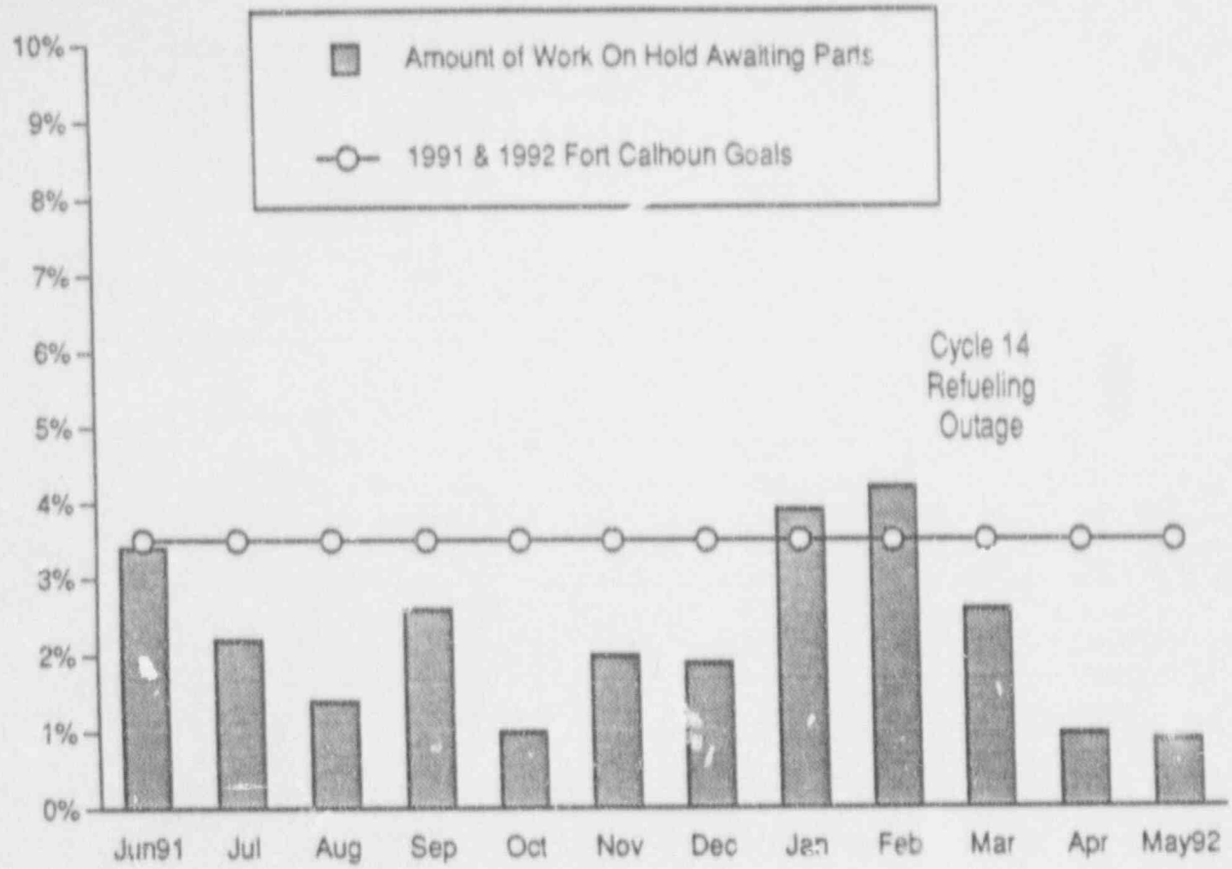
System	Number of Incidents			
	May '92		April '92	
	Environs	Failures	Environs	Failures
Alarms	4	12	12	10
CCTV	4	3	1	2
Computer	N/A	5	N/A	6
Search Equipment	N/A	1	N/A	5
Door Hardware	N/A	4	N/A	16
Totals	8	25	13	39

Data Source: Sefick/Woerner (Manager/Source)

Accountability: Sefick/Patterson

Adverse Trend: None

SEP 58



AMOUNT OF WORK ON HOLD AWAITING PARTS (NON-OUTAGE)

This procurement indicator displays the percentage of open, non-outage maintenance items that are on hold awaiting parts, to the total amount of open, non-outage maintenance items.

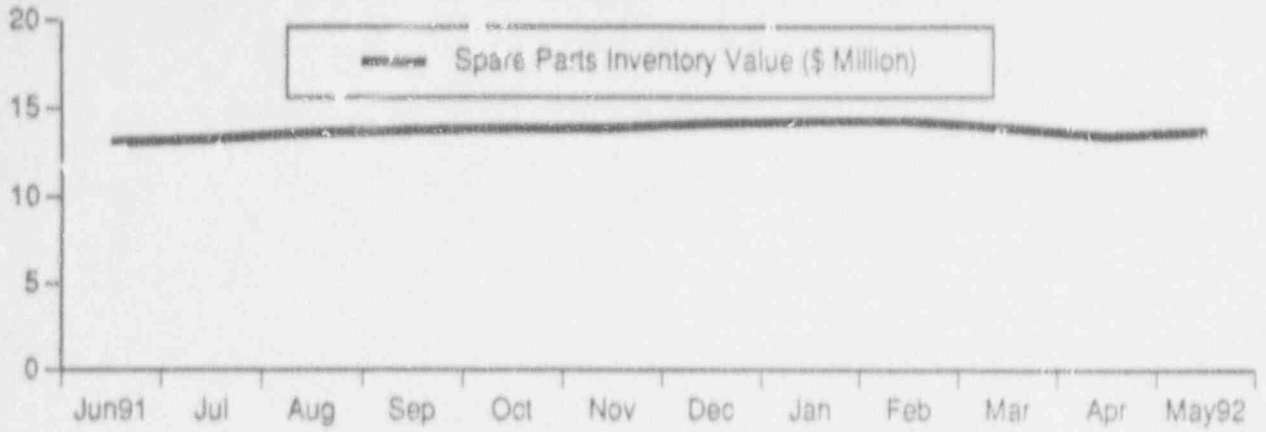
There was a total of 902 open, non-outage maintenance work orders (MWOs) with 8 (0.89%) of these MWOs on hold awaiting parts at the end of the reporting month.

The 1991 and 1992 Fort Calhoun Goals for this indicator are 3.5% of the total number of open, non-outage MWOs awaiting parts.

Data Source: Willrett/CHAMPS (Manager/Source)

Accountability: Willrett/Fraser

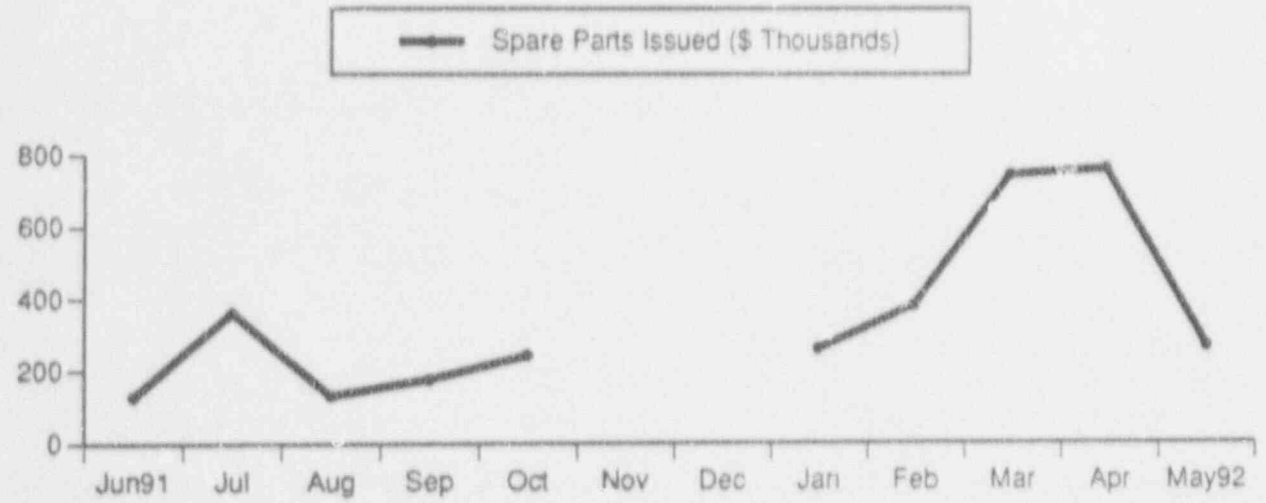
Positive Trend



SPARE PARTS INVENTORY VALUE

The spare parts inventory value at the Fort Calhoun Station at the end of May 1992 was reported as $13,646,008.

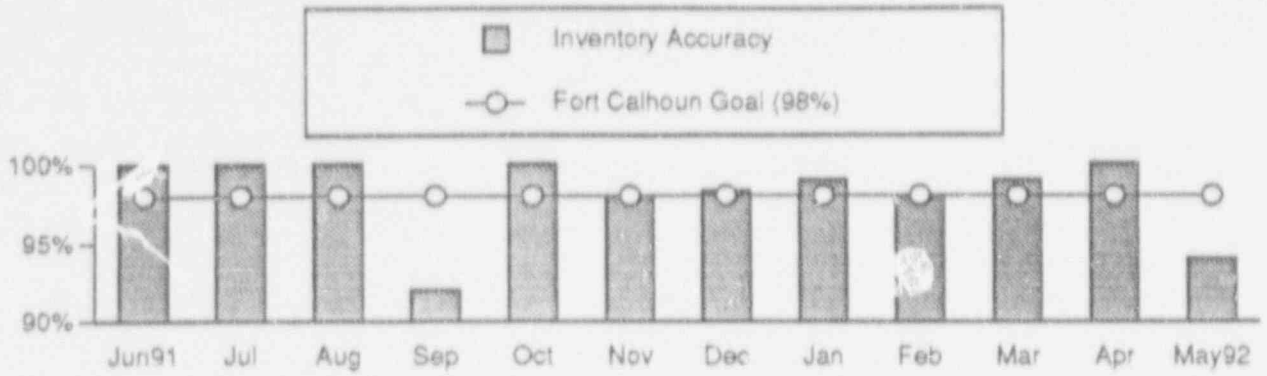
Data Source: Steele/Huliska (Manager/Source)
Accountability: Willrett/McCormick
Adverse Trend: None



SPARE PARTS ISSUED

The value of the spare parts issued during May 1992 totaled $267,822.47. The value of the spare parts issued for November and December 1991 was not available due to a printer problem.

Data Source: Steele/Miser (Manager/Source)
Accountability: Willrett/McCormick
Adverse Trend: None

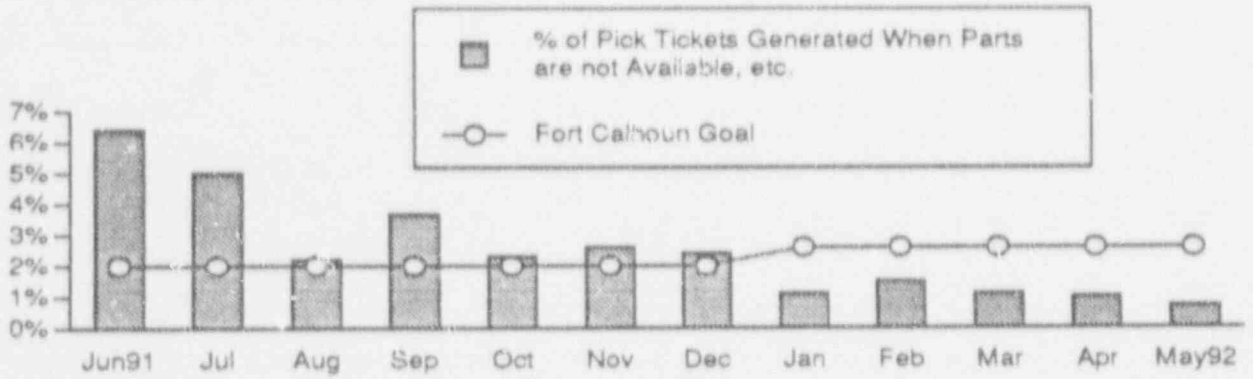


INVENTORY ACCURACY

This indicator shows the accuracy of the actual parts count for the warehouse compared to the counts contained in the MMIS computer system for the reporting month.

During May, 1,178 different line items were counted in the warehouse. Of the 1,178 line items counted, 74 items needed count adjustments. The inventory accuracy for the month of May was reported as 94%. The Fort Calhoun 1991 & 1992 goals for this indicator are 98%.

Data Source: Willrett/McCormick (Manager/Source)
Accountability: Willrett/McCormick Adverse Trend: None

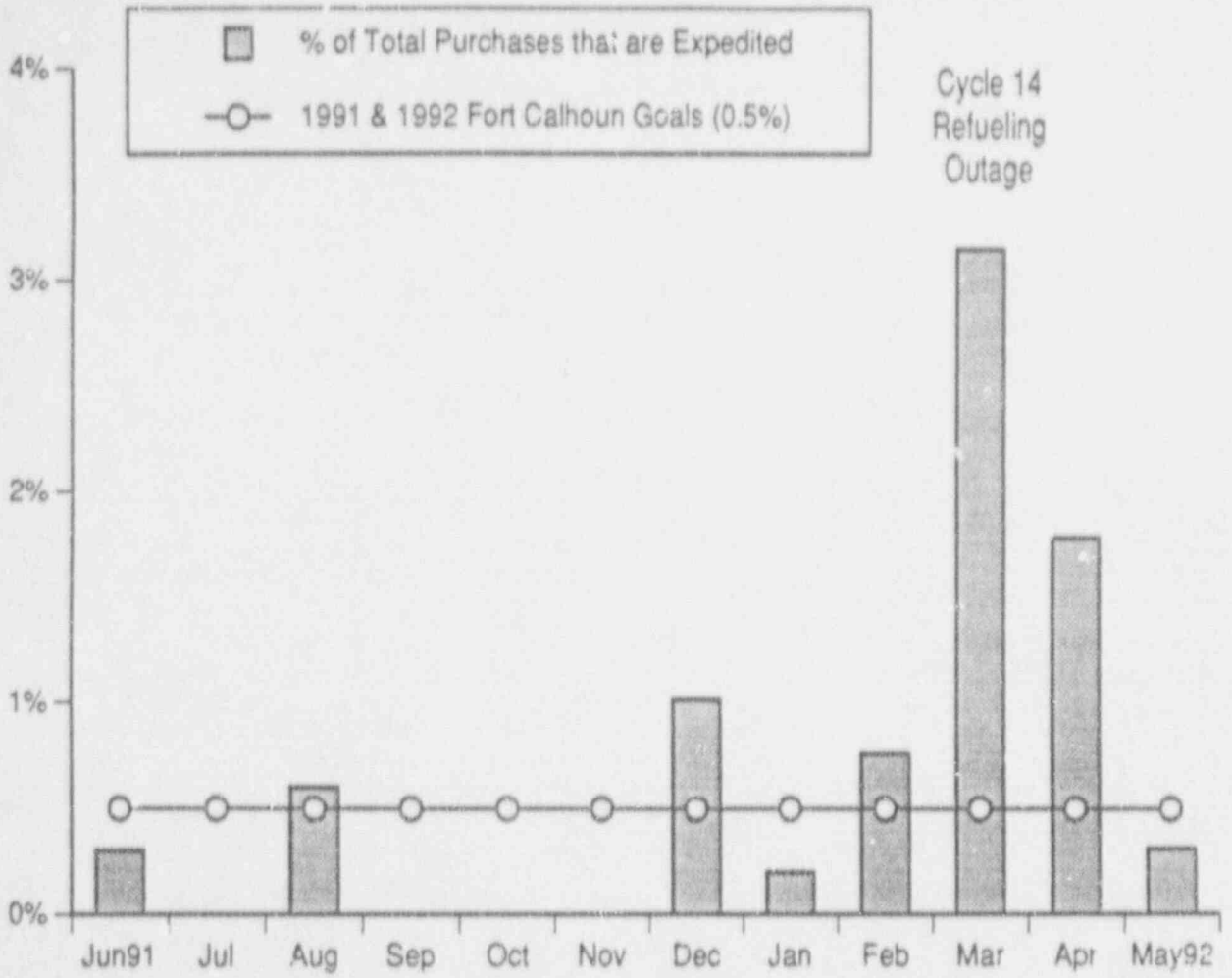


STOCKOUT RATE

This indicator shows the percentage of the number of Pick Tickets generated when the amount of parts requested is equal to or less than the minimum stocking level and parts are not available.

During May 1992, a total of 986 Pick Tickets were generated. Of the 986 Pick Tickets generated, 7 Pick Tickets (0.7 %) were generated when the amount of parts requested was equal to or less than the minimum stocking level and parts were not available. The Fort Calhoun 1992 goal for this indicator is 2.6% and the 1991 goal was 2.0%.

Data Source: Willrett/McCormick (Manager/Source)
Accountability: Willrett/McCormick
Adverse Trend: None



EXPEDITED PURCHASES

This indicator shows the percentage of expedited purchases compared to the total number of purchase orders generated during the reporting month.

During May, there was a total of 321 purchase orders generated. Of the 321 purchase orders generated, 1 (0.31%) was an expedited purchase. The expedited purchase was for radiation protection sources.

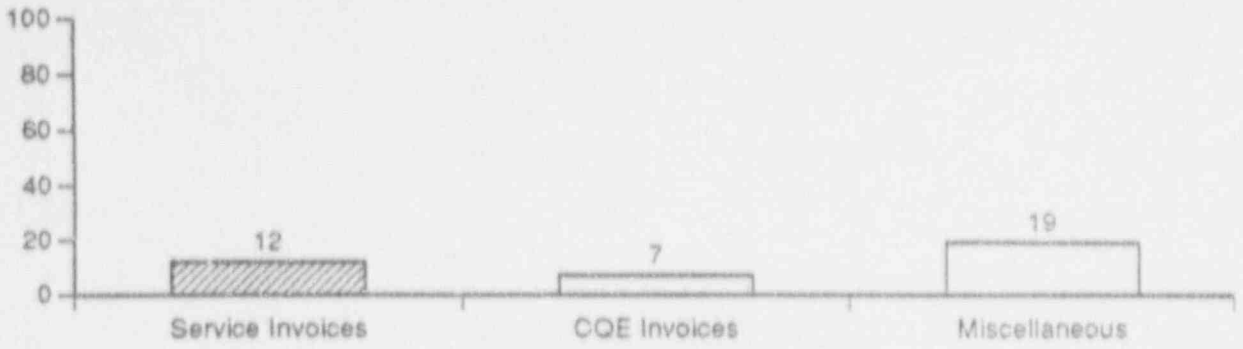
The 1992 Fort Calhoun goal for this indicator is 0.5%. The 1991 goal was 0.5%.

The number of expedited purchases was above the Fort Calhoun goal during the months of February, March and April 1992 due to the ordering of items related to the Cycle 14 Refueling Outage.

Date Source: Willrett/Fraser (Manager/Source)

Accountability: Willrett/Fraser

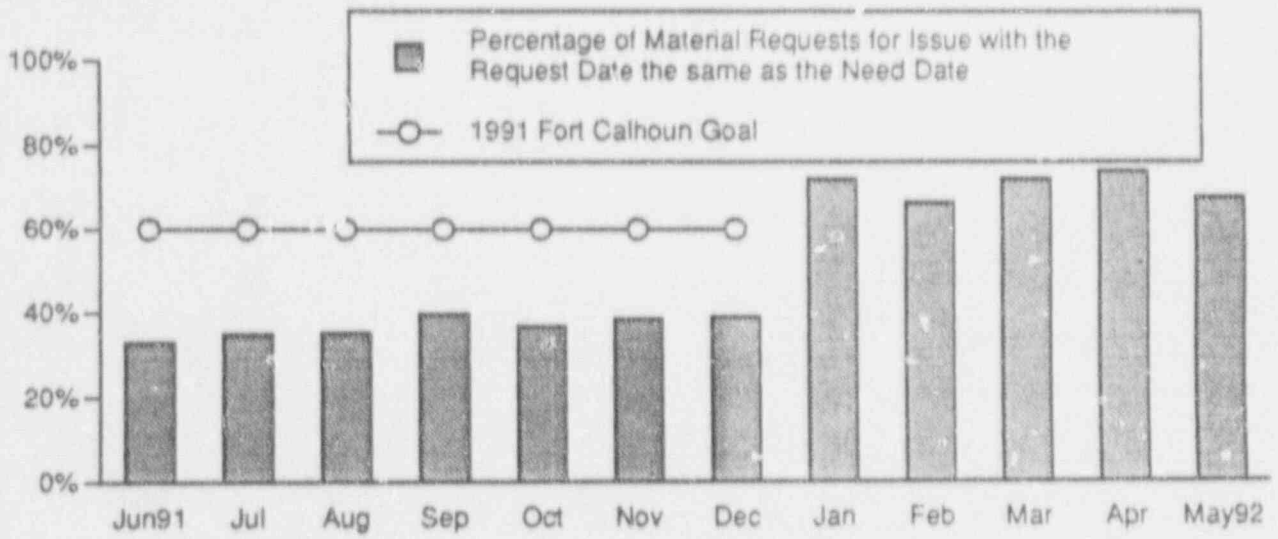
Adverse Trend: None



INVOICE BREAKDOWN

This indicator shows the number of service invoices, CQE invoices, and miscellaneous invoices for the month of May 1992.

Date Source: Willrett/Fraser (Manager/Source)
Accountability: Willrett/Fraser
Adverse Trend: None

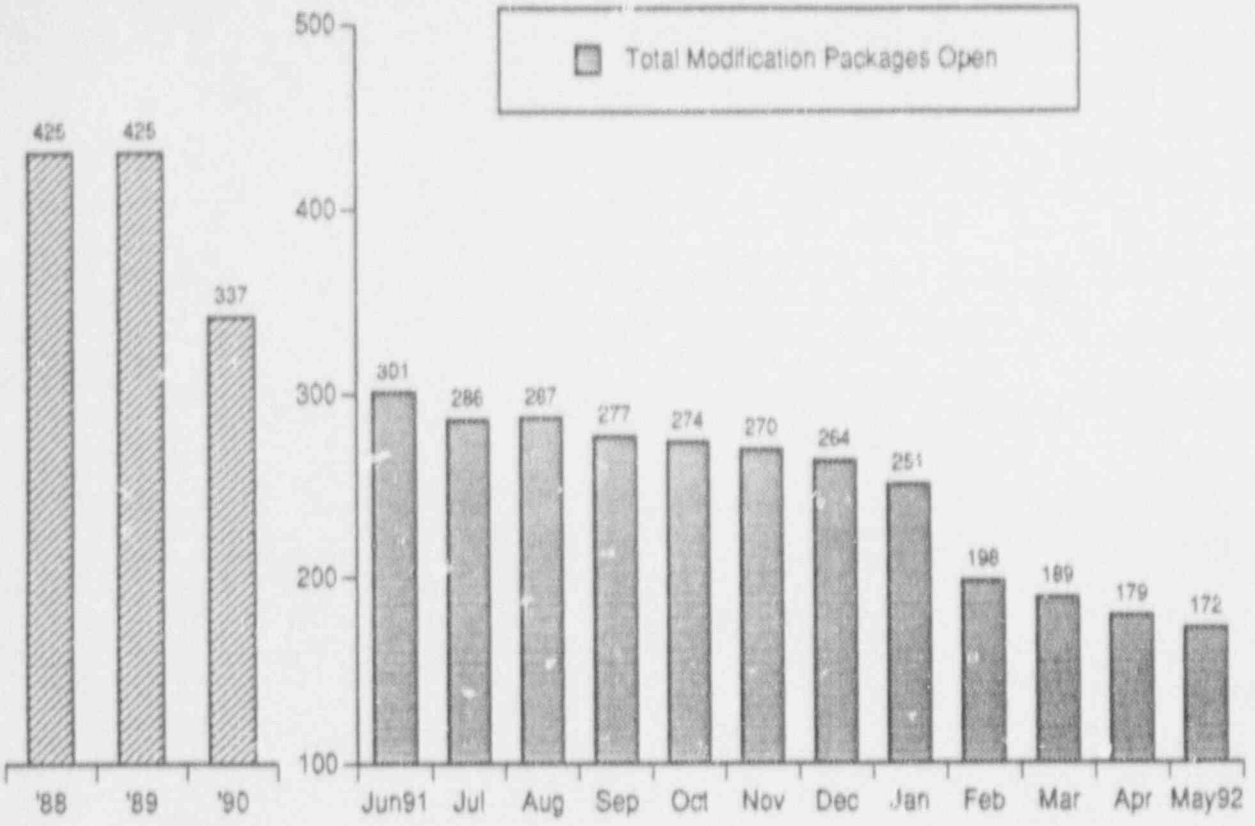


MATERIAL REQUEST PLANNING

This indicator shows the percentage of material requests (MRs) for issue with their request date the same as their need date compared to the total number of MRs for issue for the reporting month. The 1991 goal of 60% is also shown.

During the month of May, a total of 986 MRs were received by the warehouse. Of the 986 total MRs received by the warehouse, 67.5% of the MRs (666) were for issue with their request date the same as their need date.

Data Source: Willrett/McCormick (Manager/Source)
Accountability: Willrett/McCormick
Adverse Trend: None



OUTSTANDING MODIFICATIONS

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

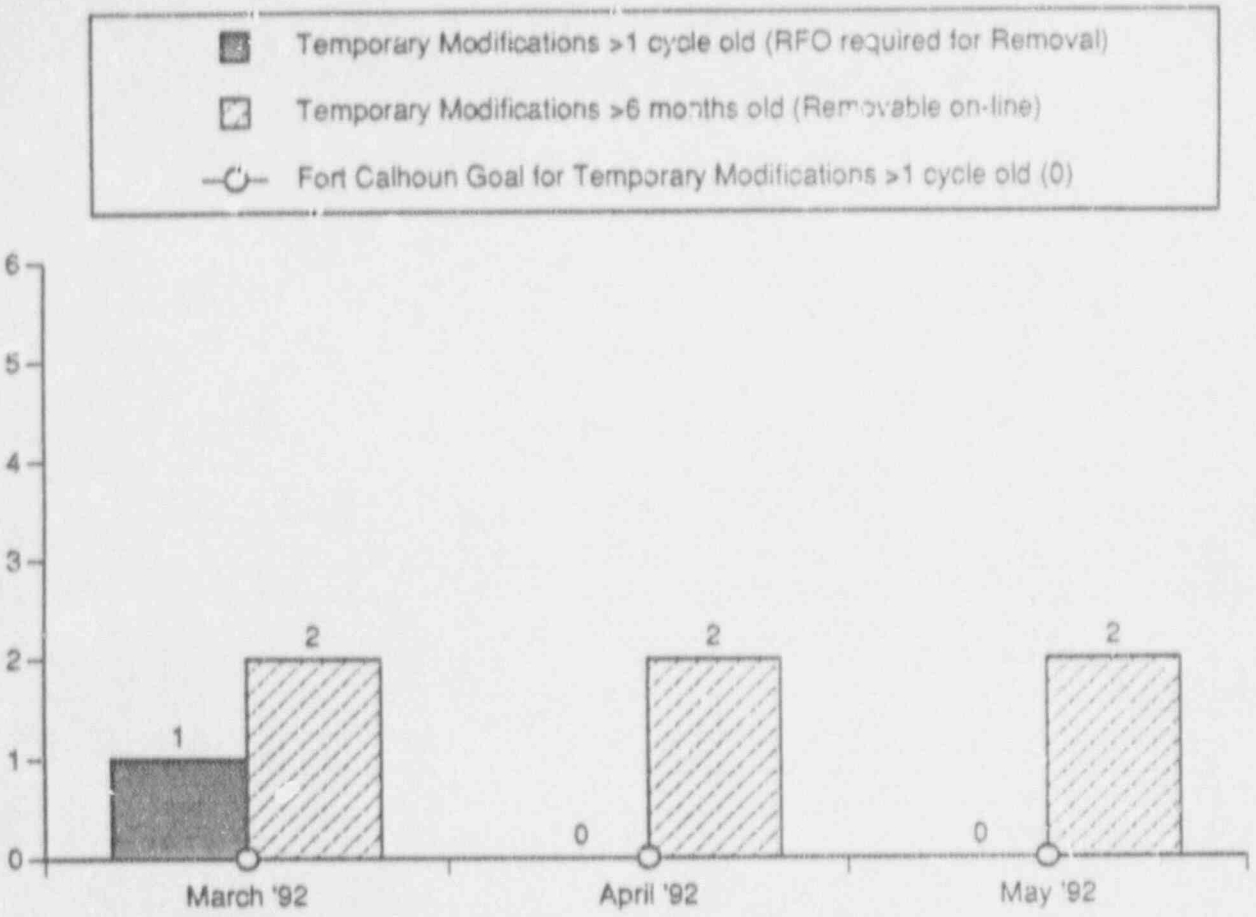
Category	Reporting Month
Form FC-1133 Backlog/In Progress	16
Mod. Requests Being Reviewed	14
Design Engr. Backlog/In Progress	70
Construction Backlog/In Progress	52
Design Engr. Update Backlog/In Progress	20
Total	172

At the end of May, 25 additional modification requests had been issued this year and 10 modification requests had been cancelled. The Nuclear Projects Review Committee (NPRC) had completed 95 backlog modification request reviews this year. The Nuclear Projects Committee (NPC) had completed 65 backlog modification request reviews this year.

Data Source: Jaworski/Turner (Manager/Source)
Scofield/Lounsbery (Manager/Source)

Accountability: Scofield/Phelps

Adverse Trend: None



TEMPORARY MODIFICATIONS (EXCLUDING SCAFFOLDING)

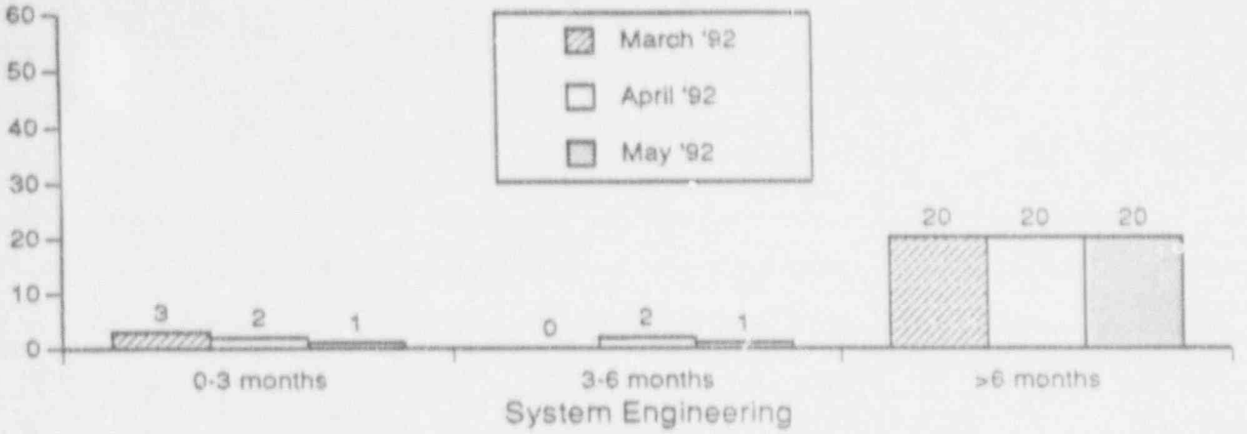
This indicator provides information on the number of temporary modifications greater than one fuel cycle old requiring a refueling outage (RFO) for removal and the number of temporary modifications removable on-line that are greater than six months old. Also provided is the Fort Calhoun goal for temporary modifications.

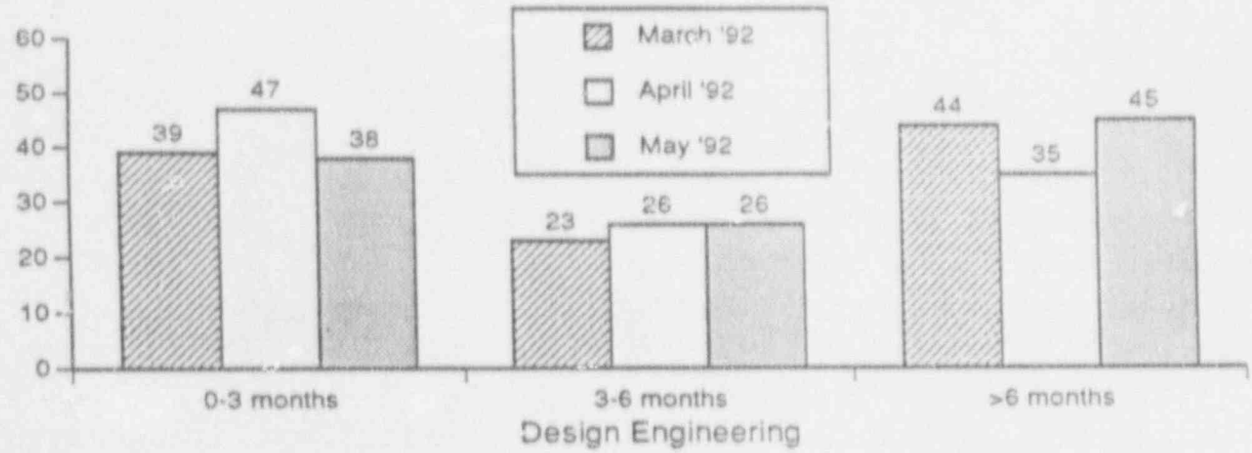
There are currently no temporary modifications that are greater than one fuel cycle old requiring a refueling outage to remove. In addition, at the end of May there were 2 temporary modifications installed that were greater than six months old that can be removed on-line. These were: handjack close of CCW/RW valves, in which OPS is reviewing a system engineering suggestion for closure; and potable water supply piping temporary repair, which is awaiting completion of MWOs 921203, 921204, and 921205 currently not scheduled.

At the end of May, there was a total of 21 TMs installed in the Fort Calhoun Station. 5 of the 21 installed TMs require an outage for removal and 16 are removable on-line. In 1992 a total of 39 temporary modifications have been installed.

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

SEP 62 & 71





ENGINEERING ASSISTANCE REQUEST (EAR) BREAKDOWN

This indicator shows a breakdown of the number of EARs assigned to Design Engineering and System Engineering awaiting a technical response from engineering.

At the end of May 1992, 32 EARs had been resolved and were going through the close-out process. There were 3 EARs awaiting a technical response from Nuclear Projects.

Total EAR breakdown is as follows:

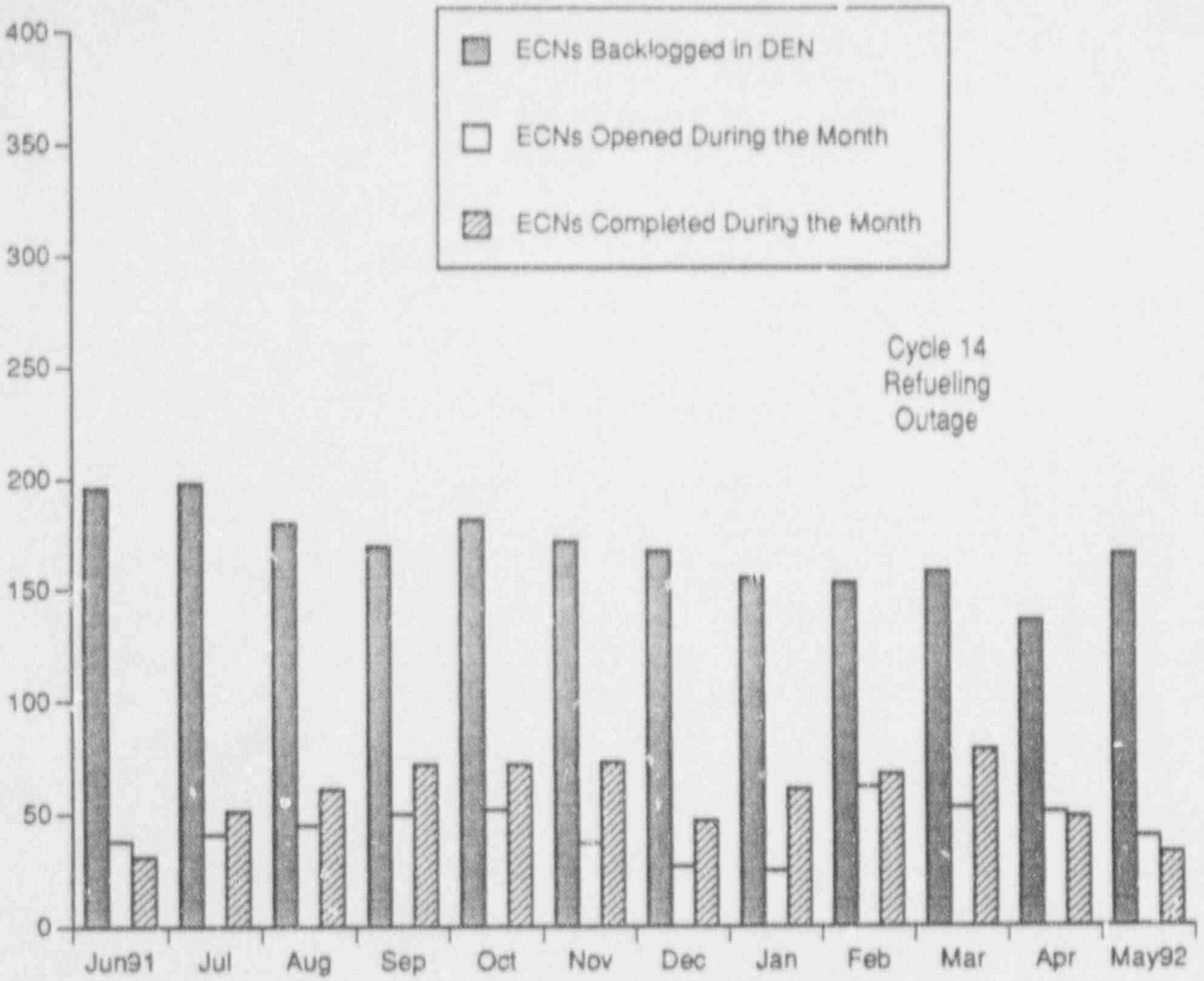
EARs opened during the month	16
EARs closed during the month	7
Total EARs open as of the end of the month	166

Data Source: Jaworski/Van Osdel (Manager/Source)

Accountability: Jaworski/Phelps

Adverse Trend: None

SEP 62



ENGINEERING CHANGE NOTICE STATUS

This indicator shows the number of Engineering Change Notices (ECNs) awaiting completion by DEN, the number of ECNs opened during the reporting month, and the number of ECNs completed by DEN during the reporting month.

At the end of May 1992, there was a total of 167 DEN backlogged open ECNs. There were 40 ECNs opened, and 33 ECNs completed during the month.

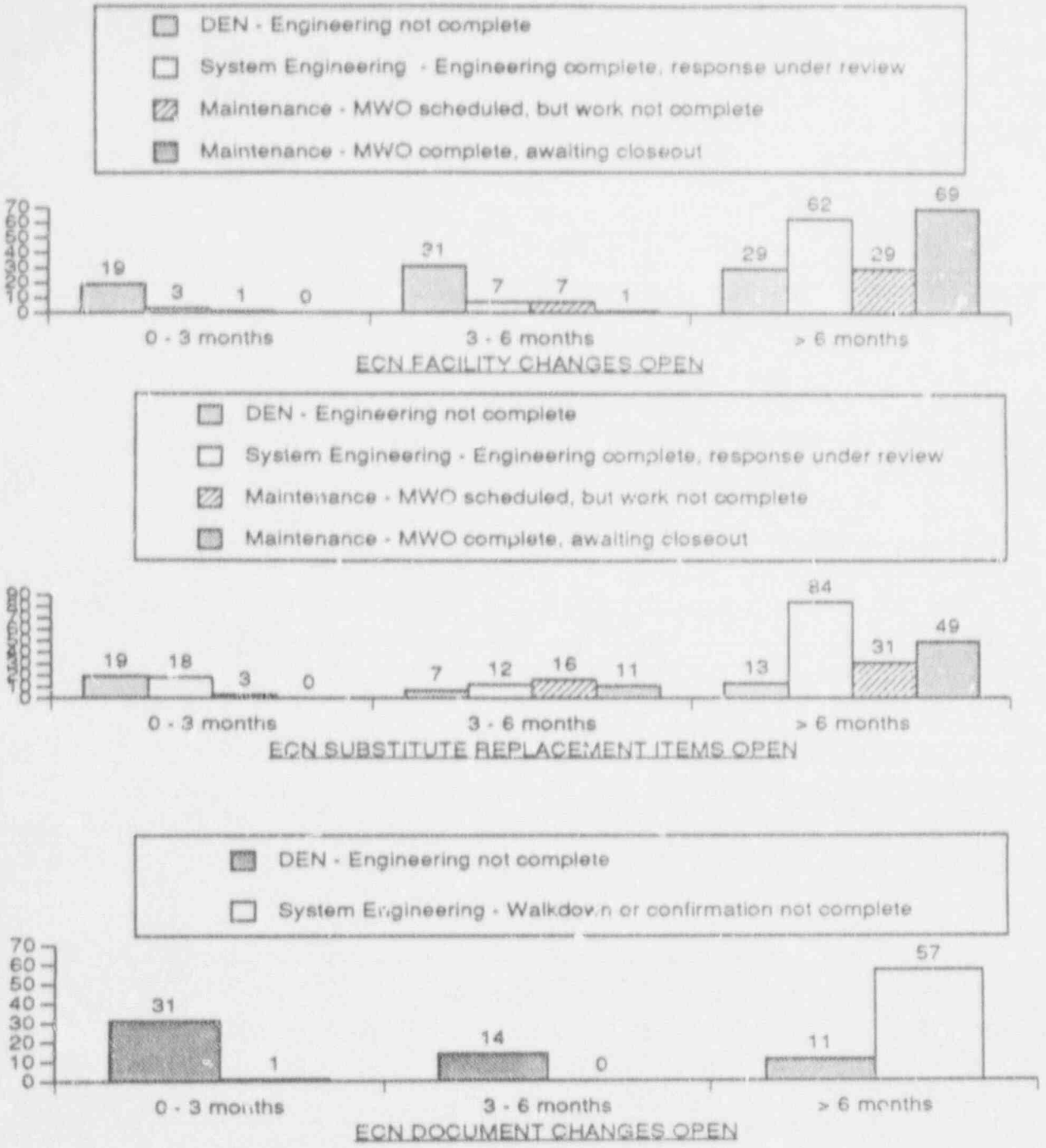
Although the number of open ECNs is currently high, activities are in progress to reduce the backlog of open ECNs. It is expected that the number of open ECNs will continue to decrease.

Data Source: Phelps/Pulverenti (Manager/Source)

Accountability: Phelps/Jaworski

Adverse Trend: None

SEP 62

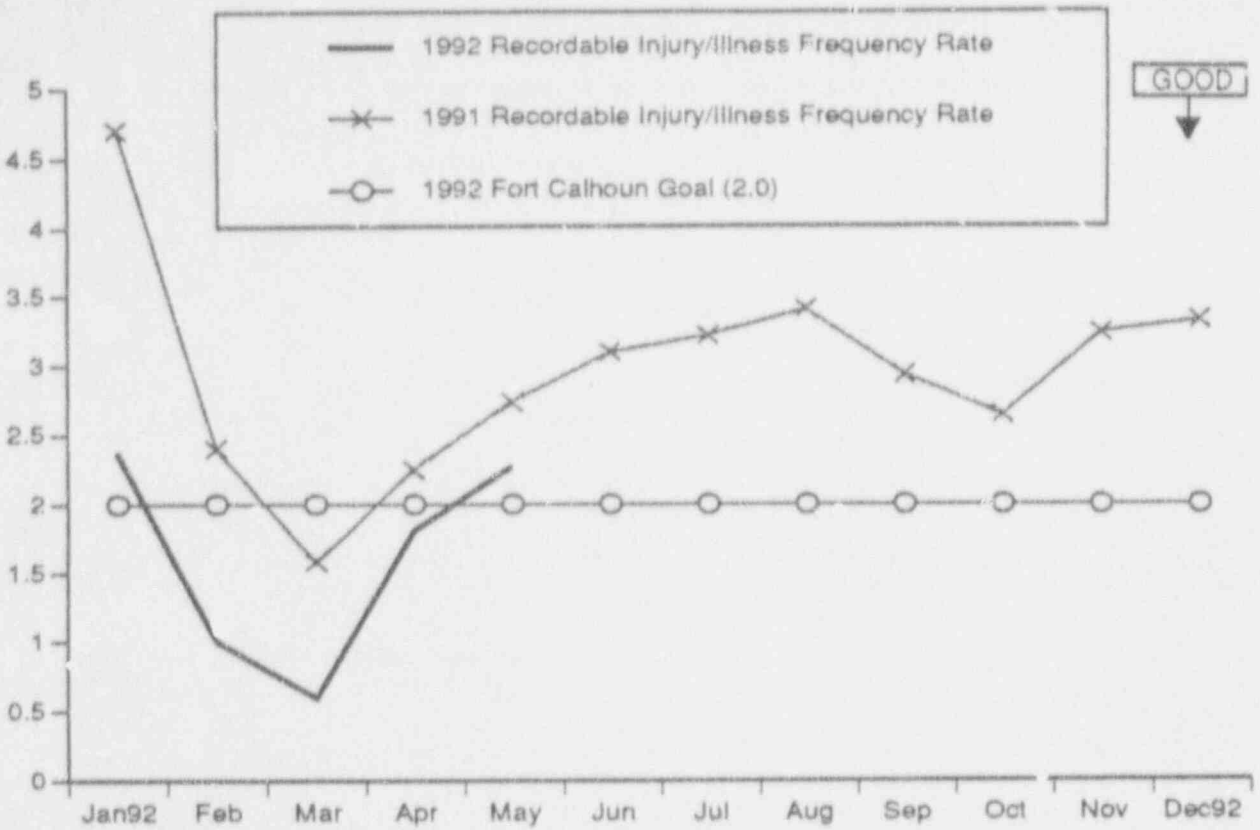


ENGINEERING CHANGE NOTICE BREAKDOWN

This indicator shows a breakdown of the number of Engineering Change Notices (ECNs) that are assigned to Design Engineering Nuclear (DEN), System Engineering, and Maintenance for the reporting month. The graphs provide data on ECN Facility Changes Open, ECN Substitute Replacement Items Open, and ECN Document Changes Open.

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

SEP 62



RECORDABLE INJURY/ILLNESS CASES FREQUENCY RATE

This indicator shows the 1992 monthly recordable injury/illness cases frequency rate in column form. The 1991 recordable injury/illness cases frequency rate and the Fort Calhoun Station 5 year average (from 1987 through 1991) recordable injury/illness cases frequency rates are also shown.

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

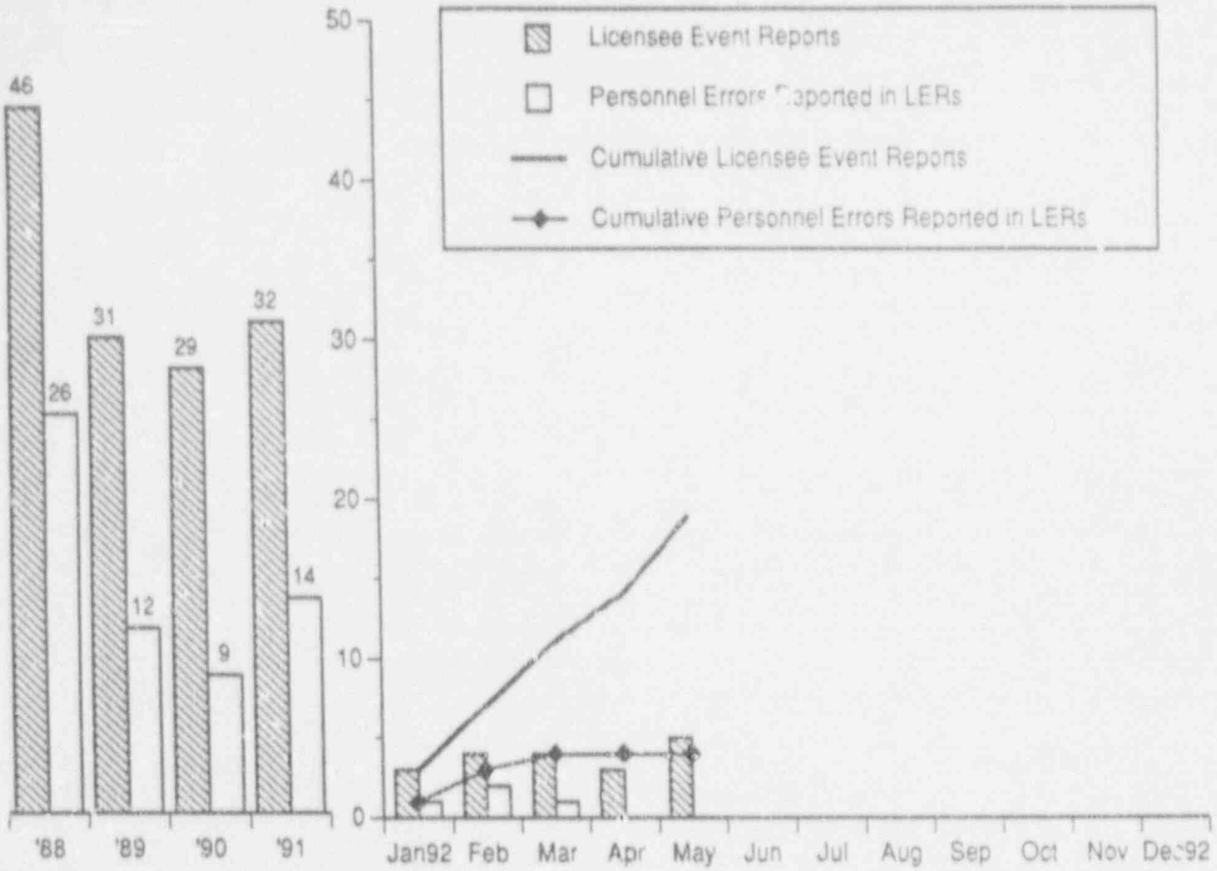
The recordable injury/illness rate for May was reported as 2.27. There were 2 recordable injury/illness cases, a back injury and tendinitus of the wrist, reported during the month of May 1992. There has been a total of 6 recordable injury/illness cases in 1992.

The 1992 goal for this indicator is 2.0.

Year	Recordable Cases	Year-End Rate
1989	11	2.2
1990	11	2.1
1991	18	3.3

Data Source: Sorenson/Skaggs (Manager/Source)
Accountability: Richard
Adverse Trend: None

SEP 15, 25 & 26



NUMBER OF PERSONNEL ERRORS REPORTED IN LERS

This indicator shows the number of Licensee Event Reports (LERs) submitted during each month of 1992, the LERs attributed to personnel errors for each month, and the cumulative totals of both. The year-end totals for the four previous years are also shown.

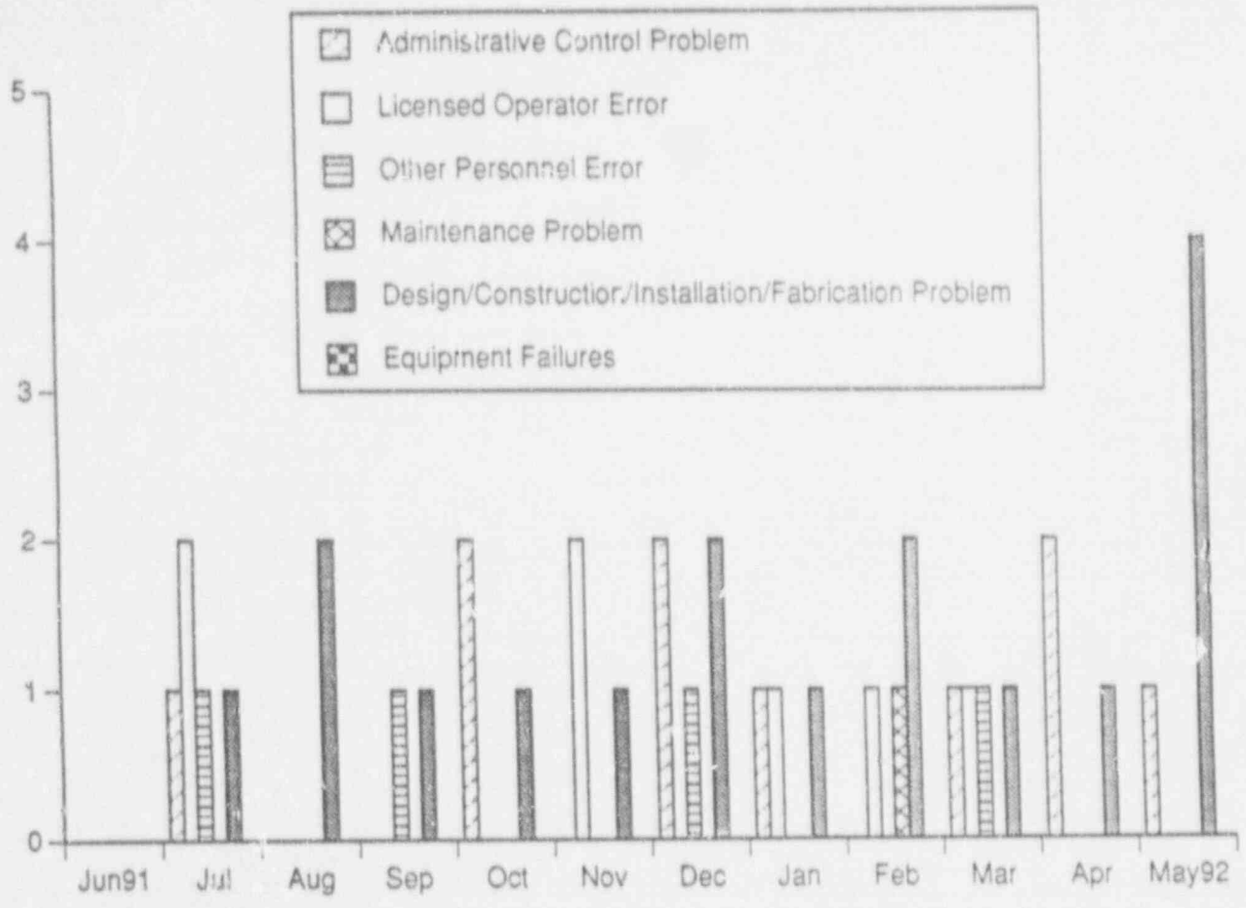
In May, there was a total of 5 LERs reported, none of which were attributed to personnel error.

Data Source: Short/Eid (Manager/Source)

Accountability: Patterson

Adverse Trend: None

SEP 15



LICENSEE EVENT REPORT (LER) ROOT CAUSE BREAKDOWN

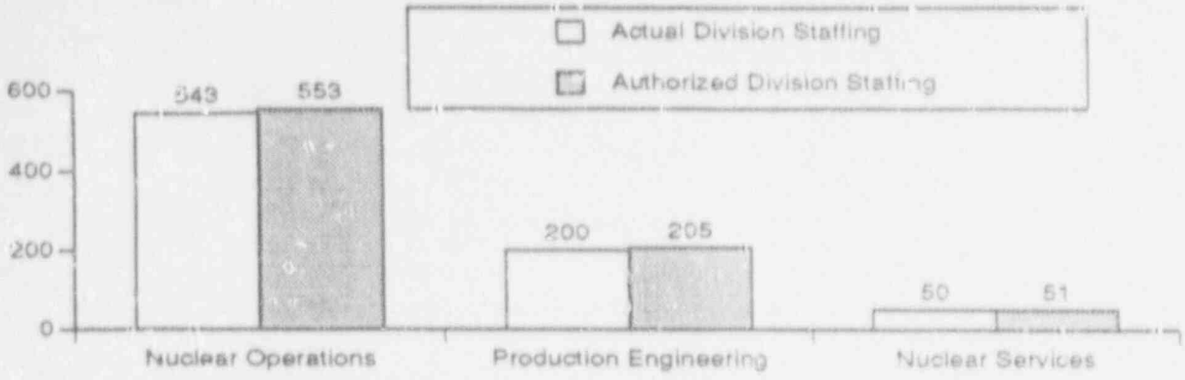
This indicator shows the LERs by report date broken down by Root Cause Code for each of the past twelve months from June 1, 1991 through May 31, 1992.

The cause codes are intended to identify possible programmatic deficiencies. In order to be consistent with industry reporting, the Root Cause Codes have been revised to reflect the NRC's sequence coding. For detailed descriptions of these codes, see the "Performance Indicator Definitions" section of this report.

Data Source: Short/Howman (Manager/Source)

Accountability: Patterson

Adverse Trend: None

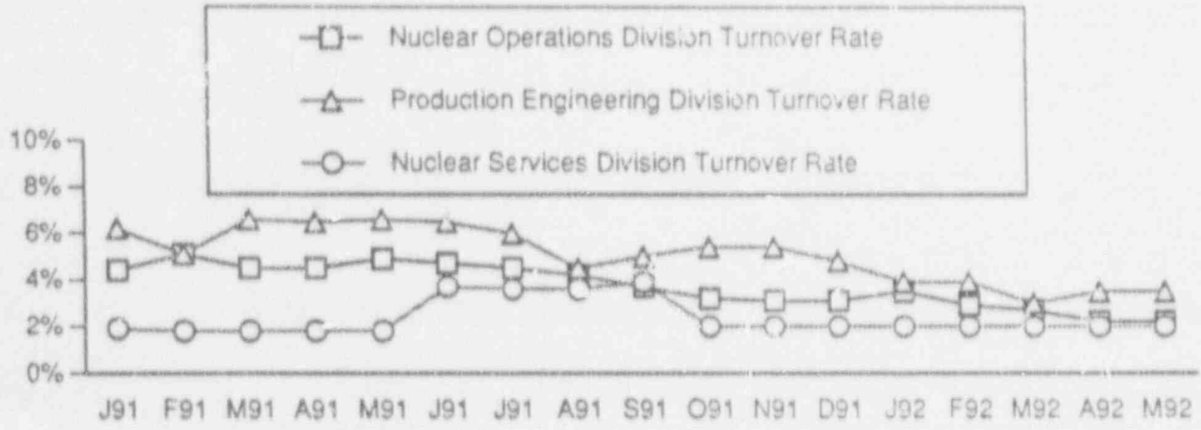


STAFFING LEVEL

The authorized and actual staffing levels are shown for the three Nuclear Divisions.

Data Source: Sorenson/Burke (Manager/Source)
Accountability: Waszak
Adverse Trend: None

SEP 24



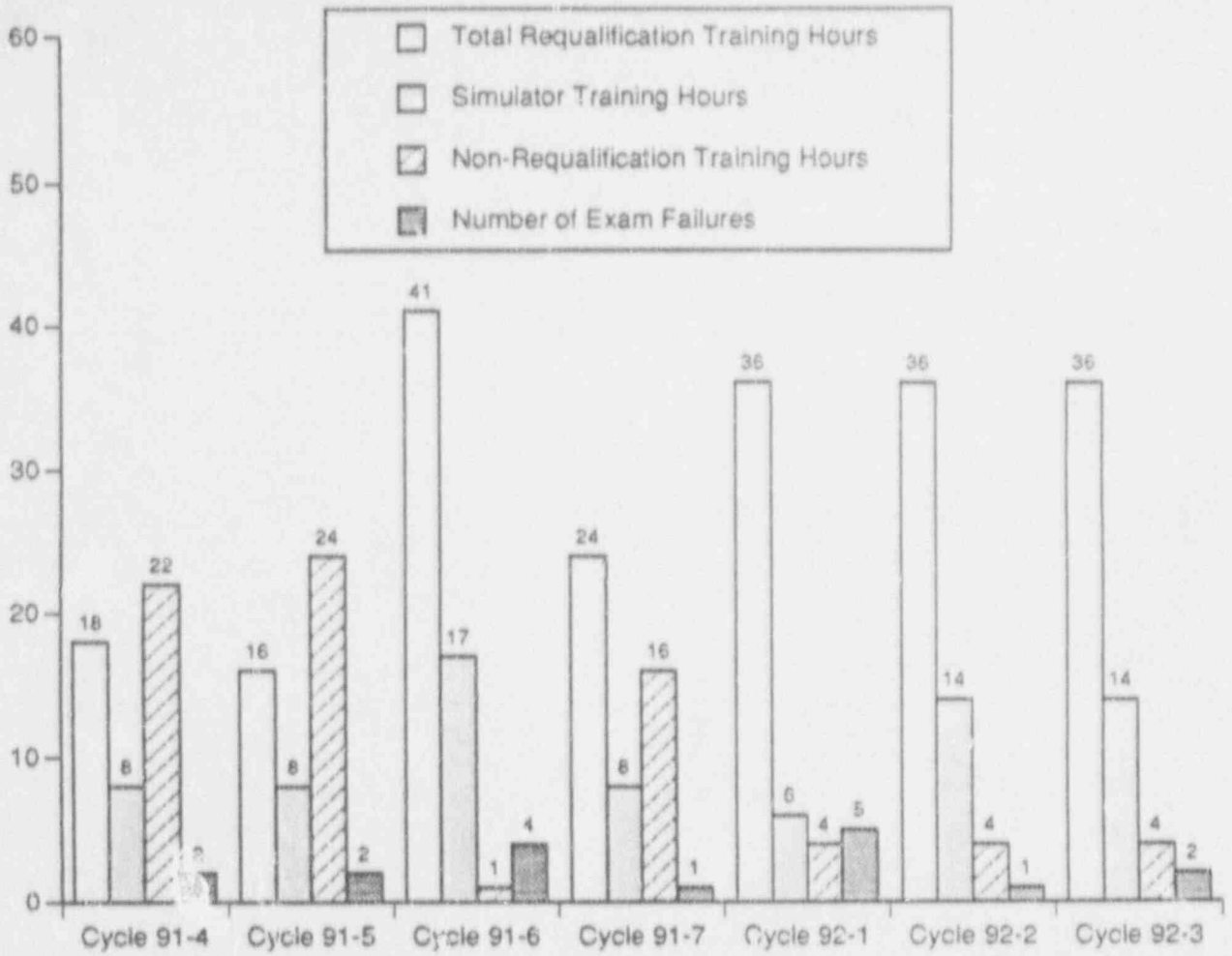
PERSONNEL TURNOVER RATE

The turnover rates for the three Divisions are calculated using only resignations from OPPD.

Division	Turnover Rate
NOD	2.2%
PED	3.5%
NSD	2.0%

Currently, the OPPD corporate turnover rate is being reported as approximately 2.5%. This OPPD corporate turnover rate is based on the turnover rate over the last four years.

Data Source: Sorenson/Burke (Manager/Source)
Accountability: Waszak
Adverse Trend: None



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.

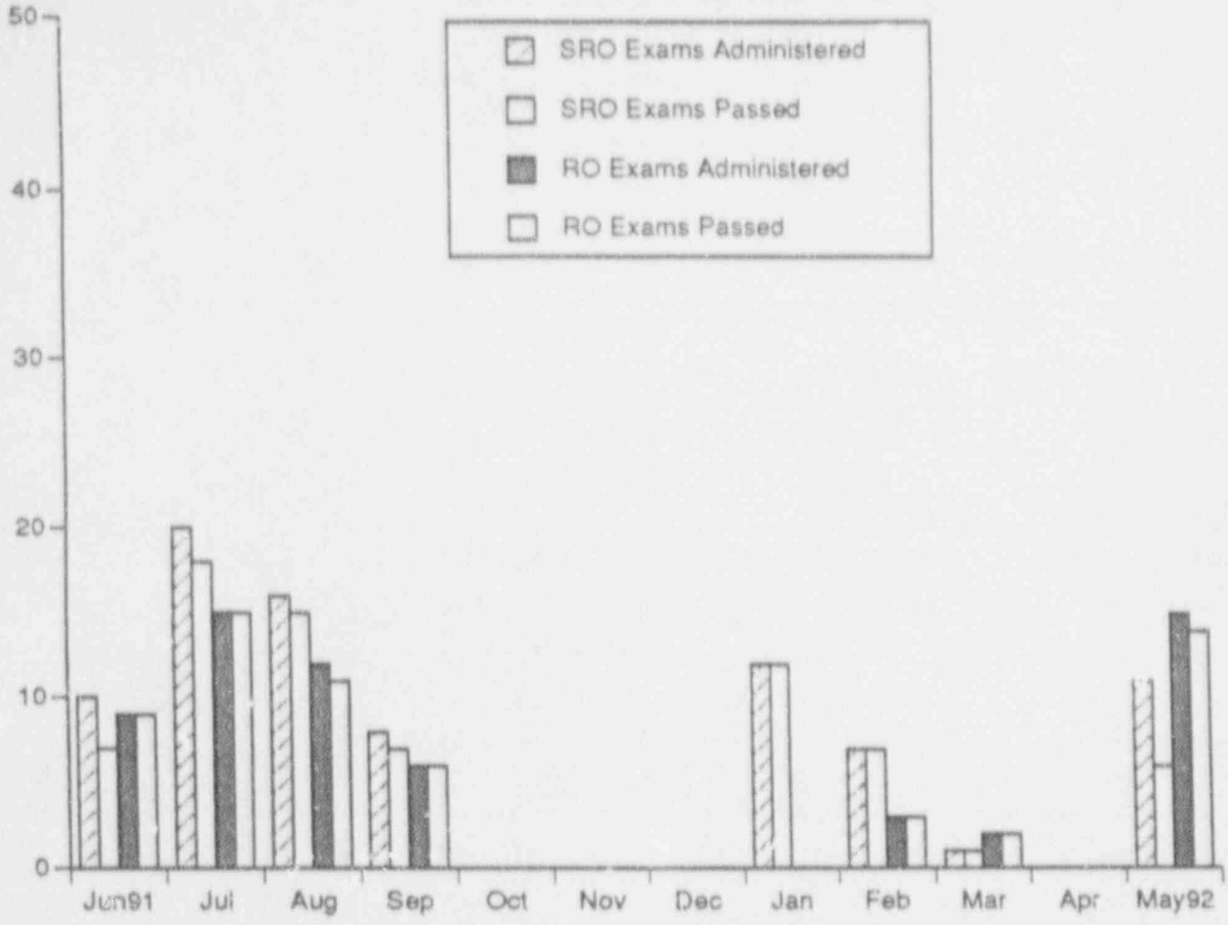
The 2 exam failures in Cycle 92-3 were during a simulator evaluation. The individuals who failed the scenario were remediated and returned to shift by the end of the requalification week.

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.

During the month of May 1992, there were 11 internally administered SRO exams taken and 6 of these exams were passed. The 5 who failed were given remedial training and all 5 passed the exams.

Also during May, there were 15 internally administered RO exams given and 14 of these exams were passed. One individual did not pass the exam and has not yet taken the remedial.

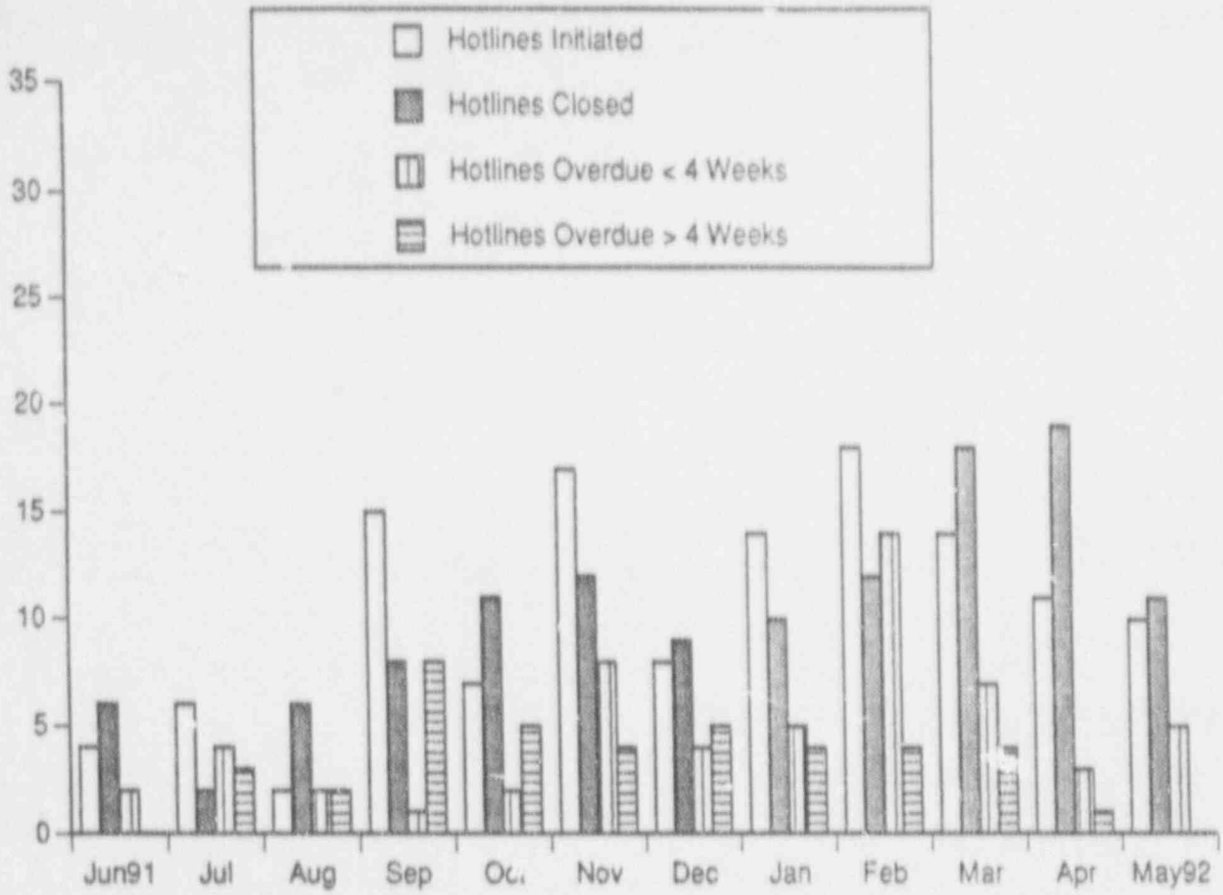
There were no NRC administered SRO or RO exams during Cycle 92-3.

Data Source: Gasper/Herman (Manager/Source)

Accountability: Gasper/Guliani

Adverse Trend: None

SEP 68



HOTLINE TRAINING MEMOS

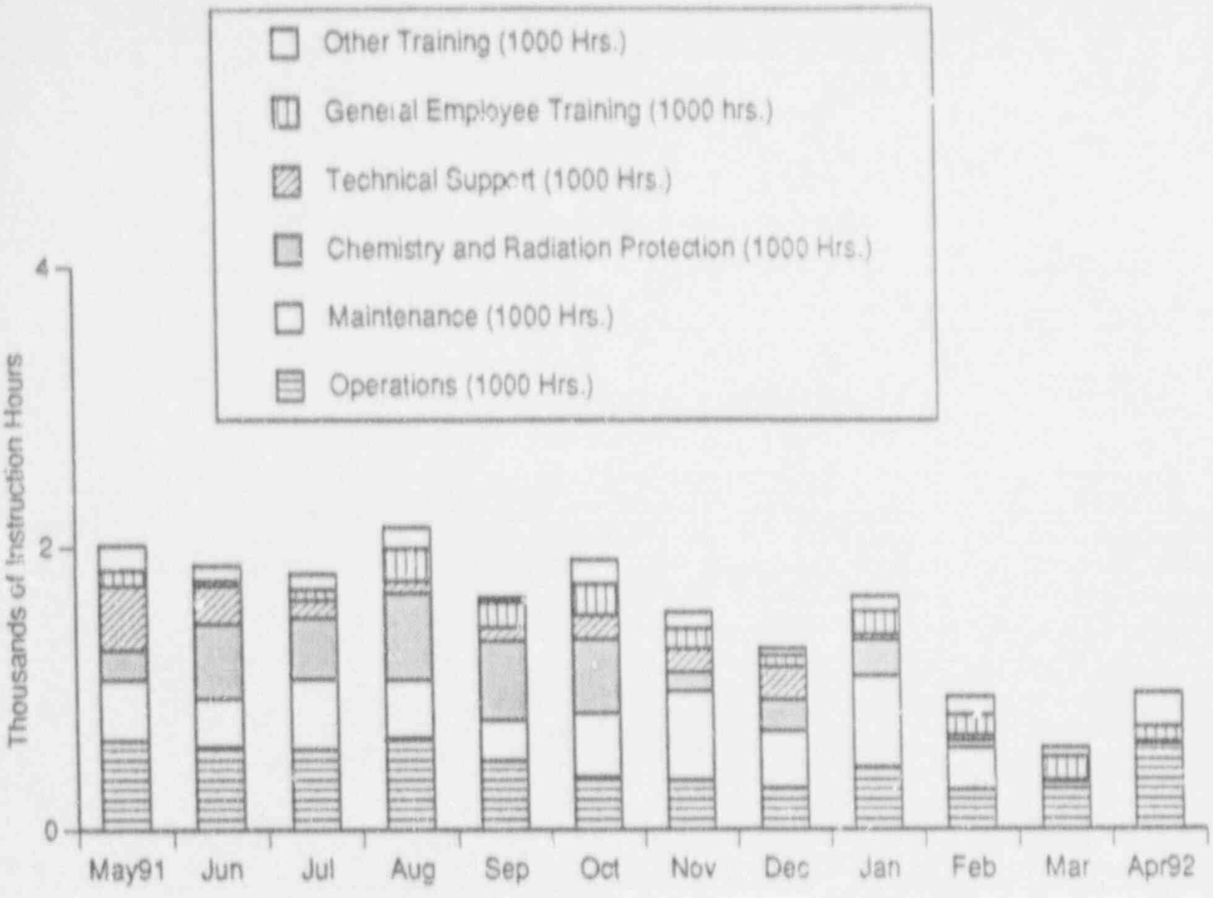
This indicator shows the number of Hotline Training Memos that were initiated, returned for close out, overdue less than four weeks, and overdue greater than four weeks for the reporting month.

	May 1992
Initiated Hotlines	10
Closed Hotlines	11
Hotlines Overdue < 4 wks.	5
Hotlines Overdue > 4 wks.	0

Data Source: Gasper/Newhouse (Manager/Source)

Accountability: Gasper

Adverse Trend: None



TOTAL INSTRUCTION HOURS

This indicator displays the training instruction hours administered to the listed departments for the month of December 1991.

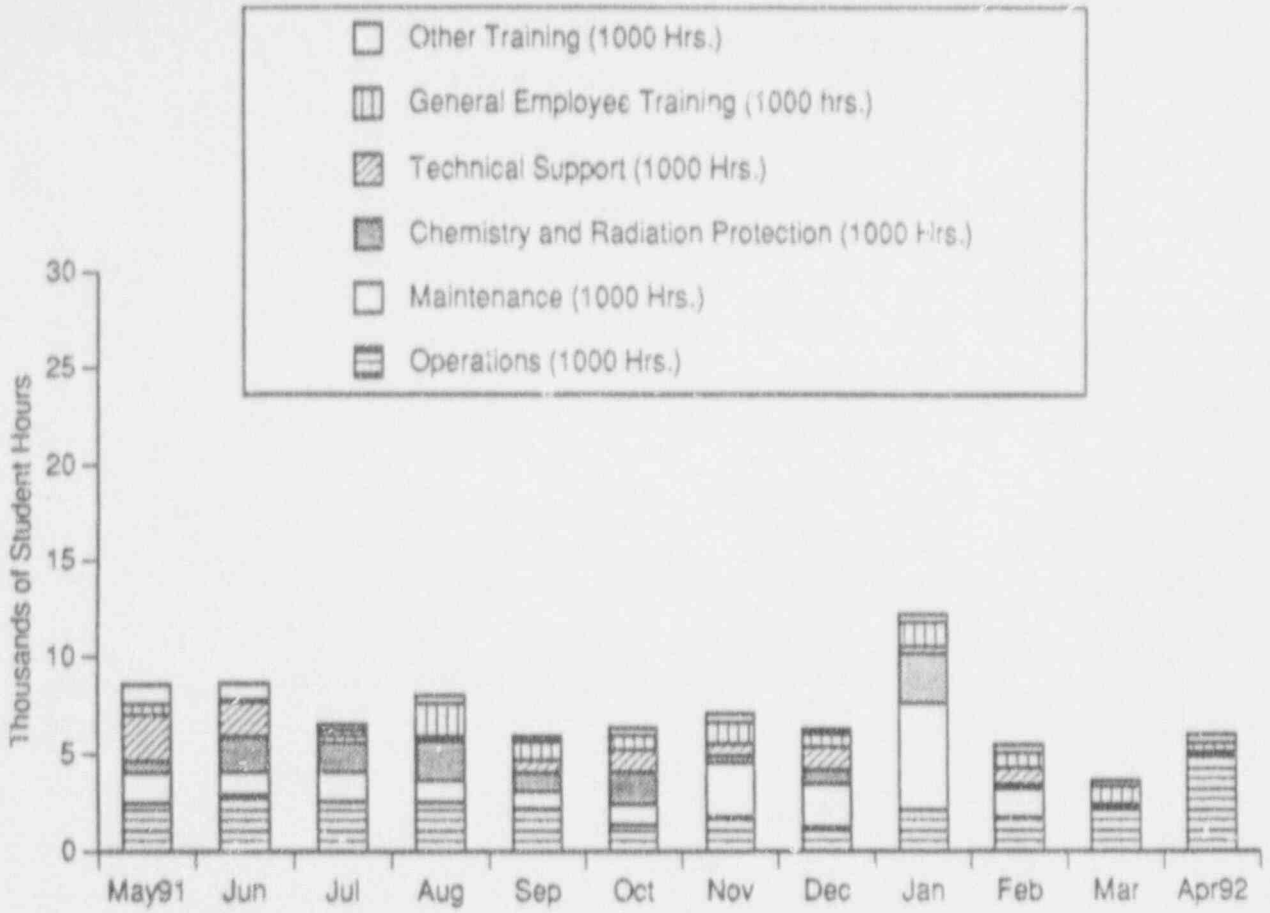
This indicator is normally one month behind the reporting month due to the time required for data collection and processing.

DEPARTMENT	MARCH '92	APRIL '92
Operations	295	613
Maintenance	43	3
Chemistry and Radiation Protection	9	10
Technical Support	4	4
General Employee Training	168	106
Other	66	241
Total	585	977

Data Source: Gasper/Newhouse (Manager/Source)

Accountability: Gasper

Adverse Trend: None



TOTAL HOURS OF STUDENT TRAINING

This indicator shows the total number of student hours for Operations, Maintenance, Chemistry and Radiation Protection, Technical Support, General Employee Training, and Other Training conducted for the Fort Calhoun Station.

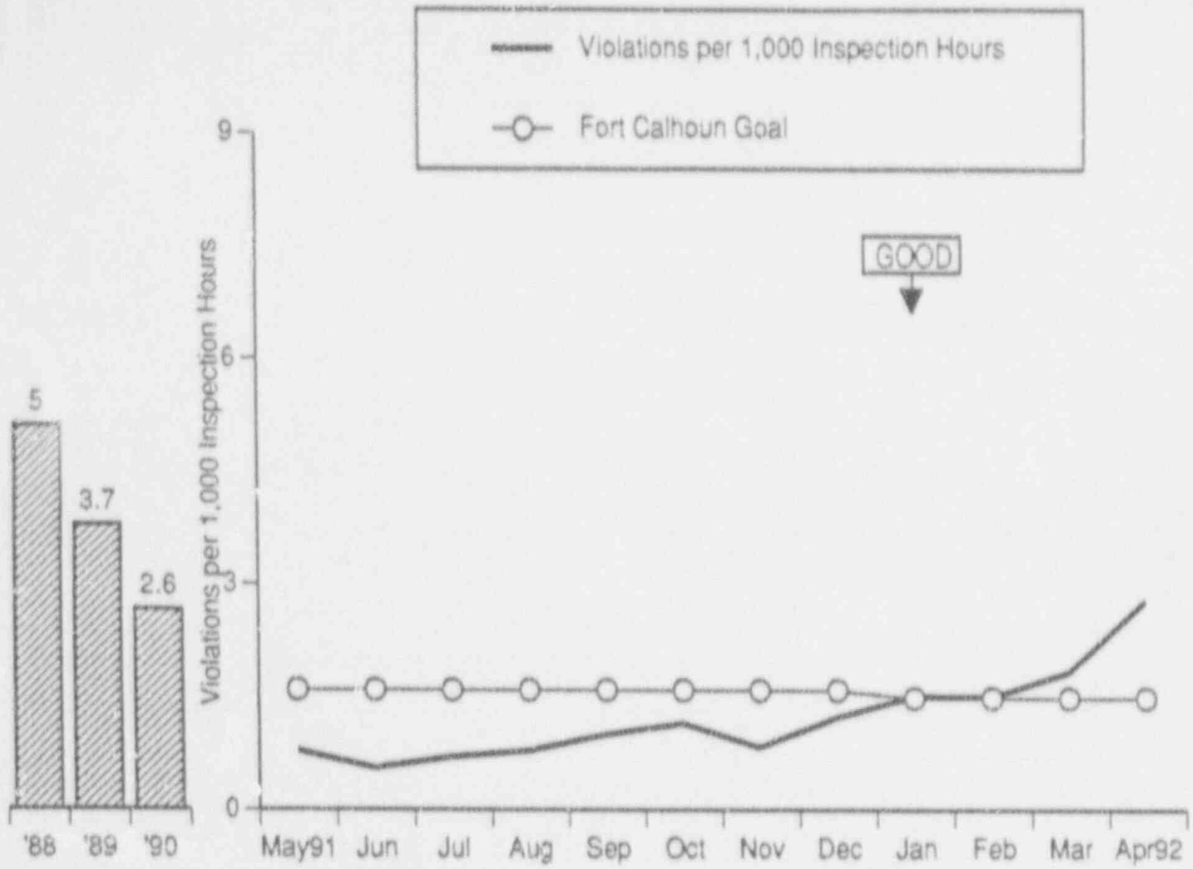
This indicator is normally one month behind the reporting month due to the time needed to collect and evaluate the data.

DEPARTMENT	MARCH '92	APRIL '92
Operations	2,295	4,918
Maintenance	150	200
Chemistry and Radiation Protection	7	10
Technical Support	4	32
General Employee Training	944	439
Other	252	455
Total	3,652	6,054

Data Source: Gasper/Newhouse (Manager/Source)

Accountability: Gasper

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.

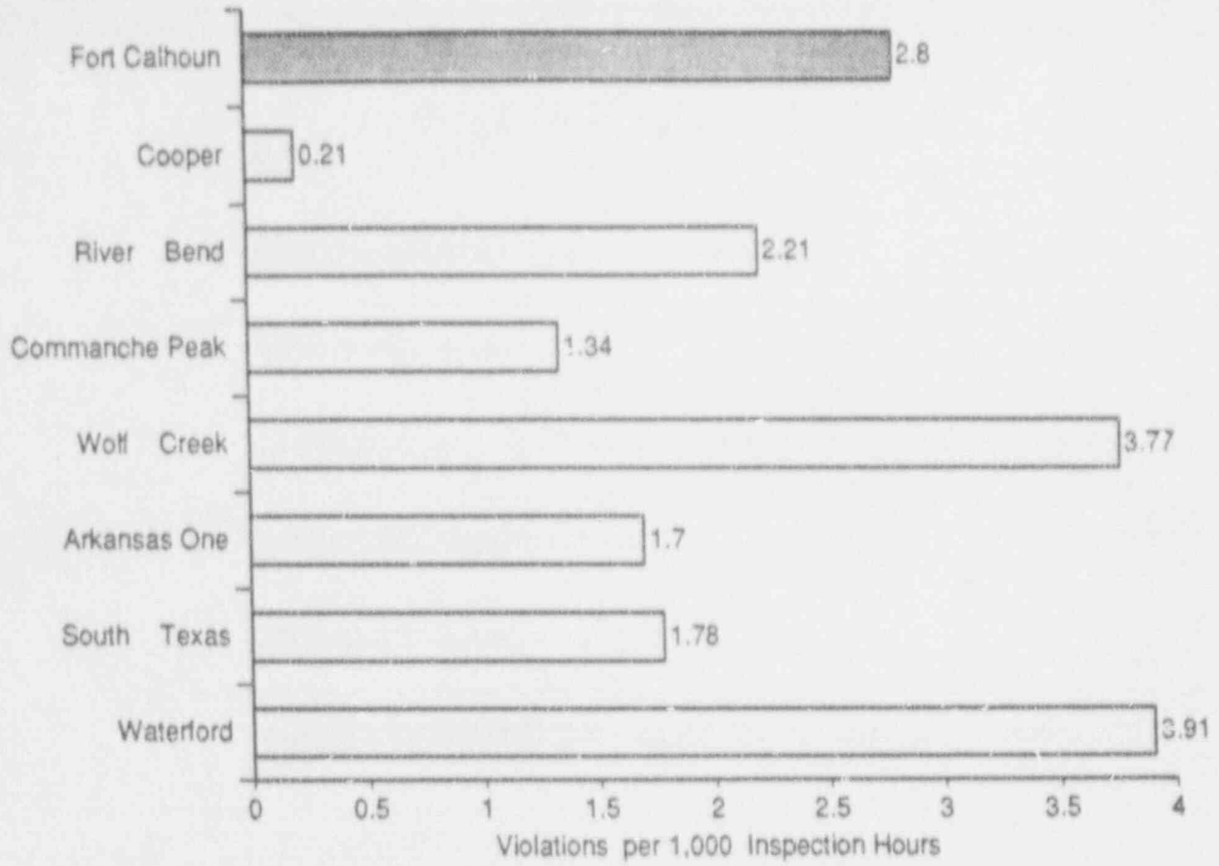
The violations per 1,000 inspection hours indicator was reported as 2.80 for the twelve months from May 1, 1991 through April 30, 1992. This increase, which exceeds the Fort Calhoun goal, is due to the large number of inspection hours (2,000 hours) from the EDSF inspection which were removed this month in calculating the violations per 1,000 inspection hours, as well as the increase in the number of violations issued (i.e., IER 92-07 reported 6 violations and 1 additional violation was issued in IER 92-09).

The 1992 Fort Calhoun goal is 1.5 violations per 1,000 inspection hours for 1992. The goal was 1.6 violations per 1,000 inspection hours for 1991.

Data Source: Short/Eid (Manager/Source)

Accountability: Short

Adverse Trend: None



COMPARISON OF VIOLATIONS AMONG REGION IV PLANTS

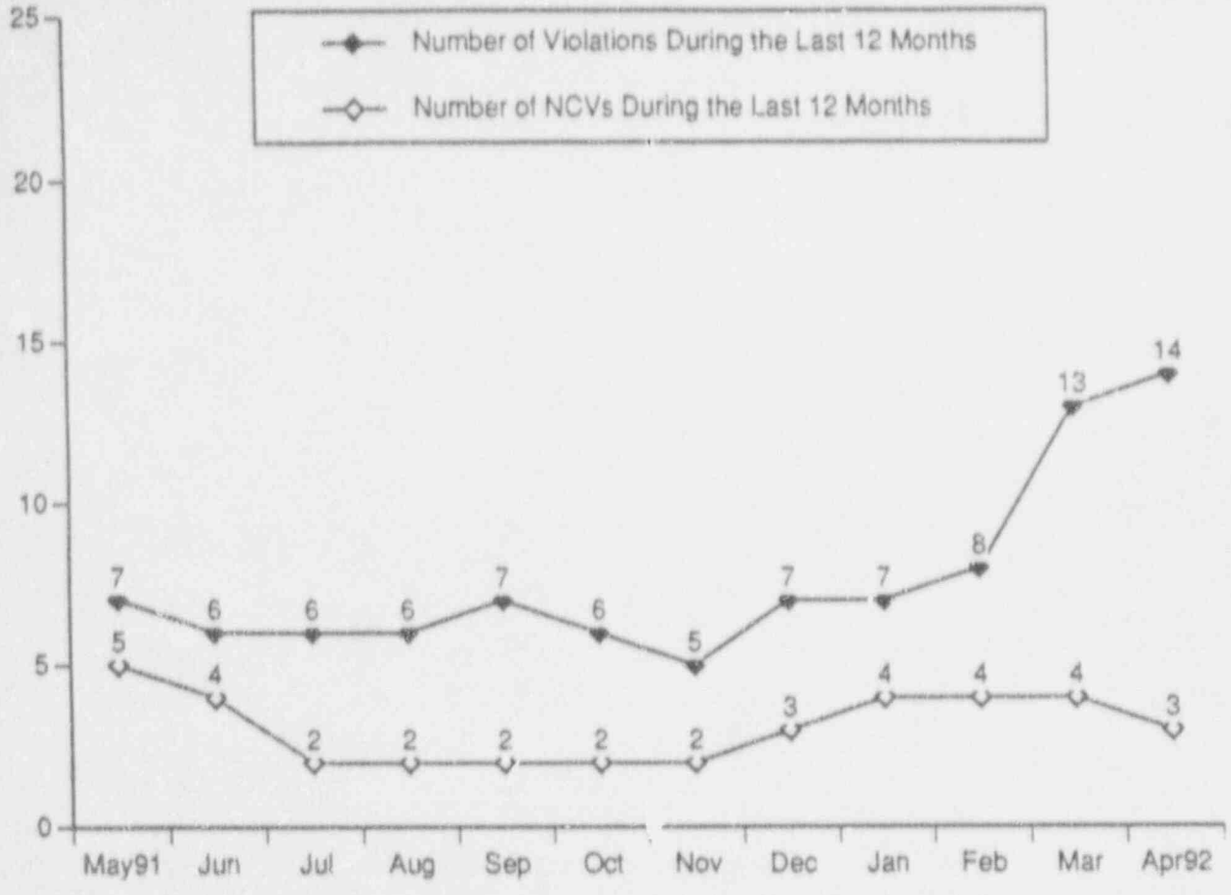
This indicator provides a comparison of violations per 1,000 inspection hours among Region IV nuclear power plants. The data is compiled for a twelve month period from May 1, 1991 through April 30, 1992.

The Fort Calhoun goal for 1992 is 1.5 violations per 1,000 inspection hours. The goal for 1991 was 1.6 violations per 1,000 inspection hours.

Data Source: Short/Eid (Manager/Source)

Accountability: Short

Adverse Trend: None



CUMULATIVE VIOLATIONS AND NCVs (TWELVE-MONTH RUNNING TOTAL)

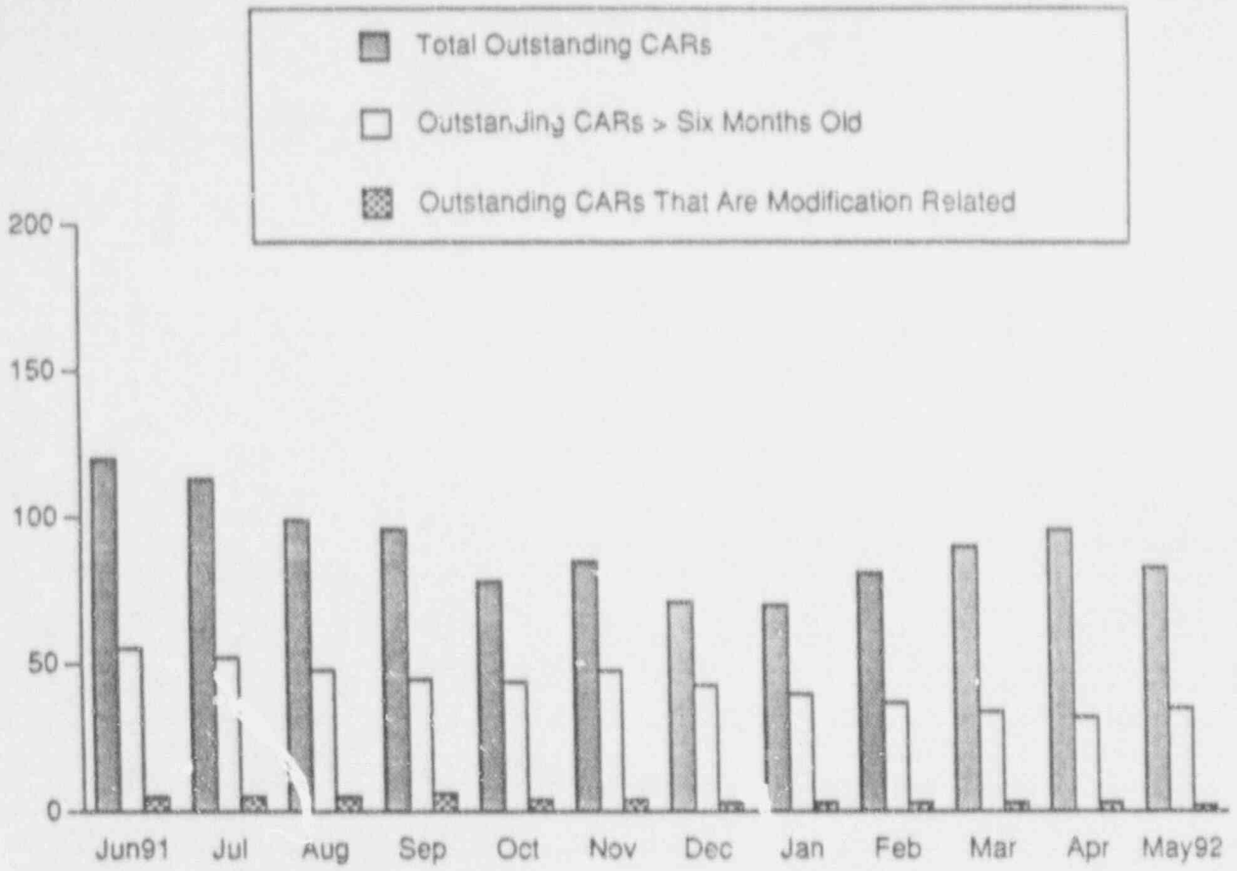
The Cumulative Violations and Non-Cited Violations (NCVs) indicator shows the cumulative number of violations and the cumulative number of NCVs for the last twelve months.

This indicator is one month behind the reporting month due to the time involved with collecting and processing the data for this indicator.

Data Source: Short/Eid (Manager/Source)

Accountability: Short

Adverse Trend: An adverse trend is indicated based on three consecutive months of increasing values for the number of cumulative violations (twelve months running total).



OUTSTANDING CORRECTIVE ACTION REPORTS

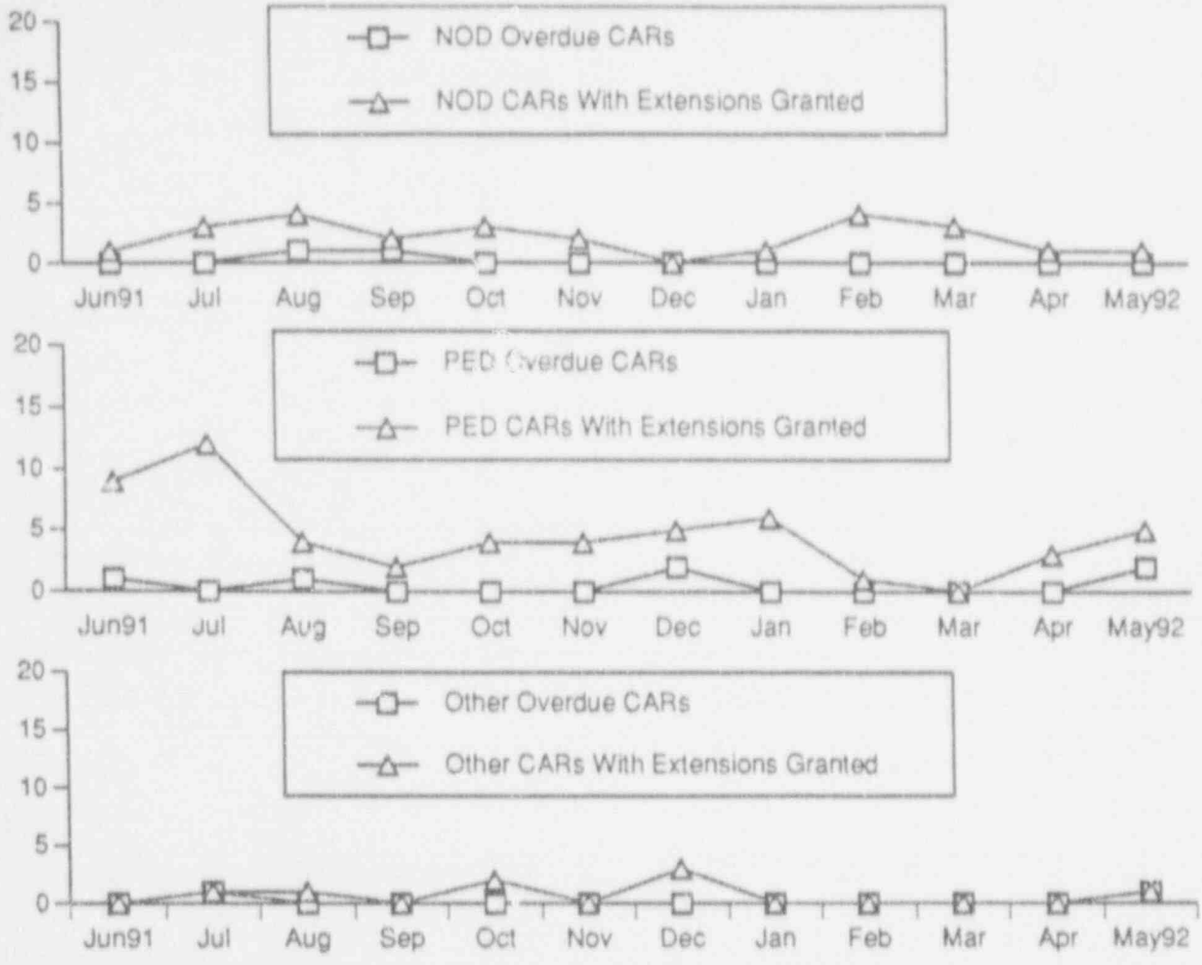
This indicator shows the total number of outstanding Corrective Action Reports (CARs), the number of outstanding CARs that are greater than six months old, and the number of outstanding CARs that are modification related.

At the end of May 1992, there were 83 outstanding CARs, 35 CARs that were greater than six months old, and 2 CARs that were modification related.

Data Source: Orr/Gurtis (Manager/Source)

Accountability: Andrews/Gambhir/Gates

Adverse Trend: None



OVERDUE AND EXTENDED CORRECTIVE ACTION REPORTS

This indicator shows the number of overdue CARs and the number of CARs which received extensions broken down by organization.

Overdue CARs

Overdue CARs	March '92	April '92	May '92
NOD	0	0	0
PED	0	0	2
Others	0	0	1
Total	0	0	3

Extended CA

Extended CARs	March '92	April '92	May '92
NOD	3	1	1
PED	0	3	5
Others	0	0	1
Total	3	4	7

Data Source: Orr/Gurtis (Manager/Source)

Accountability: Andrews/Gambhir/Gates

Adverse Trend: None

1991 SALP Funct. Area	CARs	Signif. CARs	NRC Viola.	LERs
A) Plant Operations	30	1	1	6
B) Radiolog. Controls	12	0	3	0
C) Maint/Surveil.	66	0	2	9
D) Emergency Preparedness	16	0	0	0
E) Security	5	0	1	3
F) Engr/Tech Support	93	3	1	12
G) Safety Assess/ Qual. Verif.	27	1	1	2
H) Other	0	0	0	0
Total	249	5	9	32

1992 SALP Funct. Area	CARs	Signif. CARs	NRC Viola.	LERs
A) Plant Operations	9	0	0	4
B) Radiolog. Controls	7 (1)	0	6	0
C) Maint/Surveil.	82 (8)	1	2 (1)	5 (2)
D) Emergency Preparedness	4	1	1	0
E) Security	1	0	0	0
F) Engr/Tech Support	13	0	0	10 (3)
G) Safety Assess/ Qual. Verif.	15 (2)	0	0	0
H) Other	0	0	0	0
Total	131 (11)	2	9 (1)	19 (5)

Note: ( ) Indicate values for the reporting month.

CARs ISSUED vs. SIGNIFICANT CARs vs NRC VIOLATIONS ISSUED vs. LERs REPORTED

The above matrix shows the number of Corrective Action Reports (CARs) issued by the Nuclear Services Division (NSD) vs. the number of Significant CARs issued by NSD vs. the number of violations issued by the NRC for the Fort Calhoun Station in 1991 and 1992. Included in this table is the number of Licensee Event Reports (LERs) identified by the Station each year. The number of NRC violations reported is one month behind the reporting month due to the time involved in collecting and processing the violations.

Data Source: Orr/Gurtis (Manager/Source)
Short/Eid (Manager/Source)

Accountability: Andrews/Gambhir/Gates

Adverse Trend: None

SEP 15, 20, 21

PERFORMANCE INDICATOR DEFINITIONS

AGE OF OUTSTANDING MAINTENANCE WORK ORDERS
This indicator tracks the total number of outstanding corrective non-outage Maintenance Work Orders at the Fort Calhoun Station versus their age in months.

AMOUNT OF WORK ON HOLD AWAITING PARTS
This indicator is defined as the percentage of open, non-outage, maintenance work orders that are on hold awaiting parts, to the total number of open, non-outage, maintenance work orders.

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.

AUXILIARY SYSTEMS CHEMISTRY PERCENT OF HOURS OUTSIDE STATION LIMITS
The cumulative hours that the Component Cooling Water system is outside the station chemistry limit. The hours are accumulated from the first sample exceeding the limit until additional sampling shows the parameter to be back within limits.

CARs ISSUED vs. SIGNIFICANT CARs vs. NRC VIOLATIONS vs. LERs REPORTED
Provides a comparison of CARs issued, NRC violations, and LERs reported. This indicator tracks performance for SEP #15, 20, & 21.

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 man-rem. This indicator tracks radiological work performance for SEP #54.

COMPARISON OF VIOLATIONS AMONG REGION IV PLANTS
Provides data on violations per 1,000 inspection hours for Region IV nuclear power plants.

COMPONENT FAILURE ANALYSIS REPORT (CFAR) SUMMARY
The number of items for Fort Calhoun Station with higher failure rates than the rest of the industry for an eighteen month time period. Failures are reported as component (i.e. reciprocating pumps, motor operated valves, etc.) and application (i.e. charging pumps, feedwater pumps, discharge pumps, 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.

CORRECTIVE MAINTENANCE BACKLOG GREATER THAN 3 MONTHS OLD
The percentage of total outstanding corrective maintenance items, not requiring an outage, that are greater than three months old at the end of the period reported.

CUMULATIVE VIOLATIONS & NON-CITED VIOLATIONS (12 MONTH RUNNING TOTAL)
The cumulative number of violations and Non-Cited Violations for the last 12 months.

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.

DIESEL GENERATOR UNAVAILABILITY
This indicator provides monthly data on the number of hours per diesel generator planned and unplanned unavailability. The Fort Calhoun goal for the second half of 1991 for the number of unavailable hours per diesel generator has been established based upon the 1990 industry median value provided by INPO.

DECONTAMINATED 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 decontaminated based on the total square footage. This indicator tracks performance for SEP # 54.

DISABLING INJURY 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.

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.

ENGINEERING ASSISTANCE REQUEST (EAR) BREAKDOWN

This indicator shows a breakdown, by age 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) BREAKDOWN

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.

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.

PERFORMANCE INDICATOR DEFINITIONS (cont'd)

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.

EXPEDITED PURCHASES
The percentage of expedited purchases occurring during the reporting month compared to the total number of purchase orders generated.

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).

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.

GASEOUS RADIOACTIVE WASTE BEING DISCHARGED TO THE ENVIRONMENT
This indicator displays the total number of Curies of all gaseous radioactive nuclides released from FCS.

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.

HOTLINE TRAINING MEMOS
The number of Hotline Training Memos (HTM) that are initiated, closed, and overdue less or greater than 4 weeks for the indicated month. A HTM is a training document sent out for immediate review. The HTM should be reviewed and signed within 5 days of receipt of the HTM.

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).

INVENTORY ACCURACY
The percentage of line items that are counted each month by the warehouse which need count adjustments.

INVOICE BREAKDOWN
The number of invoices that are on hold due to shelf life, CQE, and miscellaneous reasons.

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.

PERFORMANCE INDICATOR DEFINITIONS (cont'd)

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.

LIQUID RADIOACTIVE WASTE BEING DISCHARGED TO THE ENVIRONMENT
This indicator displays the total number of curies from all liquid releases from FCS to the Missouri River.

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 EFFECTIVENESS
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.

MAINTENANCE WORK ORDER BACKLOG
The number of corrective non-outage maintenance work orders that remain open at the end of the reporting month. This indicator was added to the PI Report to trend open corrective non-outage maintenance work orders as stated in SEP #36.

MAINTENANCE WORK ORDER BREAKDOWN
This indicator is a breakdown of corrective non-outage maintenance work orders by several categories that remain open at the end of the reporting month. This indicator tracks maintenance performance for SEP #36.

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

MATERIAL REQUEST PLANNING
The percent of material requests (MRs) for issues with their need date the same as their need date compared to the total number of MRs.

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.

NUMBER OF HOT SPOTS
The number of radiological hot spots which have been identified and documented to exist at FCS at the end of the reporting month. A hot spot is a small localized source of radiation. A hot spot occurs when the contact dose rate of an item is at least 5 times the General Area dose rate and the item's dose rate is equal to or greater than 100 mRem/hour.

NUMBER OF NPRDS MULTIPLE FAILURES
The number of NPRDS reportable failures over the preceding eighteen months sorted by component manufacturer and model number.

NUMBER OF OUT-OF-SERVICE CONTROL ROOM INSTRUMENTS
A control room instrument that cannot perform its design function is considered as out-of-service. A control room instrument which has had a Maintenance Work Order (MWO) written for it and has not been repaired by the end of the reporting period is considered out-of-service and will be counted. The duration of the out-of-service condition is not considered. Computer CRTs are not considered as control room instruments.

NUMBER OF PERSONNEL ERRORS REPORTED IN LERS
The number of Licensee Event Reports (LERs) attributed to personnel error on the original LER submittal. This indicator trends personnel performance for SEP #15.

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.

PERFORMANCE INDICATOR DEFINITIONS (cont'd)

OPERATIONS AND MAINTENANCE BUDGET
The year- to- date budget compared to the actual expenditures for Operations and Maintenance departments.

OUTSTANDING CORRECTIVE ACTION REPORTS
This indicator displays the total number of outstanding Corrective Action Reports (CARs), the number of CARs that are older than six months and the number of modification related CARs.

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.

OVERDUE AND EXTENDED CORRECTIVE ACTION REPORTS
The number of overdue Corrective Action Reports (CARs) and the number of CARs which received extensions broken down by organization for the last 6 months.

PERCENT OF COMPLETED SCHEDULED MAINTENANCE ACTIVITIES
The % of the number of completed maintenance activities as compared to the number of scheduled maintenance activities each week. This % is shown for each maintenance craft. Maintenance activities include MWRs, MWOs, STs, PMOs, calibrations, and other miscellaneous activities. These indicators track Maintenance performance for SEP #33.

PERSONNEL TURNOVER RATE
The ratio of the number of turnovers to average employment. A turnover is a vacancy created by voluntary resignation from the company. Retirement, death, termination, transfers within the company, and part-time employees are not considered in turnover.

PLANNED CAPABILITY LOSS FACTOR
The ratio of the planned 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.

PREVENTIVE MAINTENANCE ITEMS OVERDUE
This indicator is defined as the % of preventive maintenance items in the month that were not completed by the scheduled date plus a grace period equal to 25 % of the scheduled interval. This indicator tracks preventive maintenance activities for SEP #41.

PRIMARY SYSTEM CHEMISTRY % OF HOURS OUT OF LIMIT
The % of hours out of limit are for six primary chemistry parameters divided by the total number of hours possible for the month. The key parameters used are: Lithium, Chloride, Hydrogen, Dissolved Oxygen, Fluoride, and Suspended Solids. 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.

RADIOLOGICAL WORK PRACTICES PROGRAM
The number of identified poor radiological work practices (PRWP) for the reporting month. This indicator tracks radiological work performance for SEP #52.

RATIO OF PREVENTIVE TO TOTAL MAINTENANCE
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 man-hours. This indicator tracks preventive maintenance activities for SEP #41.

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.

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. The chemistry parameters are reported only for the period of time greater than 30 percent power.
The CPI is calculated using the following equation: CPI = (Ka/0.8) + (Na/20) + (O_2/10)) / 3 where the following are monthly averages of: Ka = average blowdown cation conductivity, Na = average blowdown sodium concentration, O_2 = average condensate pump discharge dissolved oxygen concentration.

SECURITY NON-SYSTEM FAILURES
The following components are the types of loggable/reportable non-system failures represented in this indicator. Incidents in this category include security badges, access control and authorization, security force error, and unsecured doors.
1) Security Badges - Incidents associated with improper use and handling of security badges. Incidents include security badges that are lost, taken out of the protected area, out of control on-site, or inadvertently destroyed or broken.
2) Access Control and Authorization - Administrative and procedural errors associated with the use of the card-access system such as tailgating, incorrect security badge issued, and improper escort procedures. This also includes incidents that were caused by incorrect access authorization information entered into the security system computer.
3) Security Force Error - Events caused by members of the security force that are found to be inattentive to their duties or who neglected to properly perform assigned functions (e.g., required search procedure or patrol).
4) Unsecured Doors - Doors which are found to be unsecured with no compensatory officer posted or where the individual causing the alarm did not remain at the alarmed door until a security officer responded. Events where an unsecured door is caused by air pressure are included in this category unless there is an indication that an adjustment was made to the door.
This indicator tracks security performance for SEP #58.

SECURITY SYSTEM FAILURES
The following components are the types of loggable/reportable SECURITY SYSTEM FAILURES represented in this indicator. Incidents in this category include alarm system failures, CCTV failures, security computer failures, search equipment failures, and door hardware failures. These system failures are further categorized as follows:
1) Alarm System Failure - Detection system events involving false/nuisance alarms and mechanical failures.
2) Alarm System Environs - Degradations to detection system performance as a result of environmental conditions (i.e., rain, snow, frost).
3) CCTV Failures - Mechanical failures to all CCTV hardware components.
4) CCTV Environs - Degradations to CCTV performance as a result of environmental conditions (i.e., rain, snow, frost, fog, sunspots, shade).
5) Security Computer Failures - Failure of the multiplexer, central processing unit, and other computer hardware and software. This category does not include software problems caused by operator error in using the software.
6) Search Equipment Failures - Failures of x-ray, metal, or explosive detectors and other equipment used to search for contraband. This also includes incidents where the search equipment is found to be defective or did not function properly during testing.
7) Door Hardware Failures - Failure of the door alarm and other door hardware such as latches, electric strikes, doorknobs, locks, etc.
8) 1991 versus 1992 System Failures - Statistics from 199 will be compared on a monthly basis with 1992 loggable/reportable system failures.
This indicator tracks security performance for SEP #58.

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

SPARE PARTS ISSUED
The dollar value of the spare parts issued 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.

STOCKOUT RATE
The total number of Pick Tickets that were generated during the reporting month and the total number of Pick Tickets that were generated during the reporting month when the amount of parts requested is equal to or less than the minimum stocking level and parts are not available.

PERFORMANCE INDICATOR DEFINITIONS (cont'd)

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.

THERMAL PERFORMANCE

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

TOTAL HOURS OF STUDENT TRAINING

The total number of student hours of training for Operations, Maintenance, Chemistry/Radiation Protection, Technical Support, General Employee Training, and Other Training conducted for FCS.

TOTAL INSTRUCTION HOURS

The total number and department breakdown of training instruction hours administered by the Training Center.

TOTAL SKIN AND CLOTHING CONTAMINATIONS

Reportable skin and clothing contaminations above background levels greater than 5000 dpm/100 cm squared. This indicator trends personnel performance for SEP #15 & 54.

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 WHILE CRITICAL

This indicator is defined as the number of unplanned automatic scrams (reactor protection system logic actuations) that occur while the reactor is critical. The indicator is further defined as follows:

1) Unplanned means that the scram was not part of a planned test or evolution.

2) Scram means the automatic shutdown of the reactor by a rapid insertion of all control rods 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 push-buttons) 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 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.

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POSITIVE TREND REPORT

The Positive Trend Report highlights several Performance Indicators with data representing continued performance above the stated goal and indicators with data representing significant improvement in recent months.

The following indicators have been selected as exhibiting positive trends:

Procedural Noncompliance Incidents (Maintenance)
(Page 33)
The number of procedural noncompliance incidents has decreased for two consecutive months.

Radiological Work Practices Program
(Page 53)
The number of poor radiological work practices has decreased from a high of 59 during the Cycle 14 Refueling Outage to 1 for May.

Amount of Work on Hold Awaiting Parts
(Page 60)
The amount of work on hold awaiting parts has decreased for three consecutive months.

End of Positive Trend Report

ADVERSE TREND REPORT

A Performance Indicator which has data representing three (3) consecutive months of declining performance constitutes an adverse trend. The Adverse Trend Report explains the conditions under which certain indicators are showing adverse trends. An explanation will be provided for indicators with data representing three months of declining performance that have been labeled as adverse trends.

The following indicators are exhibiting adverse trends for the reporting month:

Age of Outstanding Maintenance Work Orders (Corrective Non-Outage)
(Page 26)
The number of outstanding MWOs 0-3 months old and >12 months old has increased for three consecutive months. This trend is due to the Cycle 14 Refueling Outage during February, March and April.

Maintenance Work Order Breakdown (Corrective Non-Outage)
(Page 27)
The number of total corrective non-outage MWOs and open high priority MWOs has increased for three consecutive months. This trend is due to the Cycle 14 Refueling Outage during February, March and April.

Maintenance Work Order Backlog (Corrective Non-Outage Maintenance)
(Page 34)
The number of corrective non-outage MWOs increased for three consecutive months. This trend is due to the Cycle 14 Refueling Outage during February, March and April.

Cumulative Violations and NCVs (Twelve-Month Running Total)
(Page 81)
The number of cumulative violations (twelve-month running total) has increased for three consecutive months.

End of Adverse Trend Report.

INDICATORS NEEDING INCREASED MANAGEMENT ATTENTION REPORT

This section lists the indicators which show inadequacies as compared to the OPPD goal and indicators which show inadequacies as compared to the industry upper ten percentile. The indicators will be compared to the industry upper ten percentile as relevant to that indicator.

Unplanned Automatic Reactor Scrams Per 7,000 Hours Critical
(Page 3)
The number of unplanned automatic reactor scrams per 7,000 hours critical for 1992 (one) has exceeded the Fort Calhoun goal of zero.

Disabling Injury/Illness Frequency Rate (Lost Time Accident Rate)
(Page 18)
The disabling injury/illness frequency rate at the end of the reporting month (0.76) exceeds the Fort Calhoun goal of 0.3.

Equipment Forced Outages Per 1,000 Critical Hours
(Page 20)
The equipment forced outage rate per 1,000 critical hours at the end of the reporting month (0.69) exceeds the Fort Calhoun goal of 0.2.

Ratio of Preventive to Total Maintenance (Non-Outage)
(Page 29)
The ratio of preventive to total maintenance for the reporting month (42.4%) is lower than the Fort Calhoun goal of 65%.

INDICATORS NEEDING INCREASED MANAGEMENT ATTENTION REPORT (continued)

Preventive Maintenance Items Overdue
(Page 30)
The percentage of preventive maintenance items overdue for the reporting month (0.72%) exceeds the Fort Calhoun goal of 0.5%.

Out-of-Service Control Room Instruments
(Page 31)
The number of out-of-service control room instruments for the reporting month (20) exceeds the Fort Calhoun goal of 13.

Secondary System Chemistry
(Page 45)
The secondary system chemistry performance index value for the reporting month (0.505) is above the Fort Calhoun goal of 0.45.

In-Line Chemistry Instruments Out-of-Service
(Page 48)
The number of in-line chemistry instruments out-of-service for the reporting month (20) exceeds the Fort Calhoun goal of 6.

Total Skin and Clothing Contamination
(Page 51)
The cumulative skin and clothing contaminations at the end of the reporting month (213) exceeds the Fort Calhoun goal of 144.

Decontaminated Radiation Controlled Area
(Page 52)
The percentage of the RCA that is decontaminated for the reporting month (86.2%) is less than the Fort Calhoun goal of 88%.

Inventory Accuracy
(Page 62)
The inventory accuracy for the reporting month (94%) is less than the Fort Calhoun goal of 98%.

Recordable Injury/Illness Cases Frequency Rate
(Page 70)
The recordable injury/illness cases frequency rate for the reporting month (2.27) is above the Fort Calhoun goal of 2.0.

Violations Per 1,000 Inspection Hours
(Page 79)
The violations per 1,000 inspection hours reported this month (2.80) exceeds the Fort Calhoun goal of 1.5.

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.

Forced Outage Rate
(Page 2)
The 1992 Fort Calhoun goal was incorrectly reported as 4.5% in the January 1992 report. The indicator has been revised to show the correct goal of 2.4%.

Fuel Reliability Indicator
(Page 15)
To follow INPO practices, this indicator is now reported in units of microcuries/gram rather than nanocuries/gram.

Collective Radiation Exposure
(Page 16)
Columns have been added to the graph to represent the monthly values for this indicator.

Component Failure Analysis Report (CFAR) Summary
(Page 41)
This indicator replaces the "Number of NPRDS Reportable Failures" indicator.

Licensee Event Report (LER) Root Cause Breakdown
(Page 72)
The LER root cause codes have been revised to reflect the NRC sequence coding.

Comparison of Violations Among Region IV Plants
(Page 80)
The column graph has been changed to a bar graph to be consistent with the performance indicators standard of using columns to represent monthly data.

Cumulative Violations and NCVs (Twelve-Month Running Total)
(Page 81)
Data for the past twelve months has been revised.

Emergent MWOs Approved for Inclusion in the Cycle 14 Refueling Outage
This indicator has been deleted. Indicators to track outage planning will again be reported in the June 1992 Performance Indicators Report.

End of Indicator Improvement/Changes Report.

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 -09/18/93	(Planned Dates)	
14th Refueling	09/18/93 - 11/13/93	*	*
Cycle 15	11/13/93 - 03/11/95	*	*
15th Refueling	03/11/95 - 05/06/95	*	*

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