PERFORMANCE INDICATORS FOR OPERATING COMMERCIAL NUCLEAR POWER REACTORS
Data through September 1993

OFFICE FOR ANALYSIS AND EVALUATION OF OPERATIONAL DATA

PART I

U.S. NUCLEAR REGULATORY COMMISSION

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EXECUTIVE SUMMARY

This report presents the eight (8) NRC Performance Indicators (PIs) for the third calendar quarter of 1993. These eight indicators are: (1) automatic scrams while critical, (2) safety system actuations, (3) significant events, (4) safety system failures, (5) forced outage rate, (6) equipment forced outages per 1000 commercial critical hours, (7) collective radiation exposure, and (8) cause codes. Data are included for the calendar quarters 90-4 through 93-3 for 109 operating commercial U.S. nuclear power plants. Data for Comanche Peak 2 are included for the first time in this report. Figure 1 shows the quarterly industry average trends over this period for all of the PIs except the cause codes, for which an average trend is not computed. Because of reporting techniques, the data for the collective radiation exposure lag the other PIs by one quarter.

Figure 1. Quarterly industry performance indicator average trends

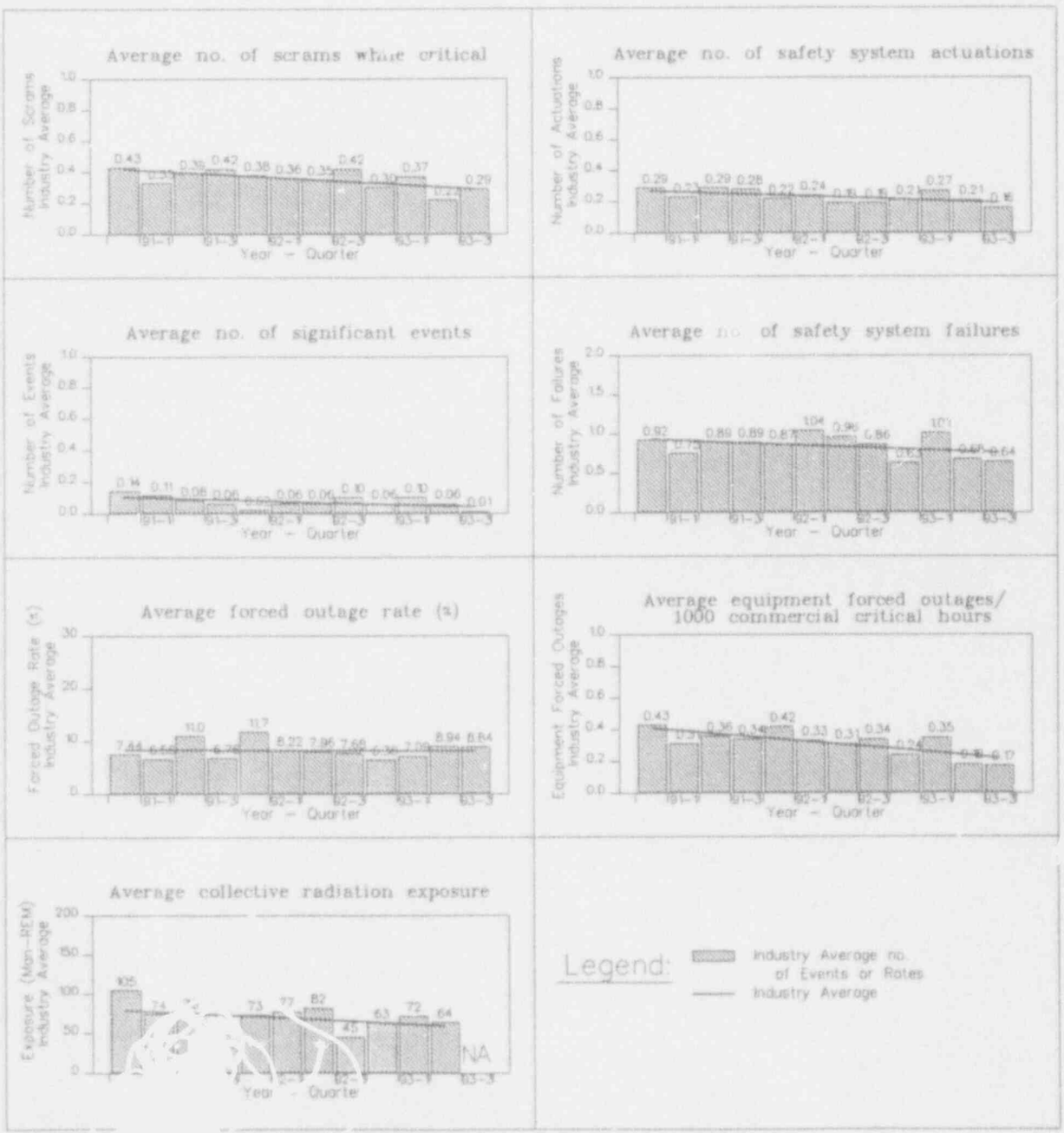


Figure 2. Peer group average number of scrams while critical during Operations and Startup (Normalized for the number of days in Operations and Startup)

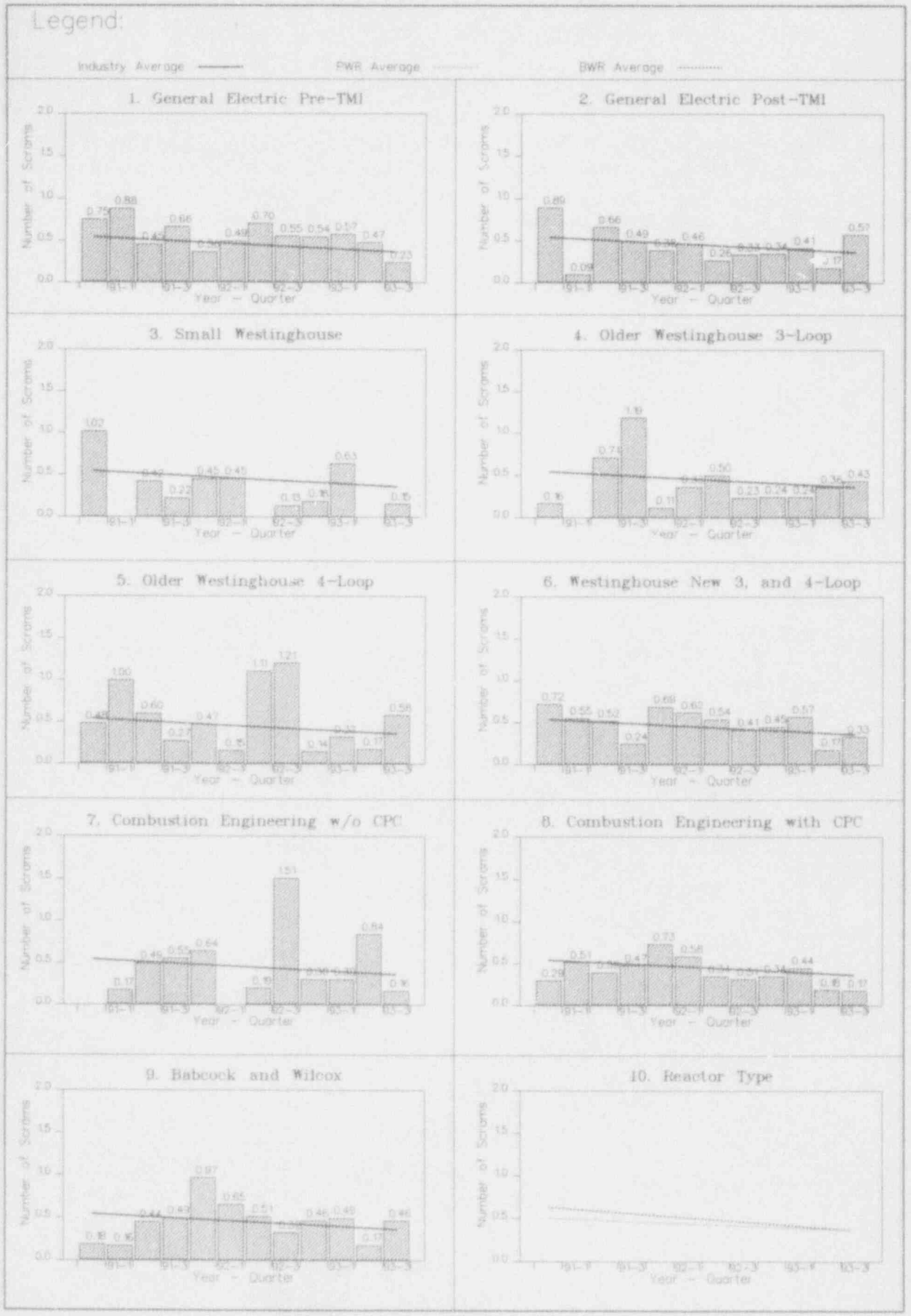


Figure 3. Peer group average number of safety system actuations during Operations and Startup (Normalized for the number of days in Operations and Startup)

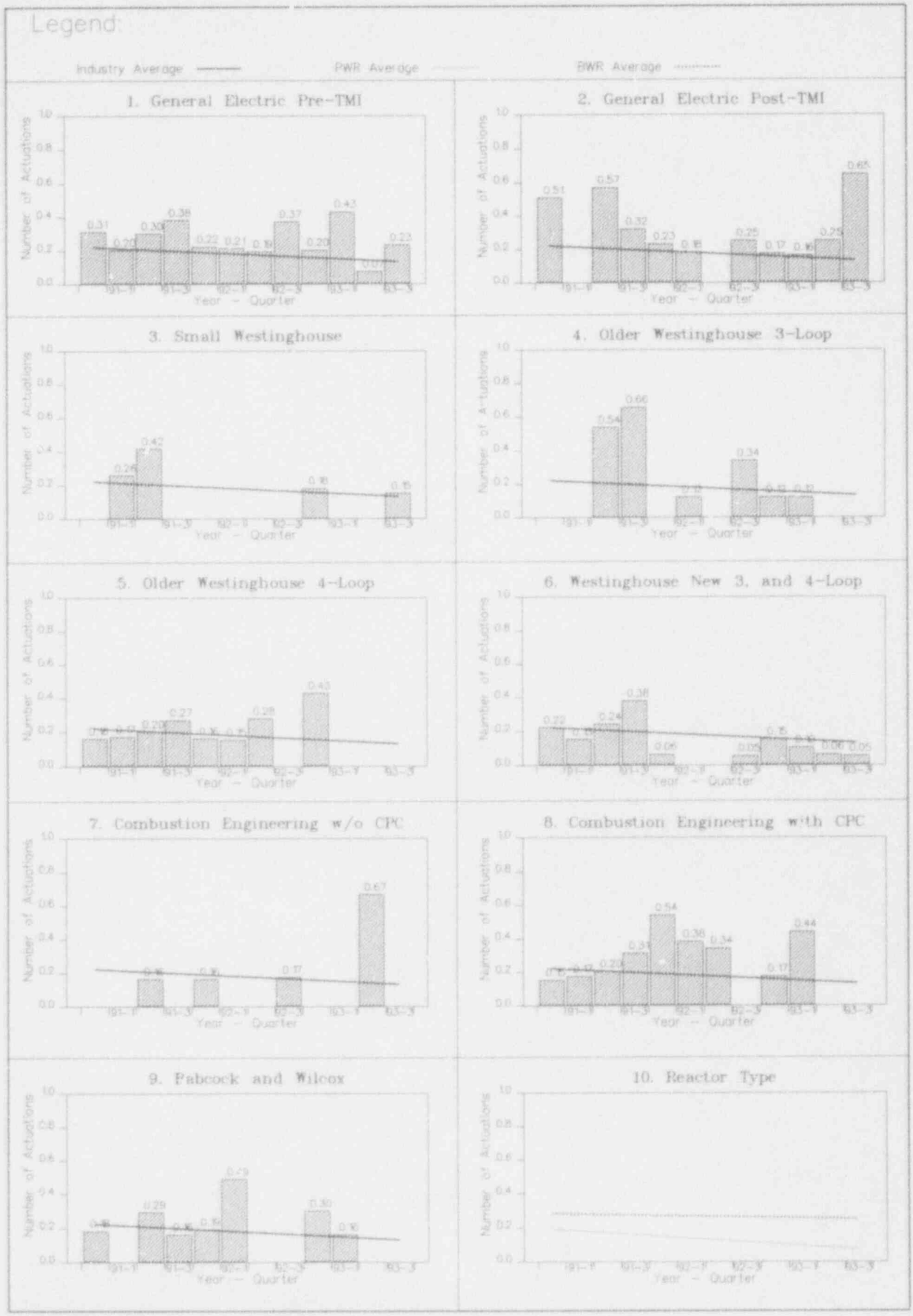


Figure 4. Peer group average number of safety system actuations during Shutdowns (Normalized for the number of days in Shutdown)

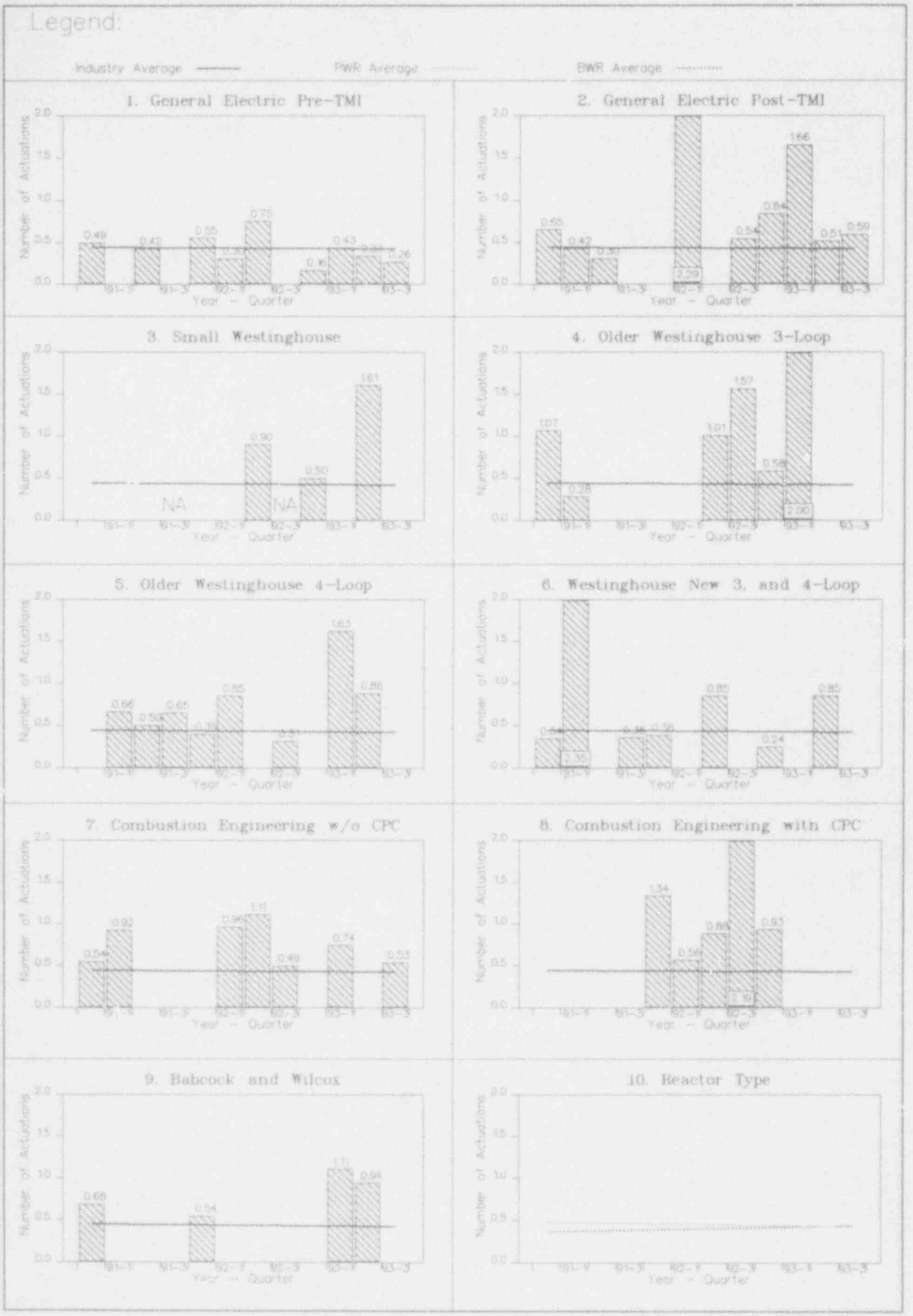


Figure 5. Peer group average number of significant events during Operations and Startup (Normalized for the number of days in Operations and Startup)

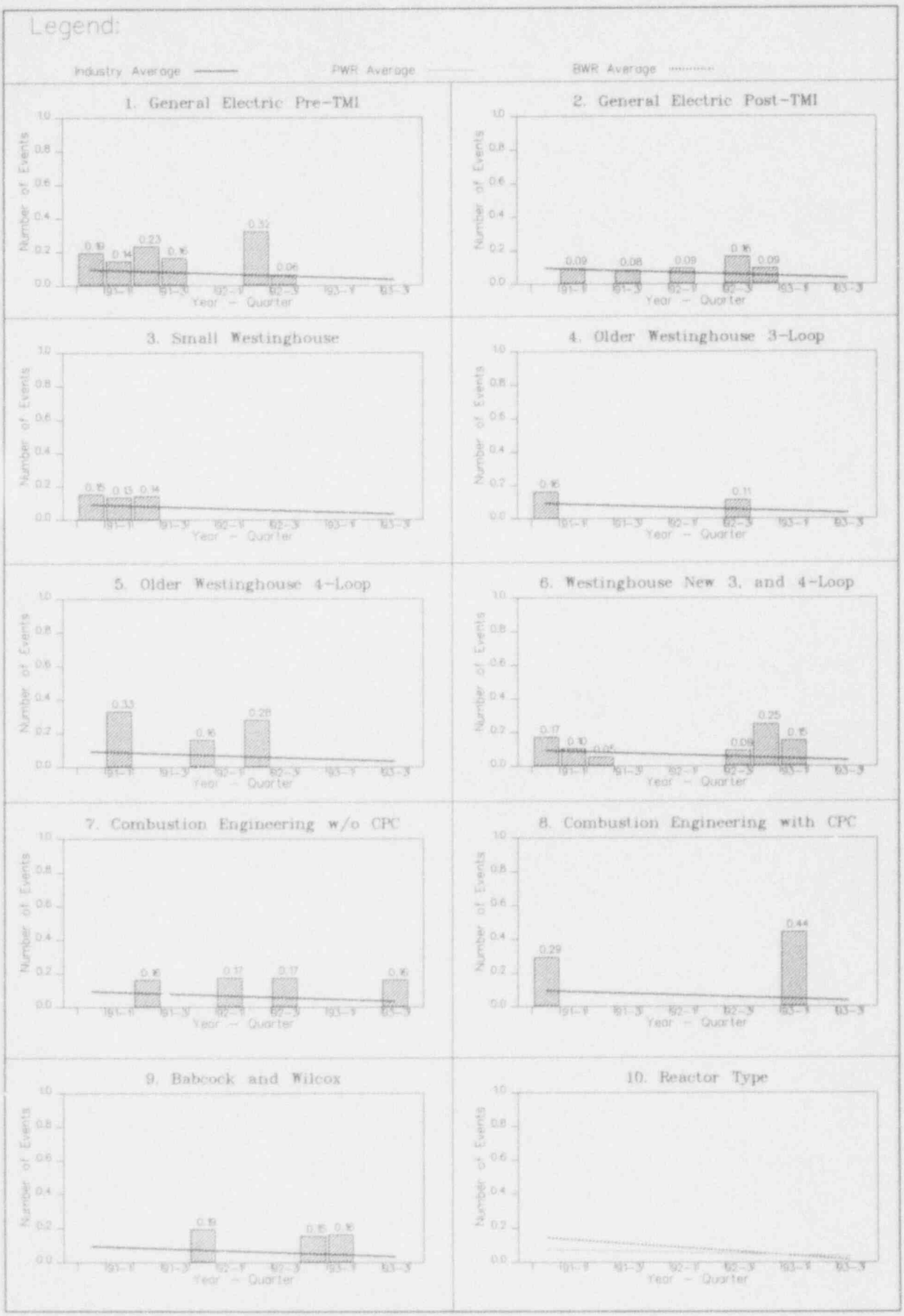


Figure 6. Peer group average number of significant events during Shutdowns (Normalized for the number of days in Shutdown)

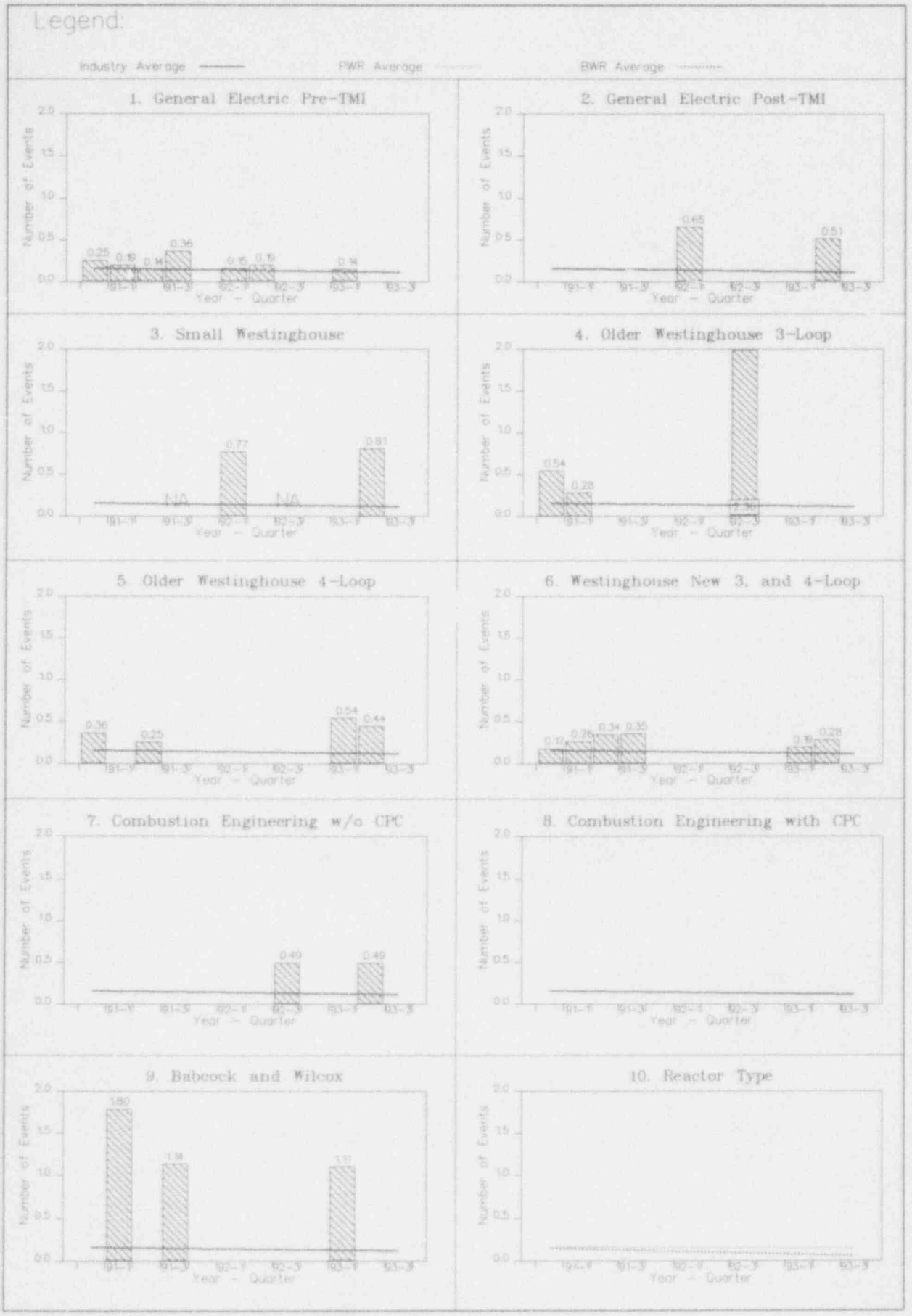


Figure 7. Peer group average number of safety system failures during Operations and Startup (Normalized for the number of days in Operations and Startup)

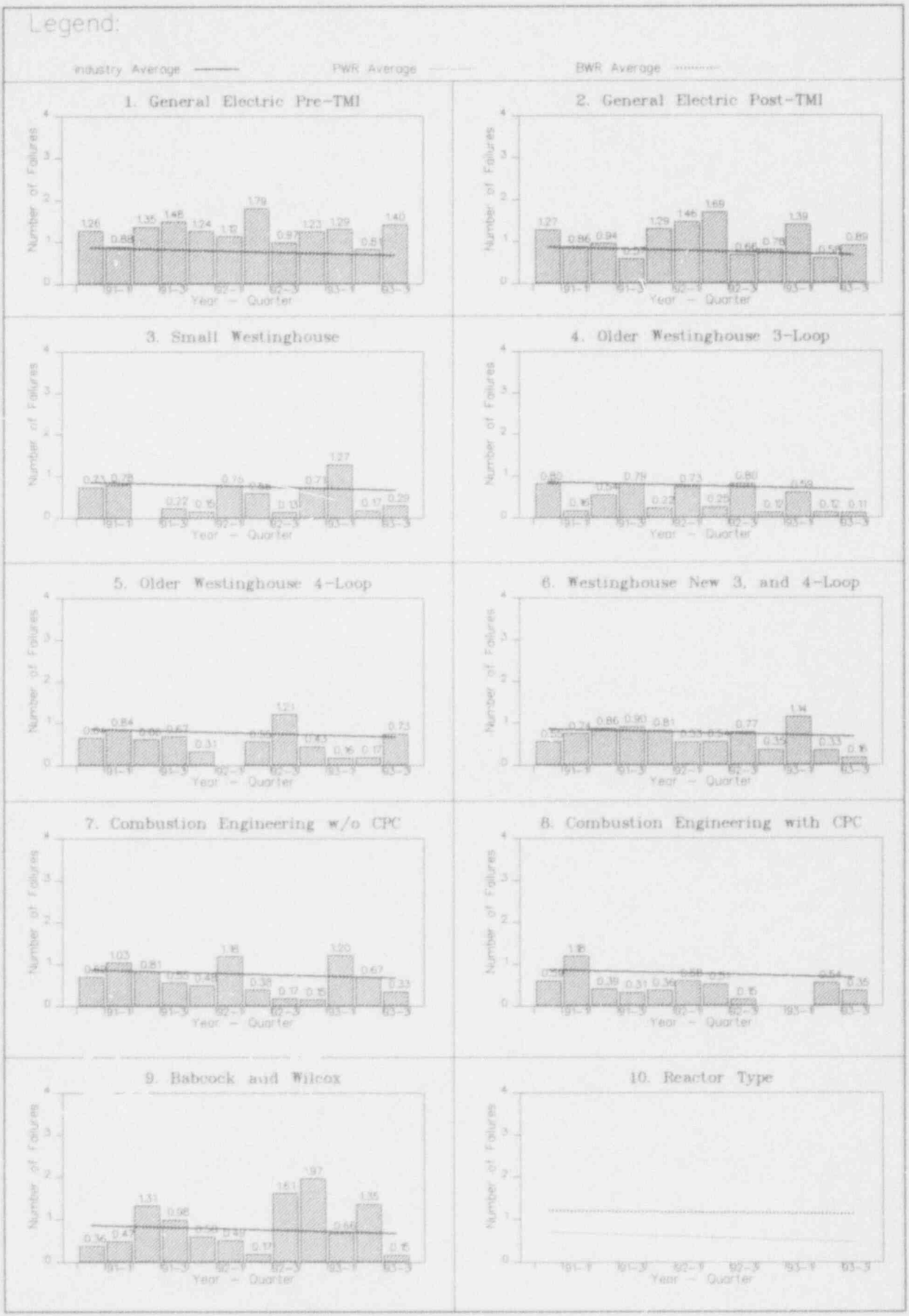


Figure 8. Peer group average number of safety system failures during Shutdowns (Normalized for the number of days in Shutdown)

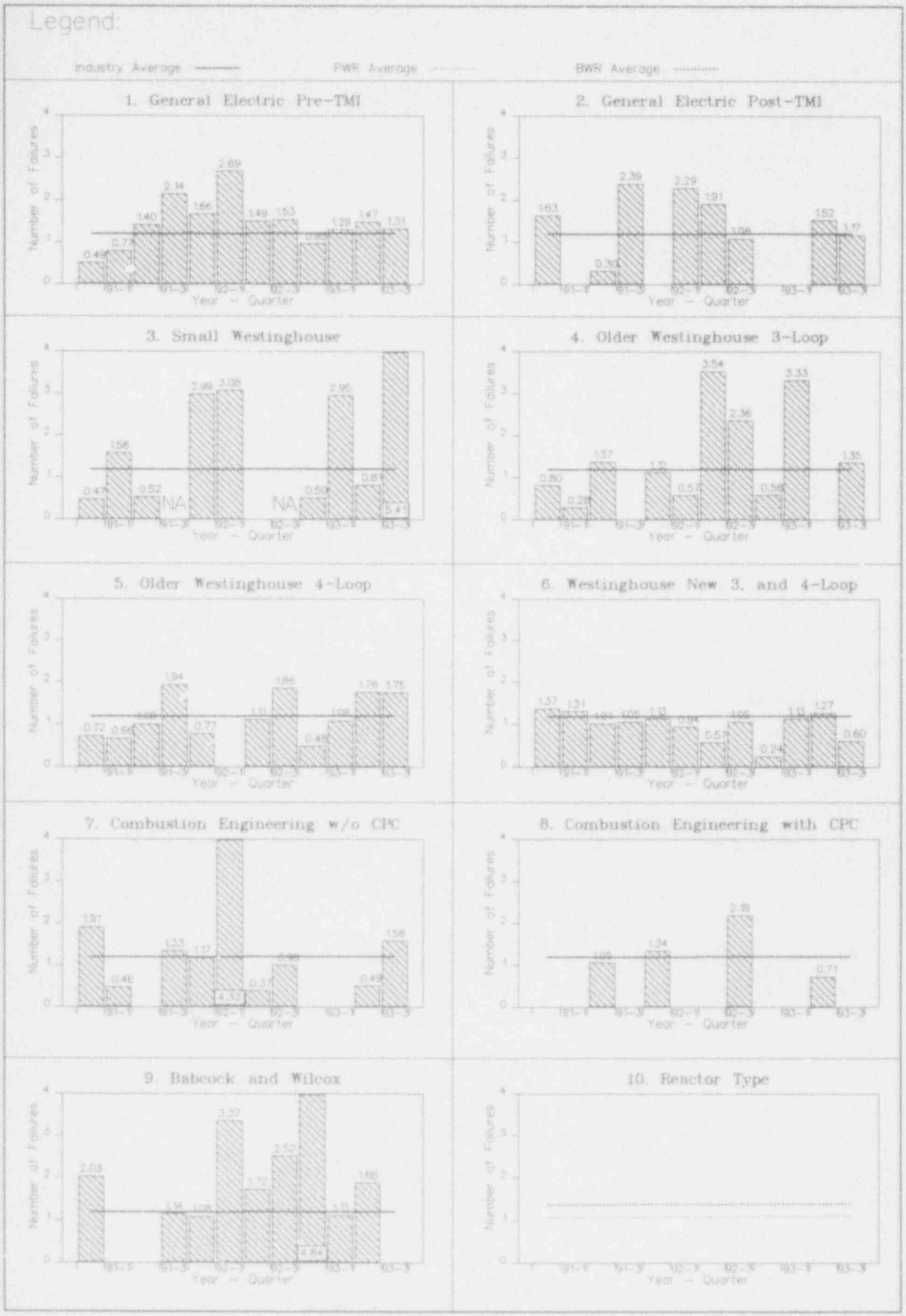


Figure 9. Peer group average forced outage rate

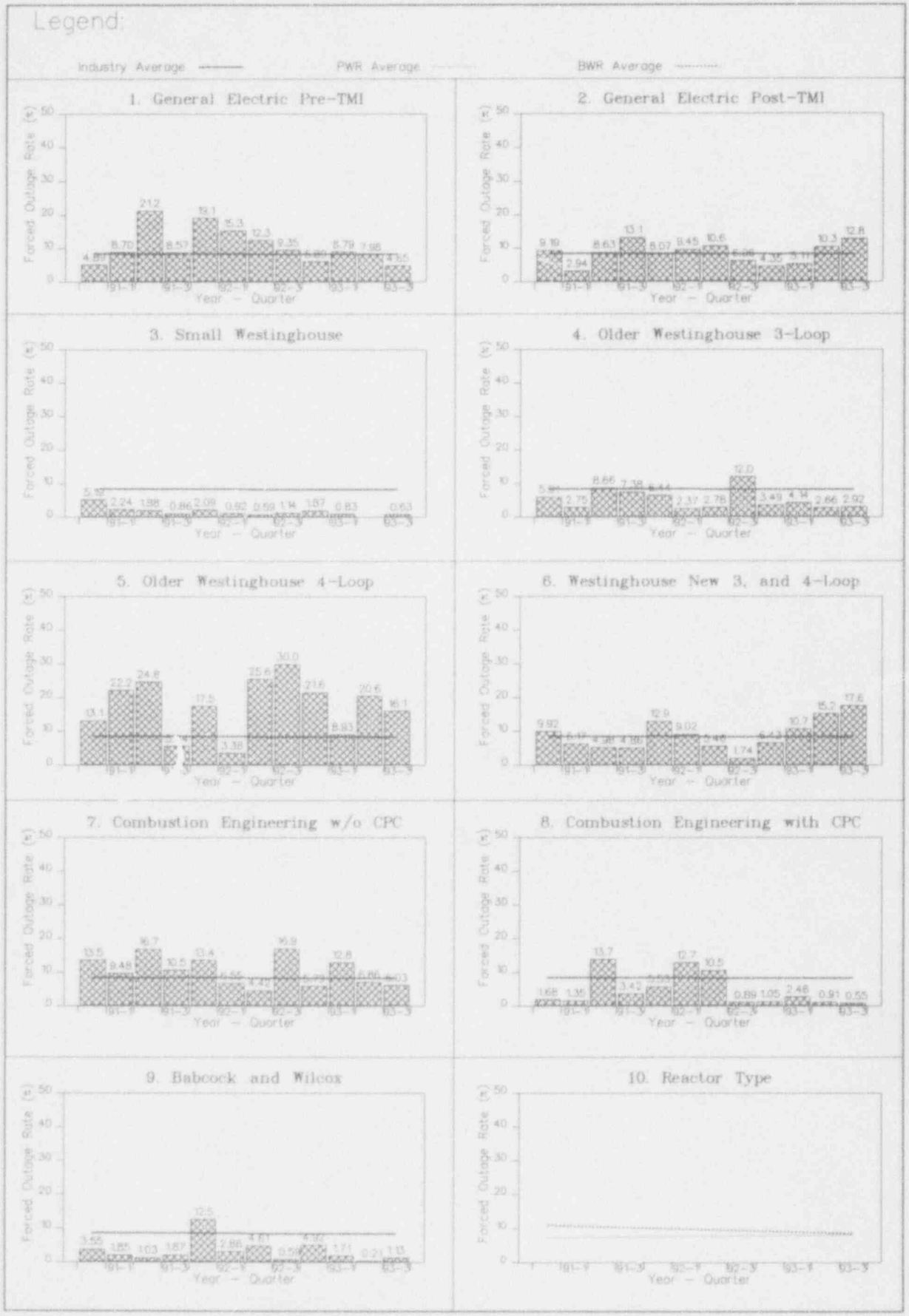


Figure 10. Peer group average equipment forced outages/1000 commercial hours

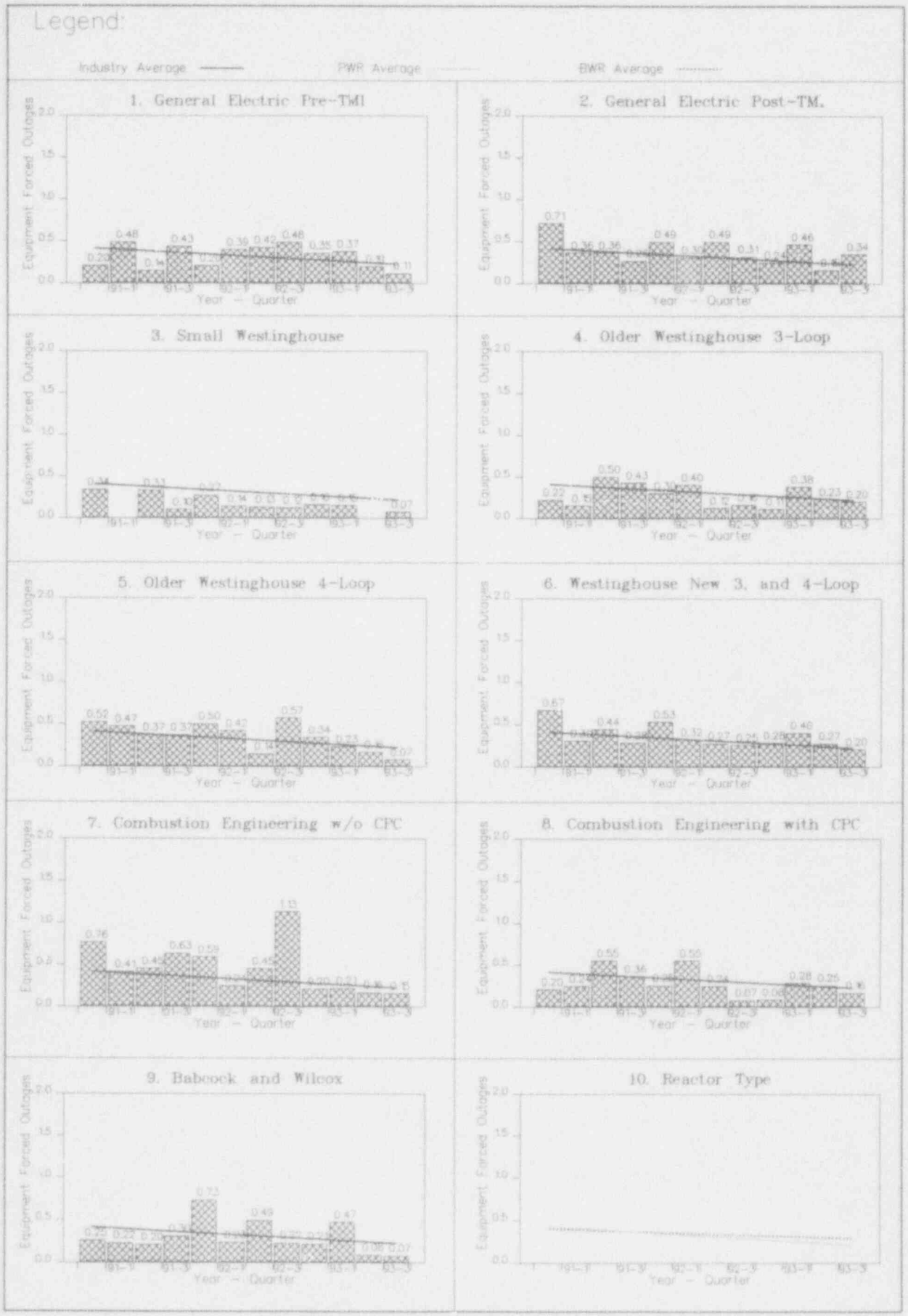


Figure 11. Peer group average number of administrative cause code during Operations and Startup (Normalized for the number of days in Operations and Startup)

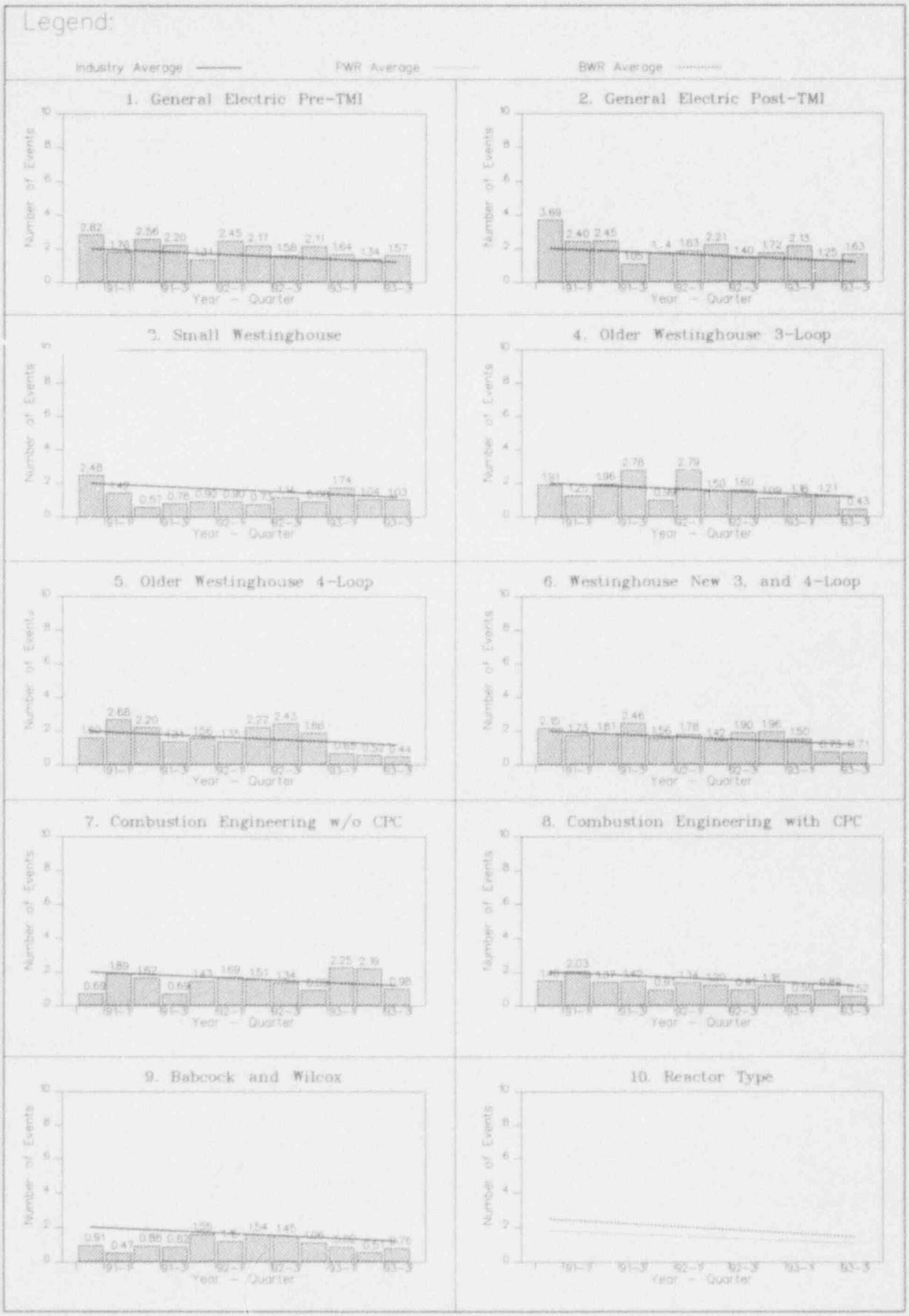


Figure 12. Peer group average number of administrative cause code during Shutdowns (Normalized for the number of days in Shutdown)

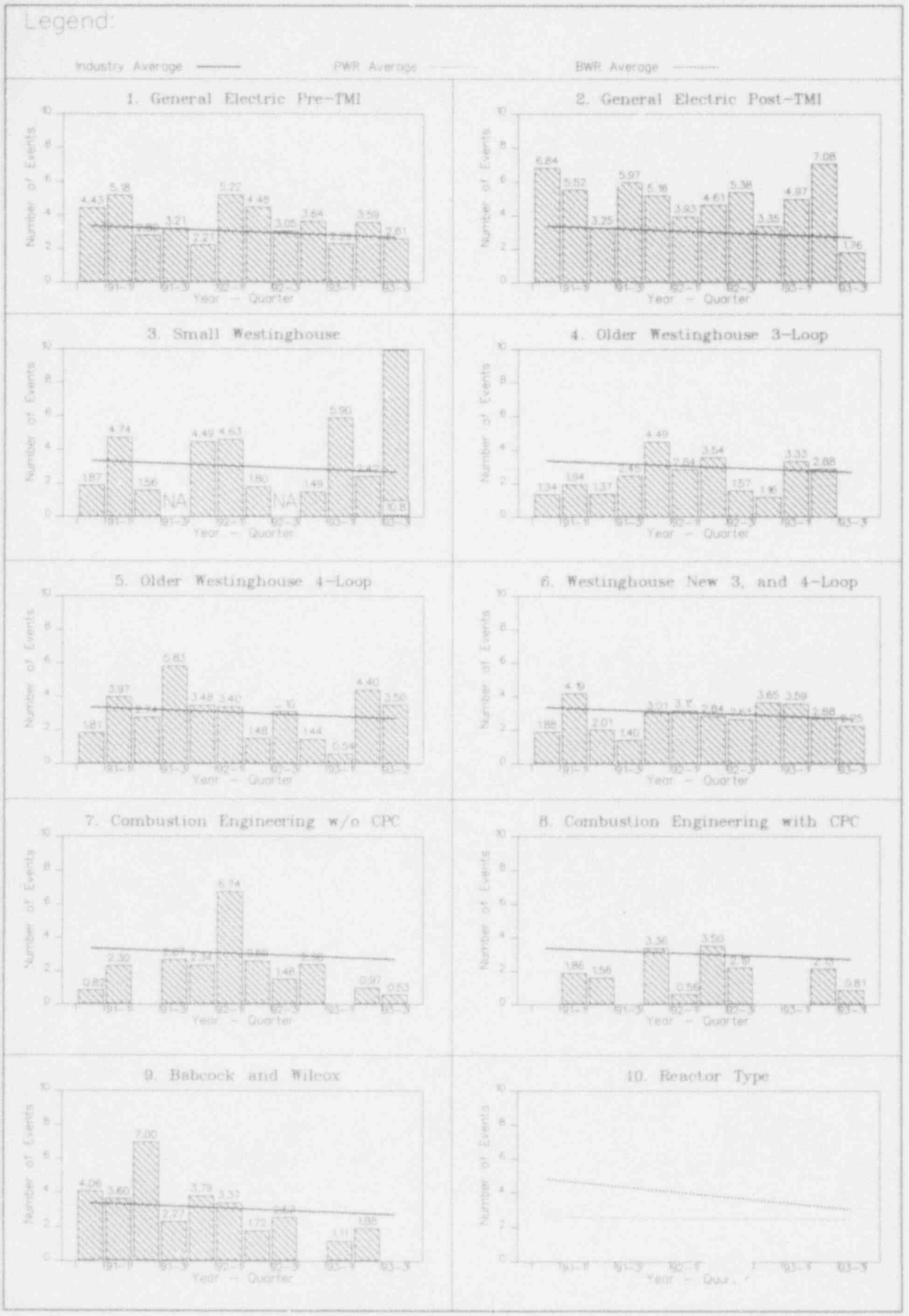


Figure 13. Peer group average number of licensed operator error cause code during Operations and Startup (Normalized for the number of days in Operations and Startup)

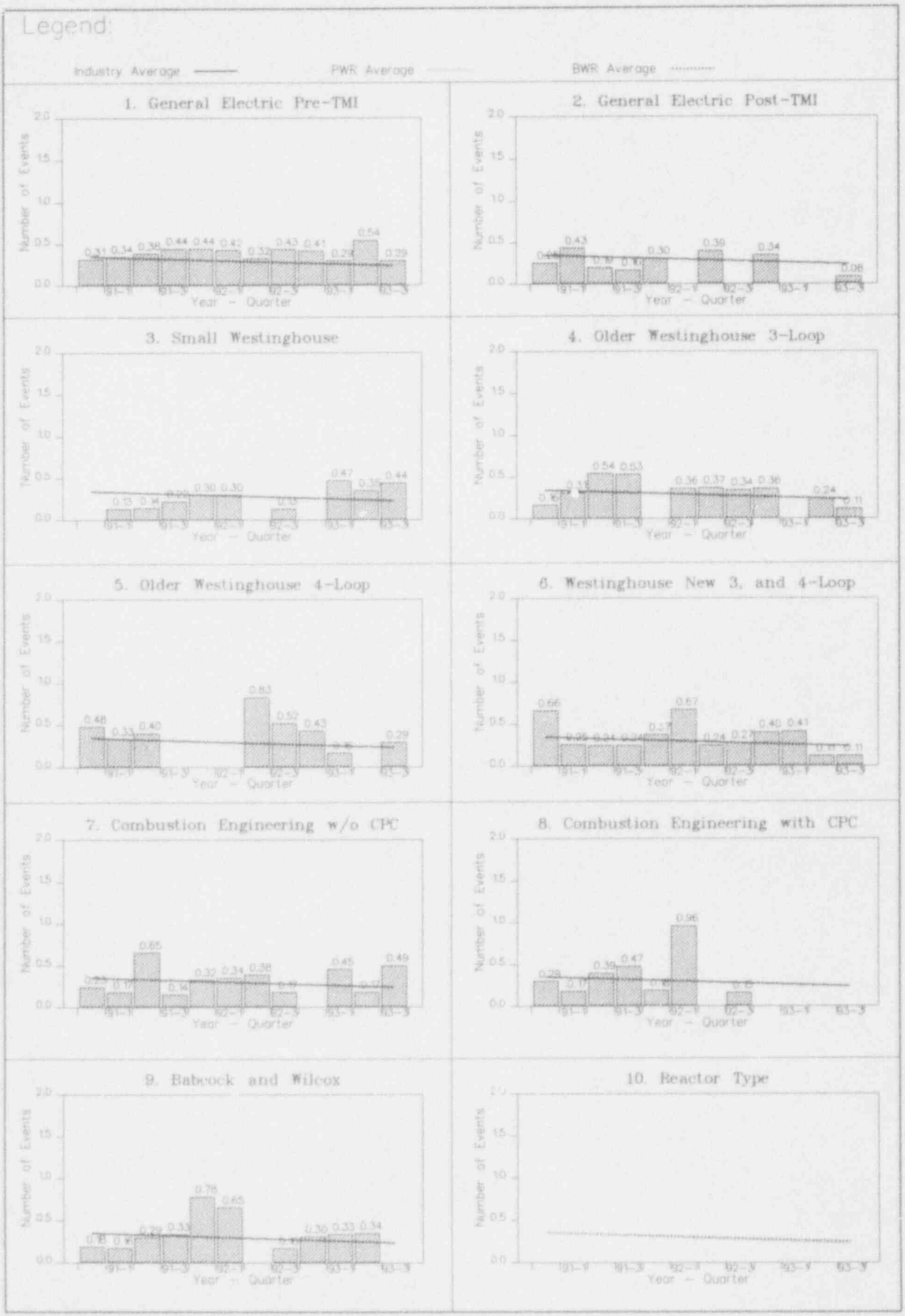


Figure 14. Peer group average number of licensed operator error cause code during Shutdowns (Normalized for the number of days in Shutdown)

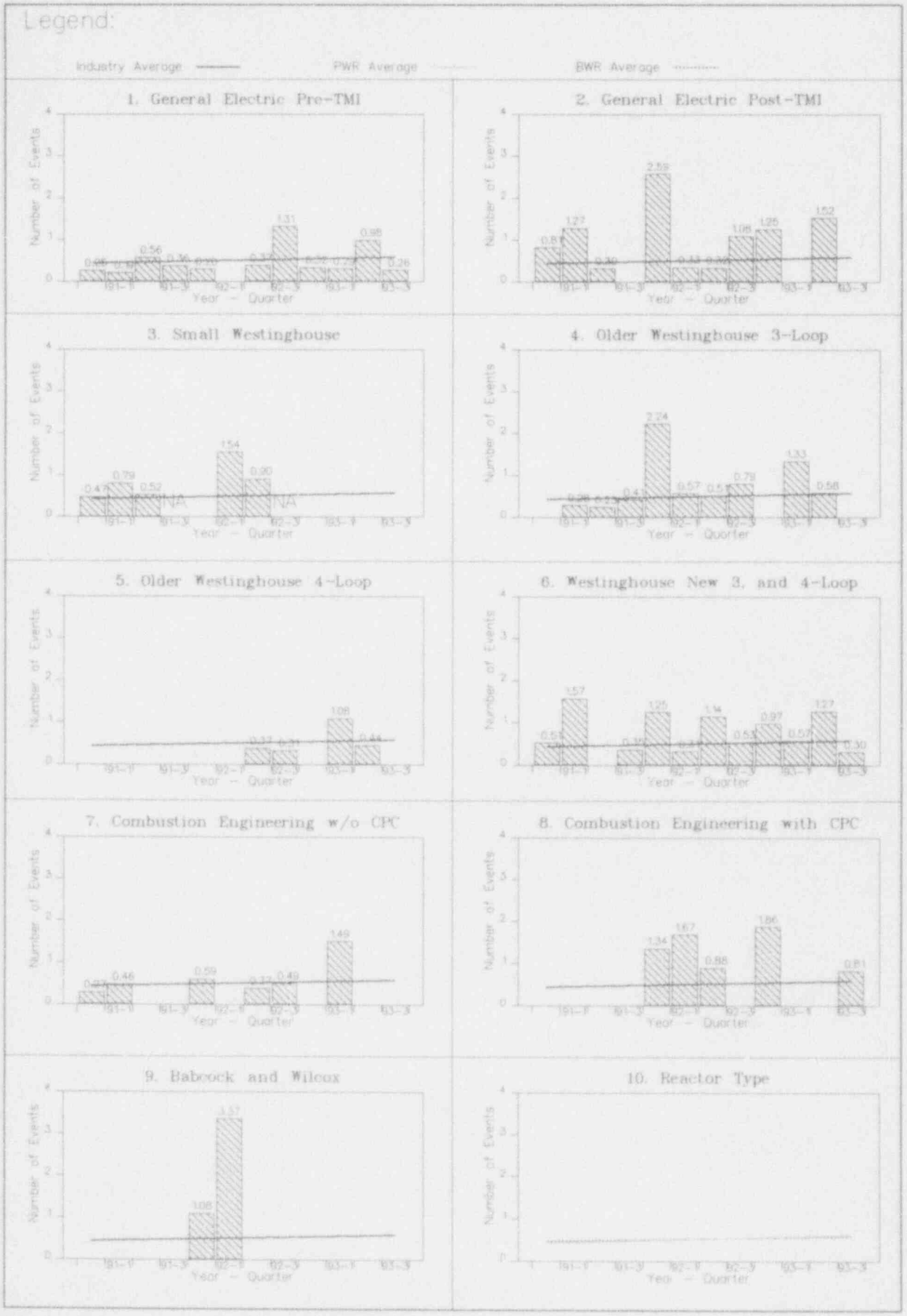


Figure 15. Peer group average number of other personnel error cause code during Operations and Startup (Normalized for the number of days in Operations and Startup)

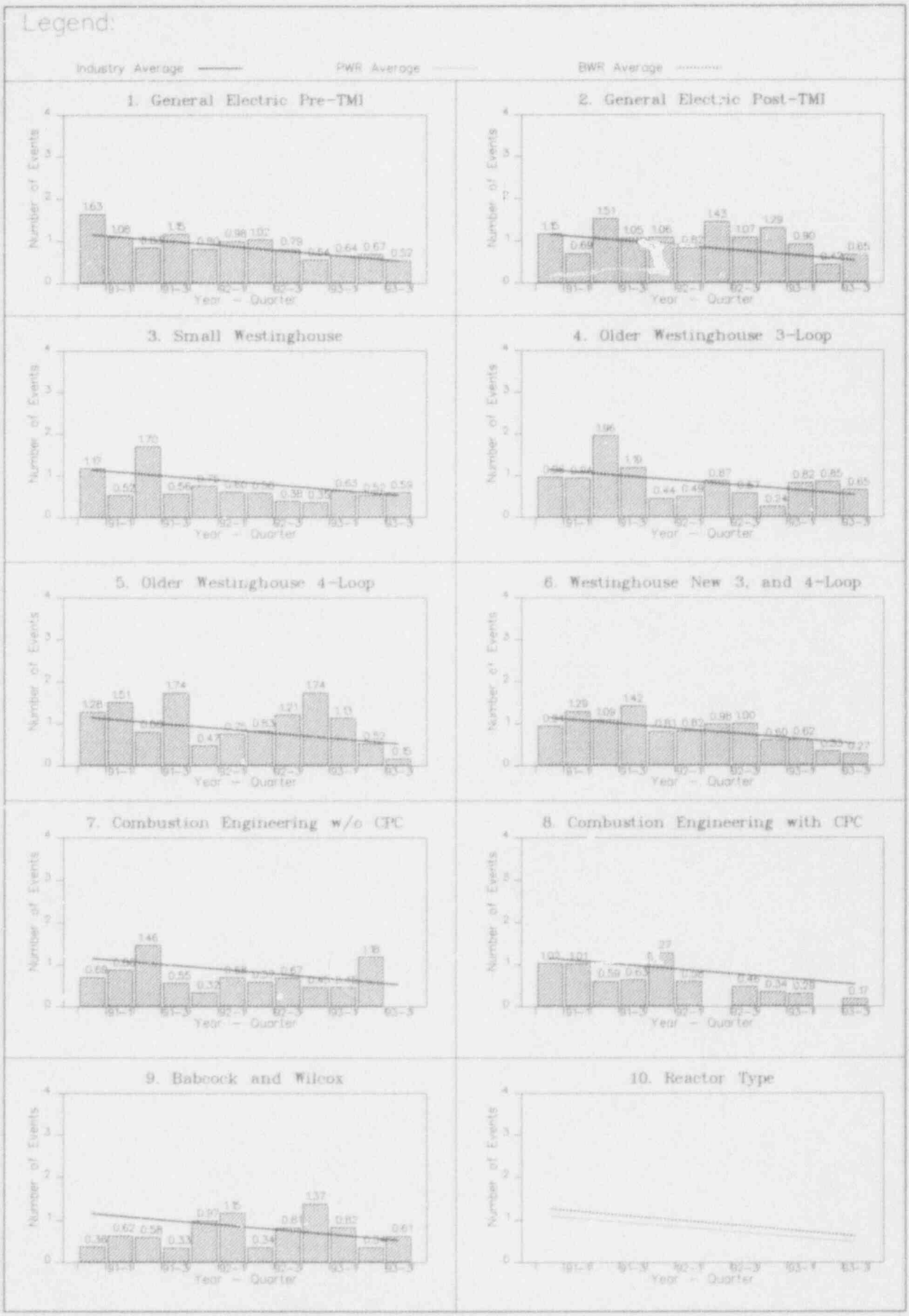


Figure 16. Peer group average number of other personnel error cause code during Shutdowns (Normalized for the number of days in Shutdown)

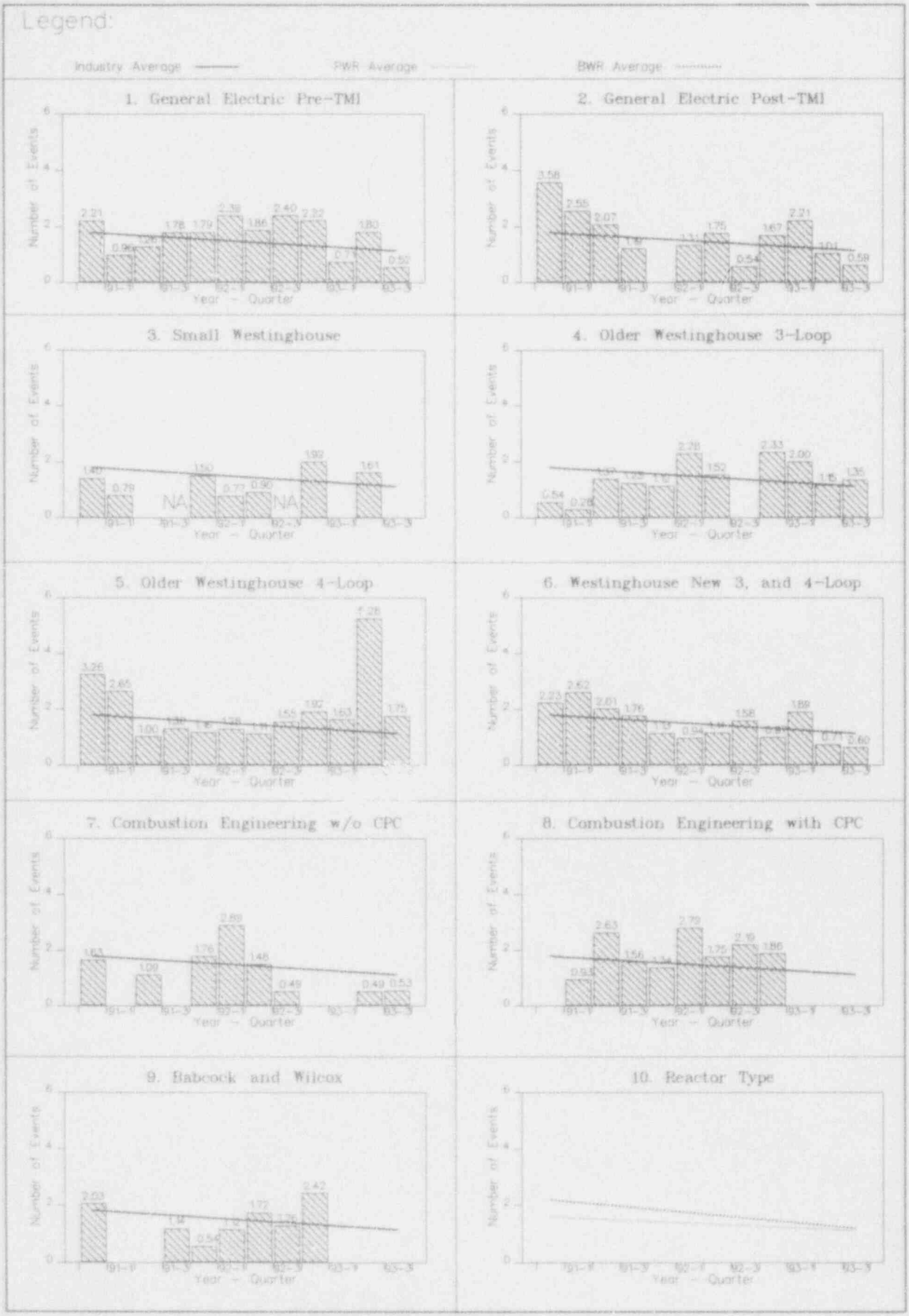


Figure 17. Peer group average number of maintenance cause code during Operations and Startup (Normalized for the number of days in Operations and Startup)

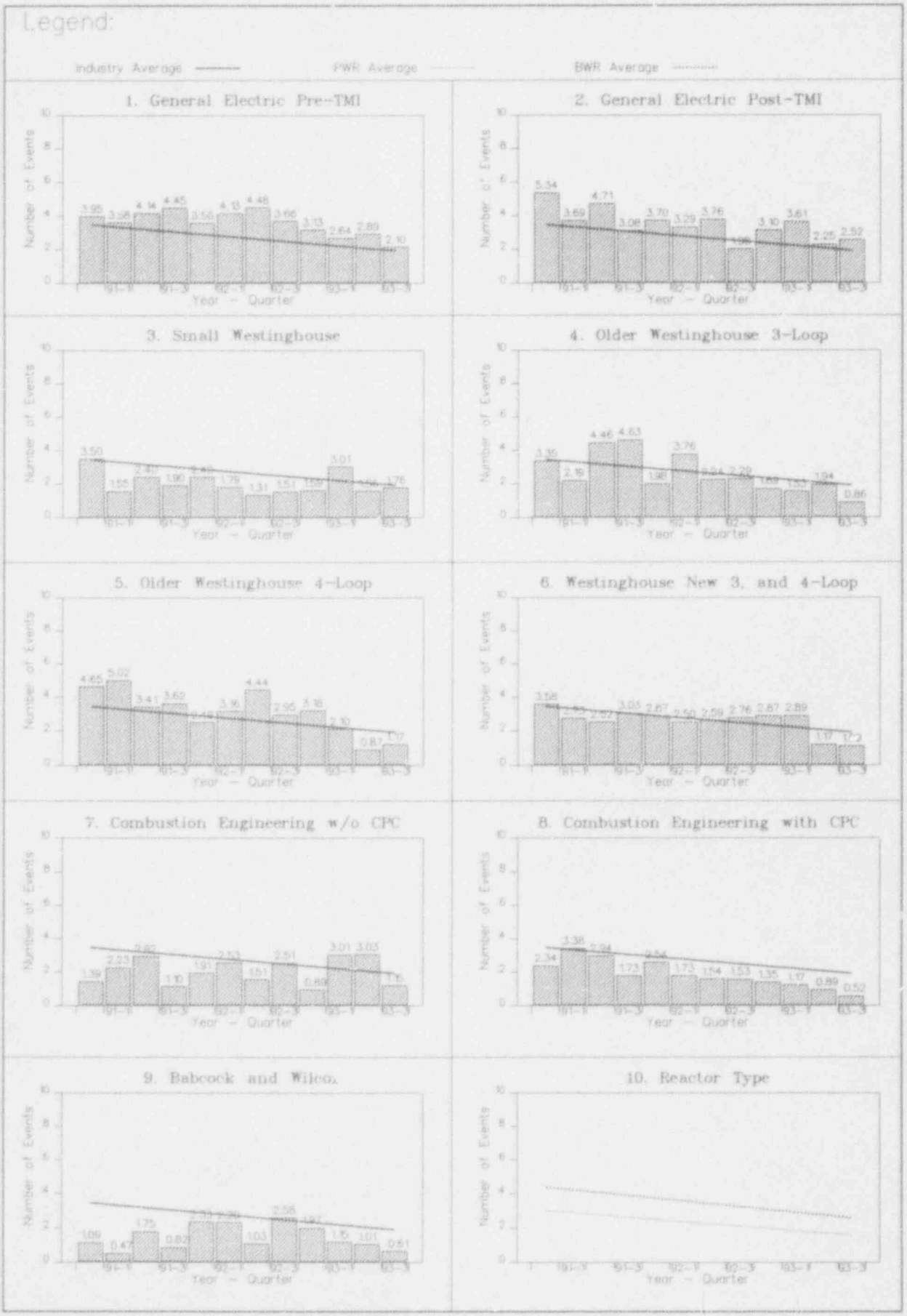


Figure 18. Peer group average number of maintenance cause code during Shutdowns (Normalized for the number of days in Shutdown)

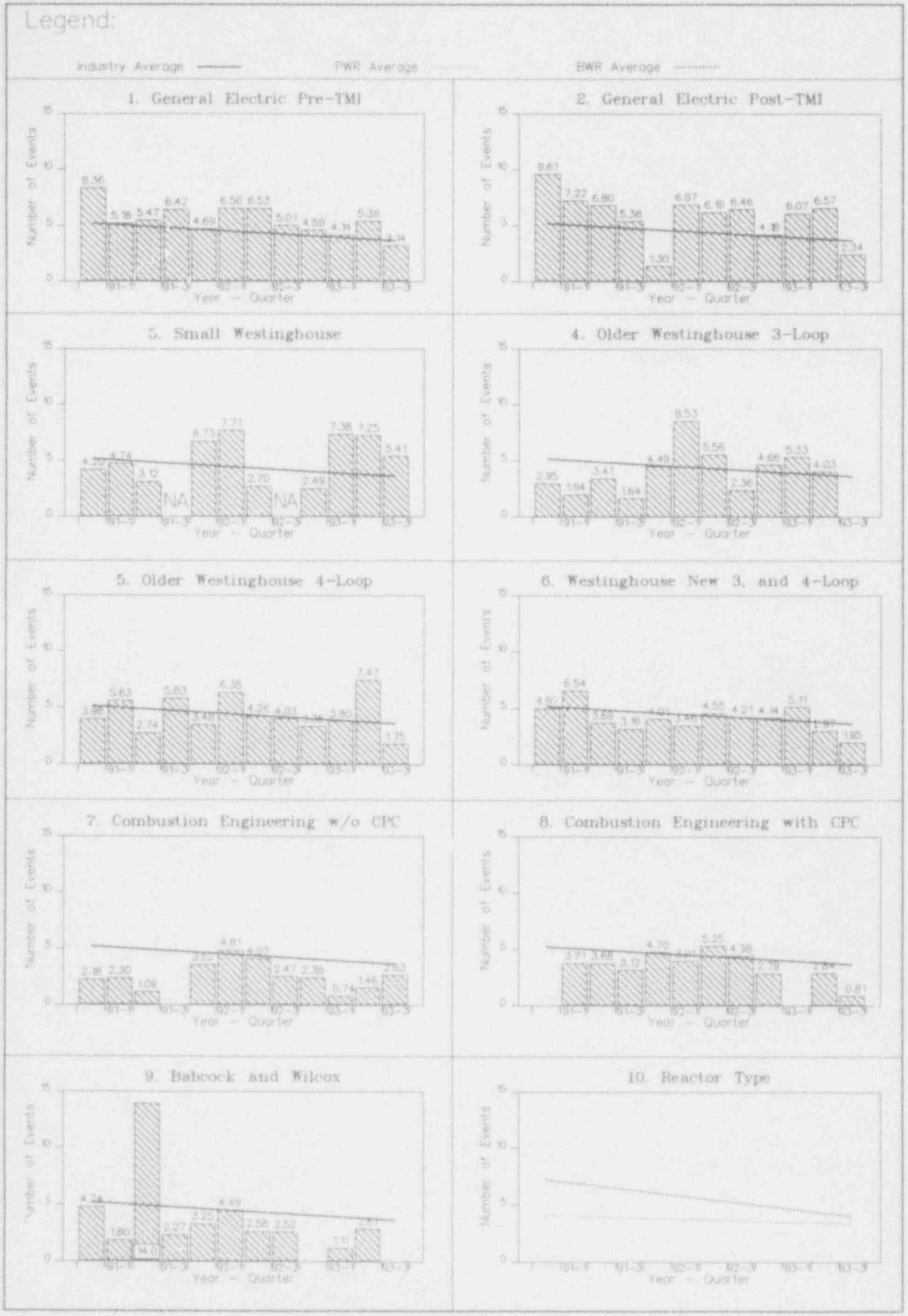


Figure 19. Peer group average number of design cause code during Operations and Startup (Normalized for the number of days in Operations and Startup)

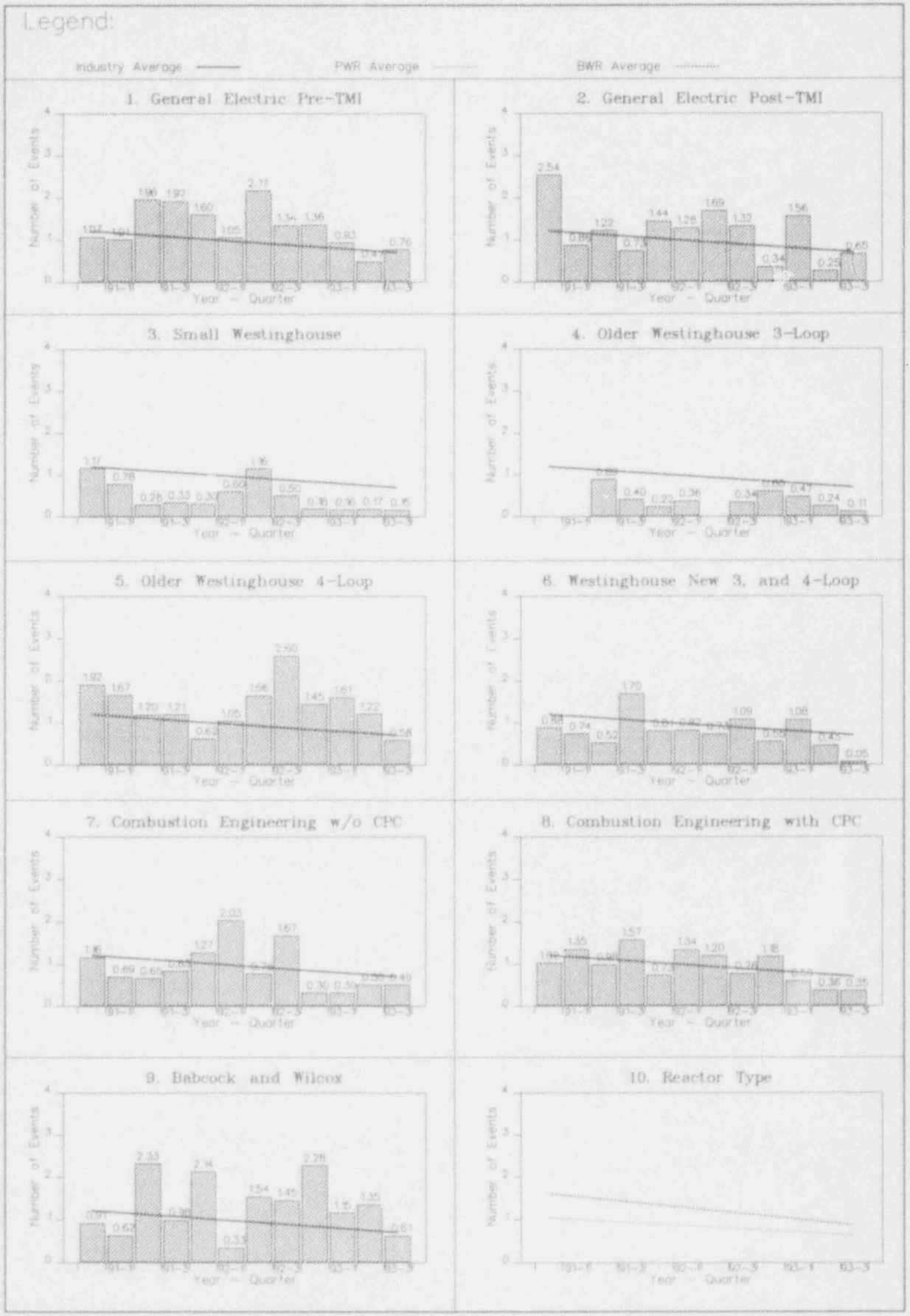


Figure 20. Peer group average number of design cause code during Shutdowns (Normalized for the number of days in Shutdown)

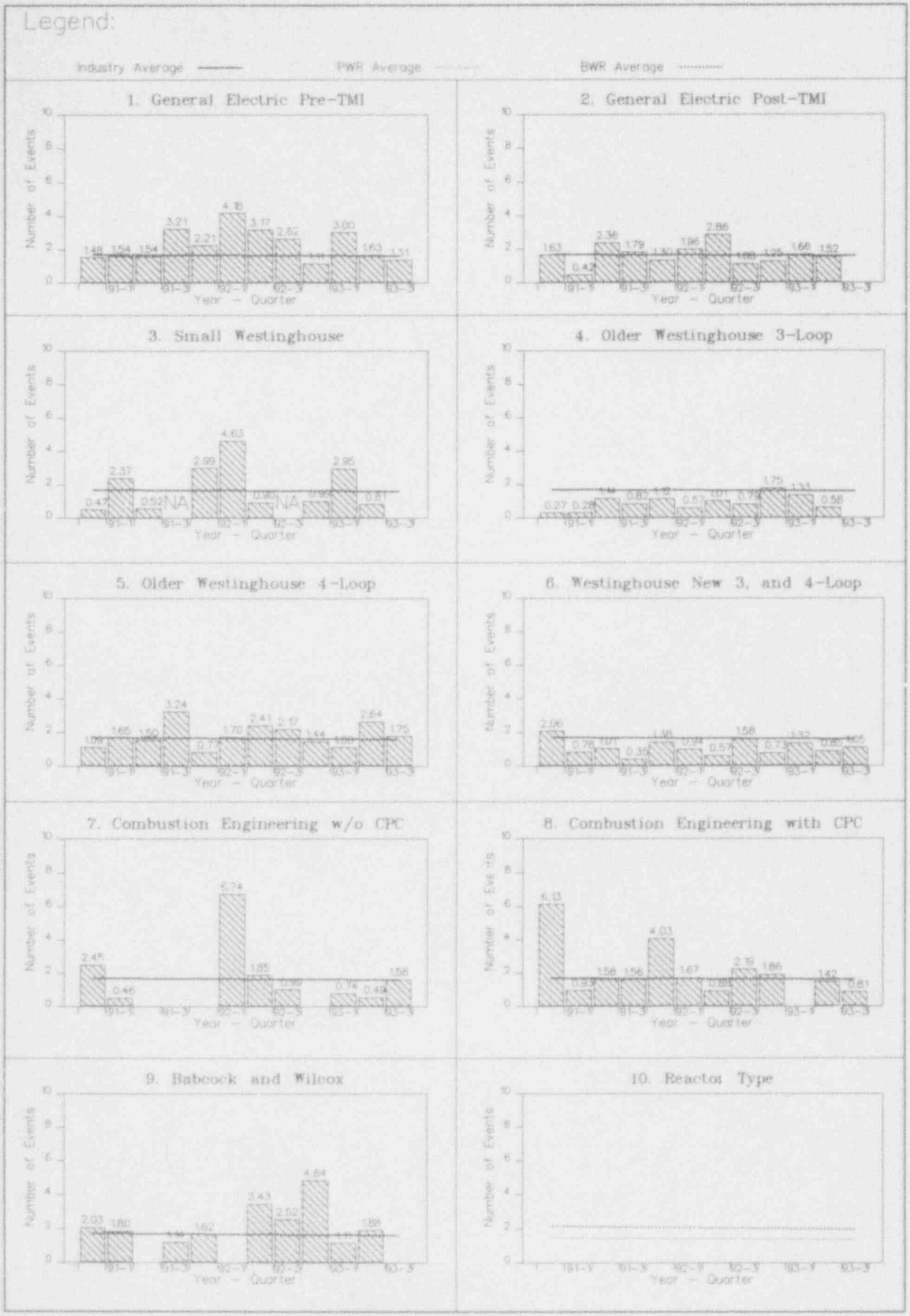


Figure 21. Peer group average number of miscellaneous cause code during Operations and Startup (Normalized for the number of days in Operations and Startup)

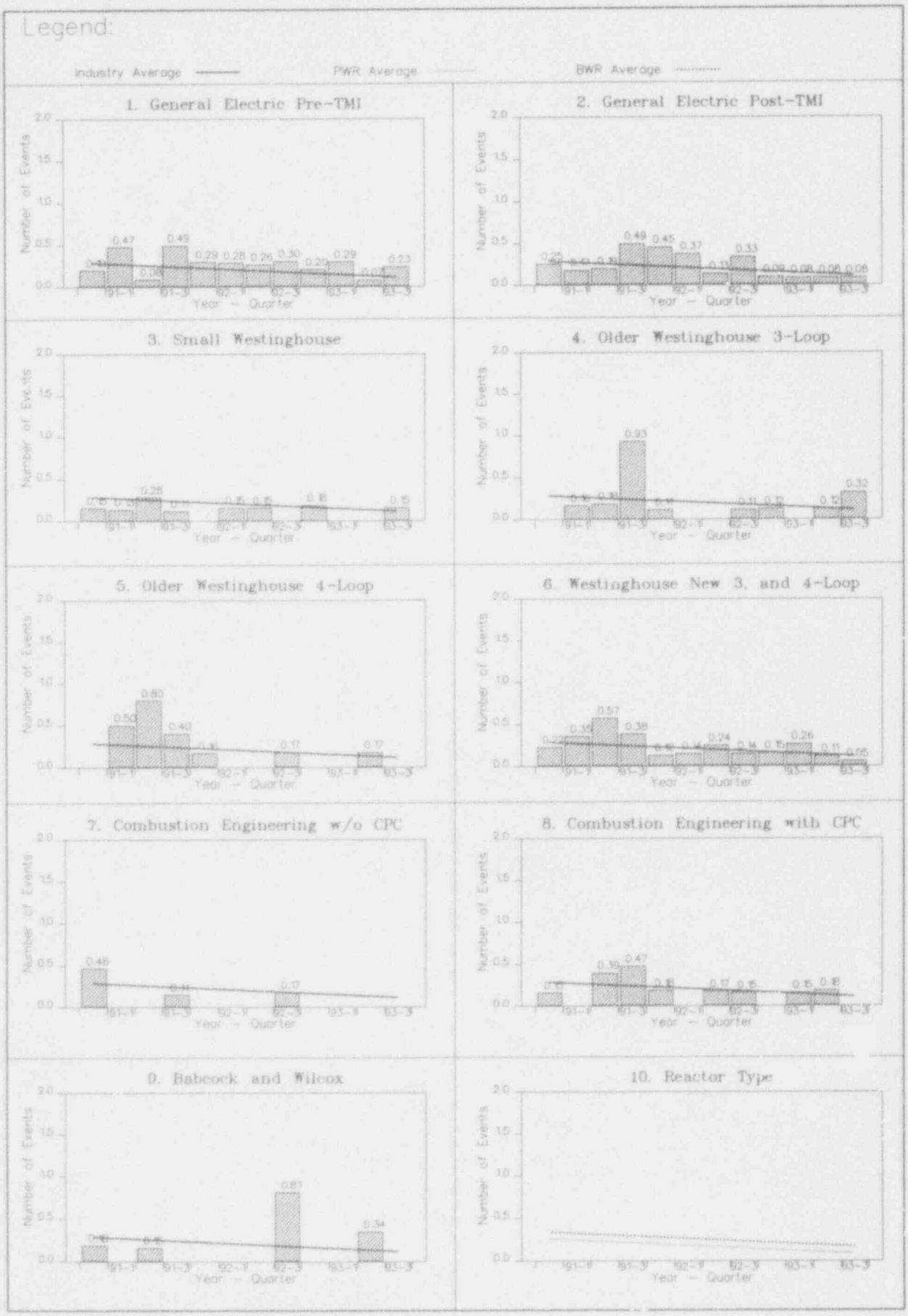
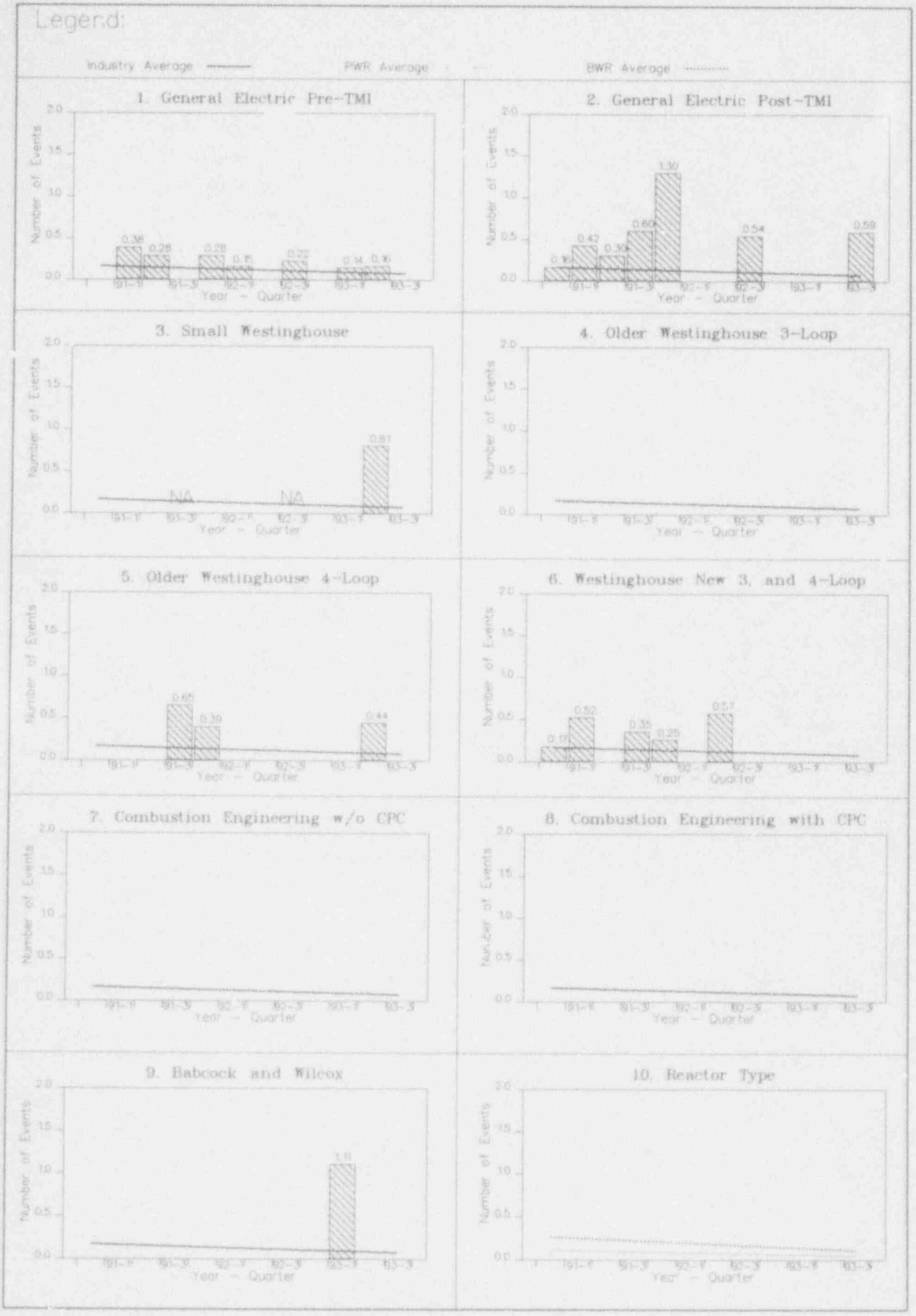


Figure 22. Peer group average number of miscellaneous cause code during Shutdowns (Normalized for the number of days in Shutdown)



UNITED STATES
NUCLEAR REGULATORY COMMISSION

ANNOUNCEMENT NO. 200

DATE: November 28, 1989

TO: All NRC EMPLOYEES

SUBJECT: REVISED GUIDANCE ON THE USE OF PERFORMANCE INDICATORS

This announcement revises the earlier guidance of NRC Announcement 30, dated February 5, 1988, regarding the use of the results of the NRC Performance Indicator Program. All NRC employees shall adhere to the following guidance.

The Performance Indicator Program provides an additional view of operational performance and enhances our ability to recognize areas of poor and/or declining safety performance of operating plants. However, it is only a tool and is to be used in conjunction with other tools, such as the results of routine and special inspections and the systematic assessment of licensee performance (SALP) program, for providing input to NRC management decisions regarding the need to adjust plant-specific regulatory programs.

It should be recognized that performance indicators have limitations and are subject to misinterpretation. Therefore, caution is warranted in the interpretation and use of the data. The application of performance indicators for purposes and in manners other than those stated above will be counter to the NRC objective of ensuring operational safety. To avoid such situations, the following specific directives are provided:

1. The Performance Indicator Program for operating reactors is a single, coordinated, overall NRC program under the direction of AEOD. NRC offices other than AEOD should not deviate from the NRC program without written permission of the EDO or the Director, AEOD.

2. Performance indicators are intended as a tool for senior NRC management to monitor trends in overall performance for a given plant. The performance indicators for a given plant should be viewed as a set. When viewed as a set, the performance indicators provide an additional measure of plant operational performance. However, they should not be used in communications with licensees as a measure of performance level.

3. Performance indicators are intended to be one of several tools for use by senior NRC management in decision-making regarding plant-specific regulatory programs. Senior management in each NRC office should have access to performance indicators for their assigned unit(s). Performance indicators are not to be overemphasized in relation to other measures of safety performance. For this reason, no regulatory action should be taken on the basis of Performance Indicator Program results alone.

4. Performance indicators do not provide a valid basis for ranking individual nuclear power plants and should not be presented in such a way as to imply "problem facility" status for individual plants.

5. The Performance Indicator Program is separate and distinct from the SALP program, although it is recognized that the indicators have relationships in varying degrees to SALP functional areas. Indicators, such as failures of a plant's safety systems or frequent forced outages due to equipment failures, may be symptomatic of safety problems. Thus, the staff may recognize events and failures captured by certain indicators in SALP discussions and reports, but these SALP references are to be based on the underlying causes of poor performance and not on the results of the Performance Indicator Program, either individually or as a set. Regional Administrators should ensure that our decision-making process adheres to this guidance, especially in SALP discussions and documentation.

6. NRC senior management should bear in mind when evaluating performance indicator results that the indicators are assessment tools that aid in identification of unanticipated performance, and that the underlying causes should be carefully assessed, evaluated, and understood (factoring in other available information).

7. Quarterly compilations of Performance Indicator Program results should be placed in the Public Document Room following dissemination to NRC management and the Commission.

It should be recognized that in conducting reviews, inspections, and evaluations of plants, it is often necessary to rely on plant data. Such information has been routinely used in our SALP, safety evaluation reports, and technical evaluation reports. The foregoing policy is not intended to change this process.

NRC staff must be sensitive to inappropriate pressure from any source which causes licensee personnel at individual nuclear power plants to "manage the indicators" or to take any actions that are contrary to plant safety because of performance indicators, individually or as a set (such as inhibiting reactor trips). Any such instances should be promptly communicated to appropriate licensee management and brought to NRC management attention.

James M. Taylor
Acting Executive Director
for Operations

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ANALYSIS OF THE PERFORMANCE INDICATOR DATA THROUGH SEPTEMBER 1993

1. INTRODUCTION

This U.S. Nuclear Regulatory Commission (NRC) report presents performance indicator data, accounting for the different operational conditions, through September 1993 for 109 reactors. Data for Comanche Peak 2 are included for the first time in this report. There are eight NRC Performance Indicators for Operating Commercial Nuclear Power Plants: (1) automatic scrams while critical, (2) safety system actuations, (3) significant events, (4) safety system failures, (5) forced outage rate, (6) equipment forced outages per 1000 commercial critical hours, (7) collective radiation exposure, and (8) cause codes.

This report is based on performance indicator data that are extracted from Licensee Event Reports (LER) submitted in accordance with 10 CFR 50.73, immediate notifications to the NRC Operations Center in accordance with 10 CFR 50.72, monthly operating reports in accordance with plant technical specifications, and screening of operating experience by NRC staff. Radiation exposure data are obtained from the Institute of Nuclear Power Operations (INPO). Graphical presentations of each plant's data, including trends and deviations analyses, are provided in Part I of this report; Part II provides tabulated summaries of the data. In both volumes, the trends and deviations analyses and tabulated summaries have been presented and calculated accounting for the plant's operational conditions.

2. BACKGROUND

Since May 1986, an interoffice task group has been working to develop an overall NRC program for using quantitative indicators of nuclear power plant safety performance. In July and August of 1986, the group conducted a trial program for 50 plants with 17 prospective performance indicators. For the most part, this trial program used data through calendar year 1984. The group then selected eight performance indicators to be recommended as the best set for initial implementation. One of these, corrective maintenance backlog, was deleted by the staff following consideration of industry comments.

In October 1986, a prototype report was prepared by expanding the trial program data to 100 operating reactors and including the data through the first half of 1986. The staff's recommended program, the task group report, and the prototype report were documented in SECY-86-317, "Performance Indicators", dated October 28, 1986. The Commission was briefed on the staff's recommended program in November 1986, and approved the implementation of the program in December 1986, instructing the staff to delete the enforcement action index from the set of indicators. In February 1987, the first quarterly PI report was issued and provided to senior management. This report covered the calendar quarters 85-1 through 86-4. In May 1987, an annual collective radiation exposure indicator was incorporated into the first quarter 1987 report. This was later revised to a quarterly collective radiation exposure indicator and incorporated into the first quarter 1989 report. In 1989, as documented in SECY-89-046 and SECY-89-211, the staff proposed that a new performance indicator based on cause codes be added to the program. Through Staff Requirements Memoranda (SRM) dated March 15, 1989, and August 10, 1989, the Commission approved cause codes as a new singular performance indicator. The new cause code indicator was subsequently incorporated by the staff into the program beginning with the second quarter 1989 report. Beginning in December 1989, the impact of the plant's peer group and operational conditions on the performance indicators was assessed. The peer group/operational cycle methodology was developed and a trial period conducted in 1992. In SECY 92-425, the staff proposed official implementation of the enhanced methodology beginning with the first quarter 1993 report. This plan was approved by the Commission in March 1993.

3. DEFINITIONS OF THE PERFORMANCE INDICATORS

The performance indicator data presented in this report are categorized according to specific definitions. The definitions of the eight indicators currently in the program are provided below.

3.1 Automatic Scrams While Critical (Scrams)

This indicator monitors the number of unplanned automatic scrams that occurred while the affected reactor was critical. Examples of the types of scrams included in this indicator are those that resulted from unplanned transients, equipment failures, spurious signals, or human error. Also included are those that occurred during the execution of procedures in which there was a high chance of a scram occurring, but the occurrence of a scram was not planned. Scram data are primarily derived from 10 CFR 50.73 Licensee Event Report (LER) information and supplemented as necessary from 10 CFR 50.72 Immediate Notification reports. The reactor was "critical" if the report so states. Otherwise, criticality is determined from a detailed review of the other operational information. This indicator is similar to the unplanned automatic scrams per 7000 critical hours indicator of INPO.

3.2 Safety System Actuations (SSA)

Safety system actuations are manual or automatic actuations of the logic or equipment of either certain Emergency Core Cooling Systems (ECCS) or, in response to an actual low voltage on a vital bus, the Emergency AC Power System. Input for this indicator are derived from LERs and supplemented by 50.72 reports. In determining which events should be counted by this indicator, the following conventions are used:

1. Only actuations of the High Pressure Injection System, Low Pressure Injection System, or Safety Injection Tanks are counted for pressurized water reactors (PWRs). For boiling water reactors (BWRs), only actuations of the High Pressure Coolant Injection System, Low Pressure Coolant Injection System, High Pressure Core Spray System, or Low Pressure Core Spray System are counted. Actuations of the Reactor Core Isolation Cooling System are not counted.

2. Actuations of Emergency AC Power Systems are counted only if they were in response to an actual low voltage condition on a vital bus.

3. Logic actuations of any of the equipment associated with the specific ECCS or Emergency AC Power System are considered necessary and sufficient to constitute a data count. For example, if only a valve in a system is commanded to move to its emergency operational position, this is counted as an actuation. A pump does not have to be commanded to go to its emergency mode of operation and fluid does not need to be injected for an occurrence to be counted.

4. Only one ECCS actuation is counted in any one occurrence, even if multiple ECCS systems actuate during the occurrence. For example, actuation of both the High Pressure Injection and the Low Pressure Injection Systems at a PWR during the same occurrence counts as only a single ECCS actuation.

5. Only one emergency diesel generator (EDG) actuation is counted in any occurrence, even if multiple EDGs actuate during the occurrence. For example, actuation of all four EDGs at a unit counts as only a single actuation for that occurrence.

6. Occurrences involving actuations of both an EDG on a dead bus and an ECCS are given a count of two, one for the EDG actuation and one for the ECCS actuation.

7. At multi-unit sites that share equipment (e.g., a swing EDG or shared buses), actuations are counted and assigned to the unit at which the actuation signal or loss of power originated. If the signal source cannot be associated with one unit, the actuation is assigned to both units.

3.3 Significant Events (SE)

Significant events are those events identified by NRC staff through detailed screening and evaluation of operating experience. The screening process includes the daily review and discussion of all reported operating reactor events, as well as other operational data such as special tests or construction activities. An event identified from the screening process as a significant event candidate is further evaluated to determine if any actual or potential threat to the health and safety of the public was involved. Examples of some of the types of criteria considered during the significant event screening and evaluations are summarized as follows:

1. Degradation of important safety equipment. Events considered under this category include situations that had the potential to reduce or actually reduced the operational capability of equipment. One example is the identification of a common cause failure mechanism, which could cause redundant components or multiple independent components to fail in response to a test or actual demand signal. This category does not include such items as a missed surveillance test, if the equipment was subsequently tested and determined to be operable.

2. Unexpected plant response to a transient. Events considered under this category include situations in which changes in reactor parameters represent unanticipated reductions in margins of safety. For example, a rapid plant cooldown following a reactor trip exacerbated by a balance-of-plant malfunction or an undesirable system interaction. This category does not include minor differences in predicted and observed conditions that can be reasonably explained by instrument errors or modeling techniques and simplifying assumptions.

3. Degradation of fuel integrity, primary coolant pressure boundary,important associated structures. Events considered under this category include those of similar character to those identified in item 1 above, related to nuclear fuel, reactor coolant system containment, or important plant structures.

4. Scram with complication. Events considered under this category are scrams that occurred while the affected reactor was critical, followed by an equipment failure, malfunction, or personnel error. The failure, malfunction, or error generally does not include those that lead to or directly caused the scram. Failures that both cause the scram and reduce the capability of the mitigating system (e.g., electric power, instrument air, other auxiliary support functions, or deficient procedures) are counted.

   Examples of equipment failure/malfunctions include:

   - Mitigating system failures - Loss of redundancy due to single failures, reduced capacity, or margin. This includes components or trains out of service for maintenance.
   - Failure adding to complexity of event - Erroneous control system responses, electrical switching difficulties, mitigating system and key plant parameter instrumentation malfunctions/failures.
   - Additional event initiators - Stuck-open primary or secondary relief/safety valves, pipe breaks, and operating wrong equipment/trains.

   Examples of personnel errors include:

   - Improper control or termination of mitigating system.
   - Misdiagnosis of the event or failure to follow procedures.

In addition to the situations described in items 1 through 4 above, other broad categories considered for significant events include:

5. Unplanned release of radioactivity. Events considered under this category include unplanned releases of radioactivity that had the potential to exceed or actually exceeded the limits of the Technical Specifications or Regulations.

6. Operation outside the limits of the Technical Specifications. Events considered under this category include occurrences when plant operation was conducted inconsistent with the license requirements. This category applies to risk significant deviations and most likely does not include incidents involving missed surveillances, small errors in setpoints, or other administratively inoperable conditions.

7. Other. Events considered under this category include a series of events or recurring incidents that alone are not significant but when considered collectively represent ineffective corrective actions, or a deficiency in the plant hardware or administrative programs.

3.4 Safety System Failures (SSF)

Safety system failures are any events or conditions that could prevent the fulfillment of the safety function of structures or systems. If a system consists of multiple redundant subsystems or trains, failure of all trains constitutes a safety system failure. Failure of one of two or more trains is not counted as a safety system failure. The definition for the indicator paralleis NRC reporting requirements in 10 CFR 50.72 and 10 CFR 50.73. The following is a list of the major safety systems, subsystems, and components monitored for this indicator:

Accident Monitoring Instrumentation
Auxiliary (and Emergency) Feedwater System
Combustible Gas Control
Component Cooling Water System
Containment and Containment Isolation
Containment Coolant Systems
Control Room Emergency Ventilation System
Emergency Core Cooling Systems
Engineered Safety Features Instrumentation
Essential Compressed Air Systems
Essential or Emergency Service Water
Fire Detection and Suppression Systems
Isolation Condenser
Low Temperature Overpressure Protection
Main Steam Line Isolation Valves
Onsite Emergency AC & DC Power w/Distribution
Radiation Monitoring Instrumentation
Reactor Coolant System
Reactor Core Isolation Cooling System
Reactor Trip System and Instrumentation
Recirculation Pump Trip Actuation Instrumentation
Residual Heat Removal Systems
Safety Valves
Spent Fuel Systems
Standby Liquid Control System
Ultimate Heat Sink

3.5 Forced Outage Rate (FOR)

Forced outages are those required to be initiated no later than the end of the weekend following the discovery of an off-normal condition. Based on the data provided in the monthly operating reports, the forced outage rate is the number of forced outage hours divided by the sum of unit service hours (i.e., generator on-line hours) and forced outage hours.

3.6 Equipment Forced Outages per 1000 Commercial Critical Hours (EFO)

This indicator is the number of forced outages caused by equipment failures per 1000 critical hours of commercial reactor operation. It is the inverse of the mean time between forced outages caused by equipment failures. The inverse number was adopted to facilitate calculation and display. The source of these data are the same as that for the forced outage rate.

3.7 Collective Radiation Exposure

This indicator is the total radiation dose accumulated by unit personnel. Prior to the third quarter of 1992, values at multi-unit sites were reported as site averages, with the exception of the Indian Point and Millstone sites which reported individual unit values. Beginning with the third quarter of 1992, some multi-unit sites reported site average values, while other multi-unit sites reported individual unit values. A note at the bottom left corner of the Quarterly Data charts identifies which method is used. The radiation exposure data are obtained from INPO and because of the techniques employed in gathering the data, these data lag the other performance indicator data by one quarter.

3.8 Cause Codes

Cause codes are intended to identify possible deficiencies in six programmatic categories. The cause code data are developed using the NRC's Sequence Coding and Search System (SCSS) database. Any event can have any or all of the cause codes assigned to it, but only one of each type can be assigned to any one event. This database is developed from all LERs, not just those associated with specific events monitored by the other PIs. The programmatic categories and their definitions are:

3.8.1 Administrative Control Problems

Management and supervisory deficiencies that affect plant programs or activities are included in this category. This category covers the implementation of the numerous functional disciplines necessary to operate a nuclear power facility such as operations, maintenance, licensing, design, health physics, etc. Examples of administrative control problems include poor planning, breakdown or lack of adequate management or supervisory control, inadequate interdepartmental coordination, poor communication between supervisors and staff or among departments, deficiencies resulting in weak or incorrect operating, surveillance or testing procedures, and departures from program requirements. The administrative control problems category is used if there is evidence that a particular problem is recurring and no effective corrective action has been taken. Specific examples are:

- No corrective action after a design problem is discovered.
- QA/QC problems.
- Unauthorized work activity.
- Unqualified personnel performing plant tasks.
- 10 CFR 50.59 review not performed.
- Personnel contamination due to lack of warning signs.
- Technical Specification surveillance not scheduled.
- Inadequate procedure resulting in inadvertent safety injection.

3.8.2 Licensed Operator Errors

This cause category captures errors of omission or commission by licensed reactor operators during plant activities. These errors may initiate events or may be committed during the course of an event. Licensed operator errors typically occur due to carelessness, lack of experience or training, fatigue, stress, attitude, or poor work habits. Improper supervision is also included whenever the event is the result of improper instructions given by a licensed operator, such as an operations supervisor or control room shift supervisor. Excluded from this category are administrative control problems, such as incorrect procedures or inadequate planning activities, which caused an operator to take inappropriate actions. Examples of licensed operator errors include:

- Operator withdrew control rods out of order.
- Operator failed to bypass scram discharge volume high level trip following a trip. A second trip resulted.

3.8.3 Other Personnel Errors

This programmatic cause category captures errors of omission or commission committed by non-licensed personnel involved in plant activities. Included in this category are plant staff (technicians, maintenance workers, equipment operators) and contract personnel. Not included in this category are administrative control problems, such as incorrect procedures or inadequate planning activities, which caused personnel to take inappropriate actions. This cause category is used in conjunction with the Maintenance Problems category when an event is the result of a personnel error involved with a maintenance activity. Examples of other personnel errors include:

- Test personnel inadvertently shorted two cables while performing test.
- Maintenance personnel omitted two fasteners while reassembling valve operator.
- Steps in surveillance procedure performed out of order.

3.8.4 Maintenance Problems

The intent of the maintenance problems cause category 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. The deficiencies noted within this category generally lead to inadequate or improper upkeep and repair of plant equipment and systems or inadequate programs to monitor equipment and plant performance as necessary to prevent hardware failures.

This is the broadest of all categories and is intended to identify areas where improved plant performance is possible through a program which includes such things as increased attention to detail, more frequently performed surveillances, or the use of better trained personnel. The Maintenance Problems Cause category is used to track the performance of plant management's capability to properly repair failed equipment and to preclude equipment failures through improved preventative maintenance programs. Additionally, as an indication of potential maintenance problems, hardware failures which cannot be readily attributable to any preventable cause are also included in this category.

Maintenance related errors are often coupled with other cause categories such as Other Personnel Errors or Administrative Control Problems. The Maintenance Problems category is used in conjunction with other categories when an error occurs while a maintenance, surveillance, or test activity is in progress, whether the error was the result of a deficient procedure or a personnel error.

3.8.5 Design/Construction/Installation/Fabrication Problems

This category covers a full range of programmatic deficiencies in the areas of design, construction, installation, and fabrication. It is used in conjunction with other cause categories when necessary to capture all contributors to the event. One exception to the use of additional categories is that since the very nature of the design process implies a personnel error, it is not necessary to also included one of the personnel error categories for the design error itself.

Examples of the problems included in this category are:

- Check valve installed backwards resulted in RHR overpressurization when isolation valve was opened.
- Transmitter sensing lines reversed.
- Loss of control power due to underrated fuse.
- Use of wrong seal material resulted in solenoid malfunction.
- Equipment not qualified for the environment.
- Defect discovered in pump casing attributed to a manufacturing process.

The design modification process is an ongoing task at nuclear power plants. Examples of design modification problems included in this category are:

- Incorrect interpretation of plant drawings led to an incorrect design modification package.
- Incorrect modification package caused the installation of a component in an unfavorable configuration (e.g., incorrect wiring, incorrect location of instrumentation tubing, valve installed in wrong line, etc.).
- Post modification test procedure is incorrect due to incorrect information in the design modification package.

This cause category may be used in conjunction with other cause categories such as administrative control problems.

3.8.6 Miscellaneous

This category is used for spurious or one-time failures of electronic piece-parts and failures due to meteorological conditions such as lightning, ice, high winds, etc. Electronic components which are included in this category are circuit cards, rectifiers, bistable, fuses, capacitors, diodes, resistors, transducers, amplifiers, and computation modules.

This category does not include failures that can be attributed to other problems, such as maintenance problems or design/construction/installation/fabrication problems. Additionally, failures of mechanical equipment for which a cause can not be specifically identified are included in the maintenance problems category.

Examples of electronic piece-part or environmental-related failures include:

- Flashovers occurred in switchyard due to high wind and rain from a thunderstorm.
- Capacitor failure in instrument power supply caused loss of signal from containment leakage detection radiation monitor.
- Surges from lightning strike close to plant propagated through the plant electrical system, causing the main generator to trip.

4. PEER GROUP AND OPERATIONAL CYCLE DEFINITIONS

The performance indicator data are categorized by peer group and operational condition as discussed in the following sections.

4.1 Peer Group Listing

The plants have been categorized into nine peer groups based on NSSS vendor, product line, generating capacity, and licensing date. A tenth peer group includes all new plants since January 1, 1987. The following list presents the peer groups

Pre-TMI General Electric plants

Big Rock Point
Browns Ferry 1
Browns Ferry 2
Browns Ferry 3
Brunswick 1
Brunswick 2
Cooper Station
Dresden 2
Dresden 3
Duane Arnold
Fitzpatrick
Hatch 1
Hatch 2
Millstone 1
Monticello
Nine Mile Pt. 1
Oyster Creek
Peach Bottom 2
Peach Bottom 3
Pilgrim
Quad Cities 1
Quad Cities 2
Vermont Yankee

Post-TMI General Electric plants

Clinton 1
Fermi 2
Grand Gulf
Hope Creek
LaSalle 1
LaSalle 2
Limerick 1
Limerick 2
Nine Mile Pt. 2
Perry
River Bend
Susquehanna 1
Susquehanna 2
Wash. Nuclear 2

Combustion Engineering with core protection calculators plants

Arkansas 2
Palo Verde 1
Palo Verde 2
Palo Verde 3
San Onofre 2
San Onofre 3
Waterford 3

Combustion Engineering without a core protection calculator plants

Calvert Cliffs 1
Calvert Cliffs 2
Fort Calhoun
Maine Yankee
Millstone 2
Palisades
St. Lucie 1
St. Lucie 2

All Babcock and Wilcox plants

Arkansas 1
Crystal River 3
Davis-Besse
Oconee 1
Oconee 2
Oconee 3
Three Mile Isl. 1

2-Loop and small 3 and 4-Loop Westinghouse plants

Ginna
Haddam Neck
Kewaunee
Point Beach 1
Point Beach 2
Prairie Island 1
Prairie Island 2
San Onofre 1
Yankee-Rowe

Older 3-Loop Westinghouse plants

Beaver Valley 1
Farley 1
Farley 2
North Anna 1
North Anna 2
Robinson 2
Surry 1
Surry 2
Turkey Point 3
Turkey Point 4

New 3- and 4-Loop Westinghouse plants

Beaver Valley 2
Braidwood 1
Braidwood 2
Byron 1
Byron 2
Callaway
Catawba 1
Catawba 2
Comanche Peak 1
Comanche Peak 2
Diablo Canyon 1
Diablo Canyon 2
Harris
McGuire 1
McGuire 2
Millstone 3
Seabrook
Sequoyah 1
Sequoyah 2
South Texas 1
South Texas 2
Summer
Vogtle 1
Vogtle 2
Wolf Creek

Older 4-Loop Westinghouse plants

Cook 1
Cook 2
Indian Point 2
Indian Point 3
Salem 1
Salem 2
Trojan
Zion 1
Zion 2

All New Plants since 1/1/87

Braidwood 1
Braidwood 2
Beaver Valley 2
Comanche Peak 1
Comanche Peak 2
Limerick 2
Palo Verde 3
Seabrook
South Texas 1
South Texas 2
Vogtle 1
Vogtle 2

4.2 Operational Cycle Definitions

The operational cycle methodology calculates the performance indicator trends and deviations in a manner that accounts for the different plant operational conditions. The operational cycle phases and phase types are defined as follows:

4.2.1 Operational Cycle Phases

The operational cycle begins when a plant recovers from a refueling outage (i.e., leaves cold shutdown) and ends when the plant is ready to leave cold shutdown after the next refueling outage. The operational cycle has been divided into five phases to facilitate event analysis. These phases give consideration to the different activities being conducted at the plant. The phases are defined as follows:

- Refueling outage begins when a plant enters cold shutdown for refueling and ends when the plant leaves cold shutdown to enter the startup phase.
- Startup begins when a plant leaves refueling and continues for 25 operating days. Non-refueling outage days are excluded from the startup phase.
- Power operations begins at the completion of the startup phase and continues until the pre-refueling phase begins. Non-refueling outage days are excluded from the power operations phase.
- Non-refueling outages are outages, other than refueling, that are 72 hours or longer in duration.
- Pre-refueling begins 25 operating days before a plant enters cold shutdown for a refueling outage and ends when the plant enters cold shutdown. Non-refueling outage days are excluded from the pre-refueling phase.

Regulatory shutdown days, where Commission approval is required for either restart or operation above low power, are excluded from all phases.

4.2.2 Operational Cycle Phase Types

The five phases are combined into two phase types - operations, consisting of the startup, power operations, and pre-refueling phases; and shutdown, consisting of the refueling and non-refueling outage phases. To accomplish this construction of operations and shutdown phase types, each plant's operating history must be partitioned. All refueling outages, and non-refueling outages 72 hours or more in length, are removed from the time sequence and, retaining their chronological order, are combined into the shutdown phase type. The remaining days, consisting of startups, power operations, and pre-refuelings, are brought together in chronological order to form the operations phase type. These two phase types are then treated as continuums for the purpose of calculating trends and deviations. Each of these continuums, while arranged chronologically, does not necessarily consist of consecutive calendar days, depending upon the plant's operating history.

5. DISPLAY OF PERFORMANCE INDICATOR DATA

The performance indicator data in this report are presented in charts and tables as discussed in the following sections.

5.1 Quarterly Data

Figures 7.1a through 7.109a provide individual charts of PI data for each plant, containing individual bars showing quarterly PI data values. The bars are shaded to identify the number of events that occurred during each phase type and startup phase. Except for the cause codes, each chart has three linear regression trend lines to provide a comparative performance level: one for industry average trends, or in the cases of the safety system failure and collective radiation exposure indicators by plant type (pressurized or boiling water reactor), one for peer group average trends, and one for plant trends. To present a picture of a plant's recent operating history, a profile showing periods of time when the plant was in the operations or shutdown phase type is provided at the top of the page.

5.2 Trends and Deviations

Figures 7.1b through 7.109b provide plant profiles of the trends and deviations calculated from the corresponding performance indicator count values. Each chart is subdivided into three parts: operations phase type (including startup), shutdown phase type, and forced outages (which are not a function of phase type). The "Plant Self-Trend" charts (short term trends) are based on the slope of a linear regression line plotted over each plant's data. The slope is divided by a scaling factor so that all performance indicator trend values are on the same scale. The "Deviations from Peer Group Median" charts (long term deviations) compare each plant's performance with the performance of its peers. These comparisons are made by subtracting a plant event rate from the peer group median event rate. The result is divided by a scaling factor so that all performance indicator deviation values are on the same scale. The trends and deviations are calculated for all indicators except radiation exposure. Because an automatic scram while critical PI event cannot occur while shutdown, a scram trend and deviation calculation is not performed for the shutdown phase type.

Tests of the statistical significance of each plant's trends and deviations assist in distinguishing between those patterns of events that are likely to occur randomly and those that are unlikely to occur randomly. The tests determine the probability that an observed pattern is a random occurrence rather than a real performance trend or deviation. The significance tests use Monte Carlo simulation techniques to determine the probability that an observed pattern is random. Trends and deviations values with a probability of being random of greater than 0.200 are of low statistical significance and are shaded white. Those with a probability of greater than 0.025 but less than or equal to 0.200 are of medium significance and are shaded gray. Patterns with a probability of less than or equal to 0.025 of being random are of high statistical significance and are shaded black.

6. COMPUTATIONAL CONVENTIONS

The following conventions are used in the calculations and displays for this report.

1. Certain plants are excluded from the report and calculations as follows:

   With the exception of the collective radiation exposure calculations, plants in regulatory shutdown, where Commission approval is required for either restart or operation above low power, are excluded from the peer and industry average calculations and the plant self trends and deviations calculations for the regulatory shutdown period. Radiation exposure can be significant during regulatory outages, hence these data are not excluded from any calculations. In addition, plants have been excluded after they were permanently shutdown. Furthermore, no data have been included for Shoreham or Fort St. Vrain. The following listing tabulates the excluded plants and the periods for which their data were not included in the calculations for this report.

PLANT	EXCLUDED PERIODS
Browns Ferry 1	From 03/19/85 to Present
Browns Ferry 2	From 09/15/84 to 05/24/91
Browns Ferry 3	From 03/09/85 to Present
Fort St. Vrain	Not Included
Rancho Seco	From 06/07/89 to Present
San Onofre 1	From 11/30/92 to Present
Shoreham	Not Included
Trojan	From 12/31/92 to Present
Yankee-Rowe	From 10/01/91 to Present

2. Plants are considered to be "new plants" until two years after their commercial operation date.

3. "NA" is used under the following conditions for new plants:

   - For safety system actuations, significant events, safety system failures, and cause codes, until an initial operating license is first received.
   - For scrams, until critical operation.
   - For forced outages and equipment forced outages, until commercial operation is declared.
   - For collective radiation exposure, until the beginning of the first full calendar year of commercial operation.

   Thereafter, numerical values are used. For example, a plant shut down for an entire quarter after initial criticality has zero for scrams rather than "NA".

4. "NA" is also used in the following situations:

   - All quarterly PI values after a plant has permanently shutdown.
   - Collective radiation exposure for the most recent quarter. These data lag the other PI data by one quarter.
   - All Trends and Deviations values for those plants in a regulatory shutdown.
   - Trends and Deviations values when the minimum time required to perform the calculations is not met.
   - Peer group quarterly average values in the executive summary when the peer group does not have greater than 30 operations phase type or forced outage days, or 10 shutdown phase type days.

5. The Quarterly Data charts (Figures 7.1a through 7.109a) employ the following conventions:

   - Data from regulatory outage periods are excluded from the plant and peer average trend line calculations.
   - Plant trend lines are linear regression lines of quarterly event counts, disregarding phase and phase type.

- Peer average trend lines are linear regression lines of the applicable peer group average number of events per quarter, disregarding phase and phase type.
- Industry average trend lines, except for the safety system failure and collective radiation exposure charts, are linear regression lines of the industry average number of events per quarter, disregarding phase and phase type.
- The safety system failure and collective radiation exposure industry average trend lines are linear regression lines of the average number of events per quarter of each plant type (pressurized or boiling water reactor), disregarding phase and phase type.
- The linear regression lines are calculated using a least squares method as follows:

$$y = mx + b$$

$$m = \frac{n(\Sigma xy) - (\Sigma x)(\Sigma y)}{n(\Sigma x^2) - (\Sigma x)^2}$$

$$b = \frac{(\Sigma x^2)(\Sigma y) - (\Sigma xy)(\Sigma x)}{n(\Sigma x^2) - (\Sigma x)^2}$$

b = y intercept
m = Slope
n = The number of data points (12 for 12 quarters).
x = The data point sequential number (1 through 12, with 12 being the most recent quarter).
y = The data point value (quarterly value).

6. The following table summarizes the time intervals used in the trends and deviations calculations:

	OPERATIONS		SHUTDOWNS		FORCED OUTAGES	
	Trends	Deviations	Trends	Deviations	Trends	Deviations
Total Days	270	540	90	180	270	540
Minimum Days	90	90	30	30	90	90
Maximum Calendar Quarters	4	12	6	12	4	12

For the trends calculations, data are parsed into specific time segments: 30 day segments for the operations phase type and forced outages, 10 day segments for the shutdowns phase type. The slope of the linear regression line that plots the data is calculated and divided by a scaling factor, so that all performance indicator trend values are on the same scale. In accordance with the above table, an operations phase type trend value is based on the slope of a linear regression line that plots data from the most recent 270 operations days or four calendar quarters, whichever is shorter in calendar time. If a minimum of 90 operations days did not occur during the last four quarters, the calculation is not performed.

The trend scaling factors (η) normalize the data using the 2nd and 98th percentile values of all calculated plant trend slopes for a given PI and scale the result to fall between -0.9 and 0.9 as follows:

$\eta = \frac{\text{98th percentile value}}{0.9}$ or $\eta = \frac{\text{2nd percentile value}}{0.9}$

98th percentile is used for positive values
2nd percentile is used for negative values

The plant trend equation is

$$Trend = \frac{-b}{|\eta|}$$

b = Least squares slope
η = Trend scaling factor

A plant's performance may be improving ($b < 0$), unchanged ($b = 0$) or declining ($b > 0$). A minus sign is applied so that positive trends indicate improving plant performance.

For the deviations calculation, a plant's event rate is determined by counting the number of phase type events over a specific time period, then dividing by the number of phase type days during that time period. That rate is subtracted from the applicable peer group median rate. The result is divided by a scaling factor so that all performance indicator deviation values are on the same scale. Thus, a shutdown phase type deviation value is determined by subtracting a plant event rate for the most recent 180 shutdown days or 12 calendar quarters, whichever is shorter in calendar time, from the peer group median event rate. If a minimum of 30 shutdown days did not occur during the last 12 quarters, the calculation is not performed.

The deviation scaling factor (κ) is similar to the trend scaling factor, but normalizes the data using the 2nd and 98th percentile values of the difference between the peer group median rate and the plant rates. The deviation equation is

$$Deviation = \frac{\omega - \epsilon}{|\kappa|}$$

ϵ = Plant event rate
ω = Peer group median of ϵ
κ = Deviation scaling factor

The deviations calculation for new plants is slightly different in that it compares a new plant's performance with the performance of all new plants (since January 1, 1987) for the same time in plant life. For example, a plant that has completed 100 operational days after low power licensing is compared with other plants at 100 operational days after low power licensing.

Regulatory outage periods are excluded from all trends and deviations calculations. The forced outage rate trends and deviations calculations also exclude scheduled outage days. The equipment forced outages per 1000 commercial critical hours calculations use the same time periods (operations days) as the operations phase type.

7. Beginning with the third quarter 1993 report, the peer group quarterly average values in the executive summary were determined using improved calculational techniques.

7. QUARTERLY DATA AND TRENDS & DEVIATIONS FIGURES

FIGURE 7.1a

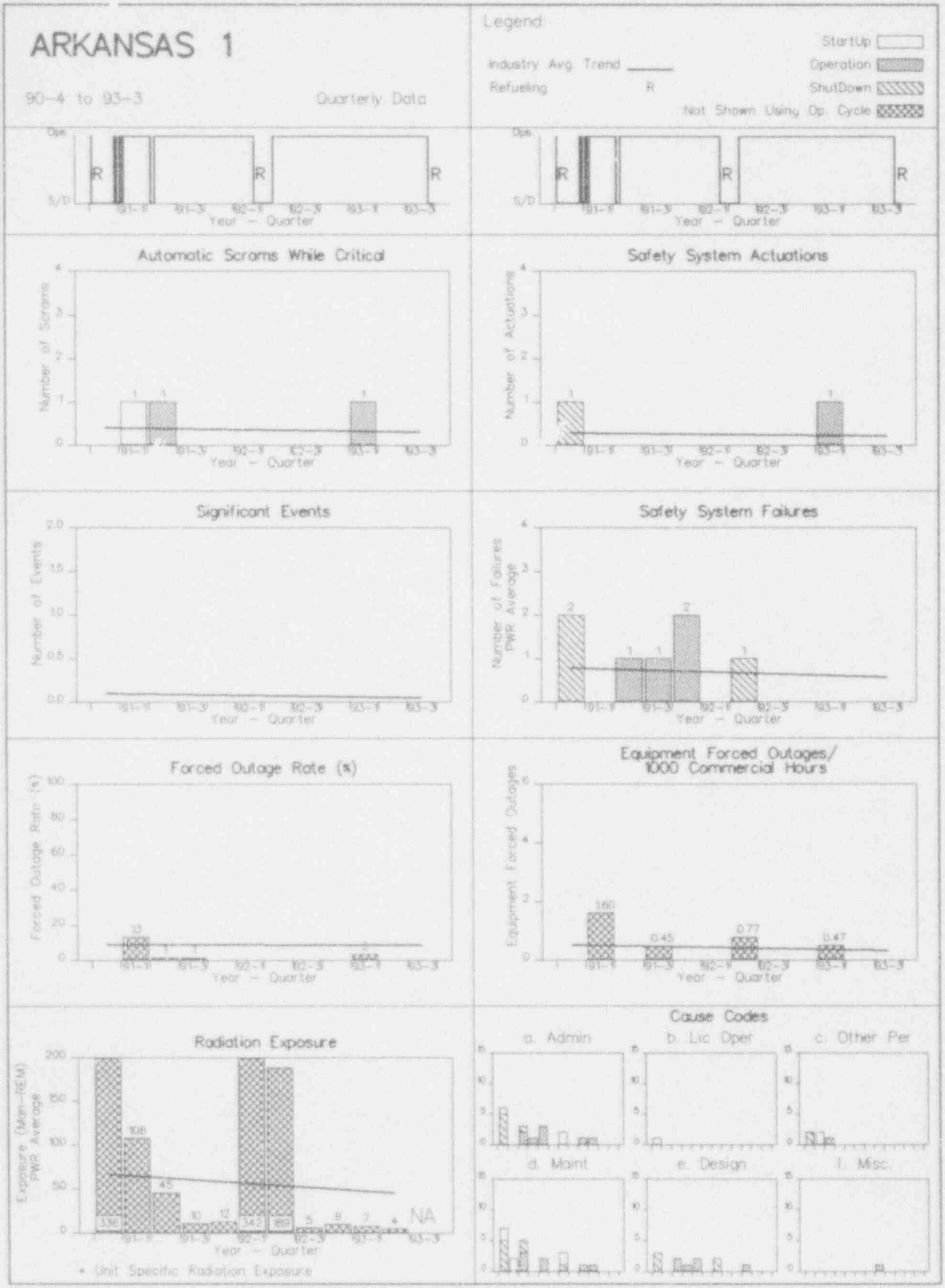
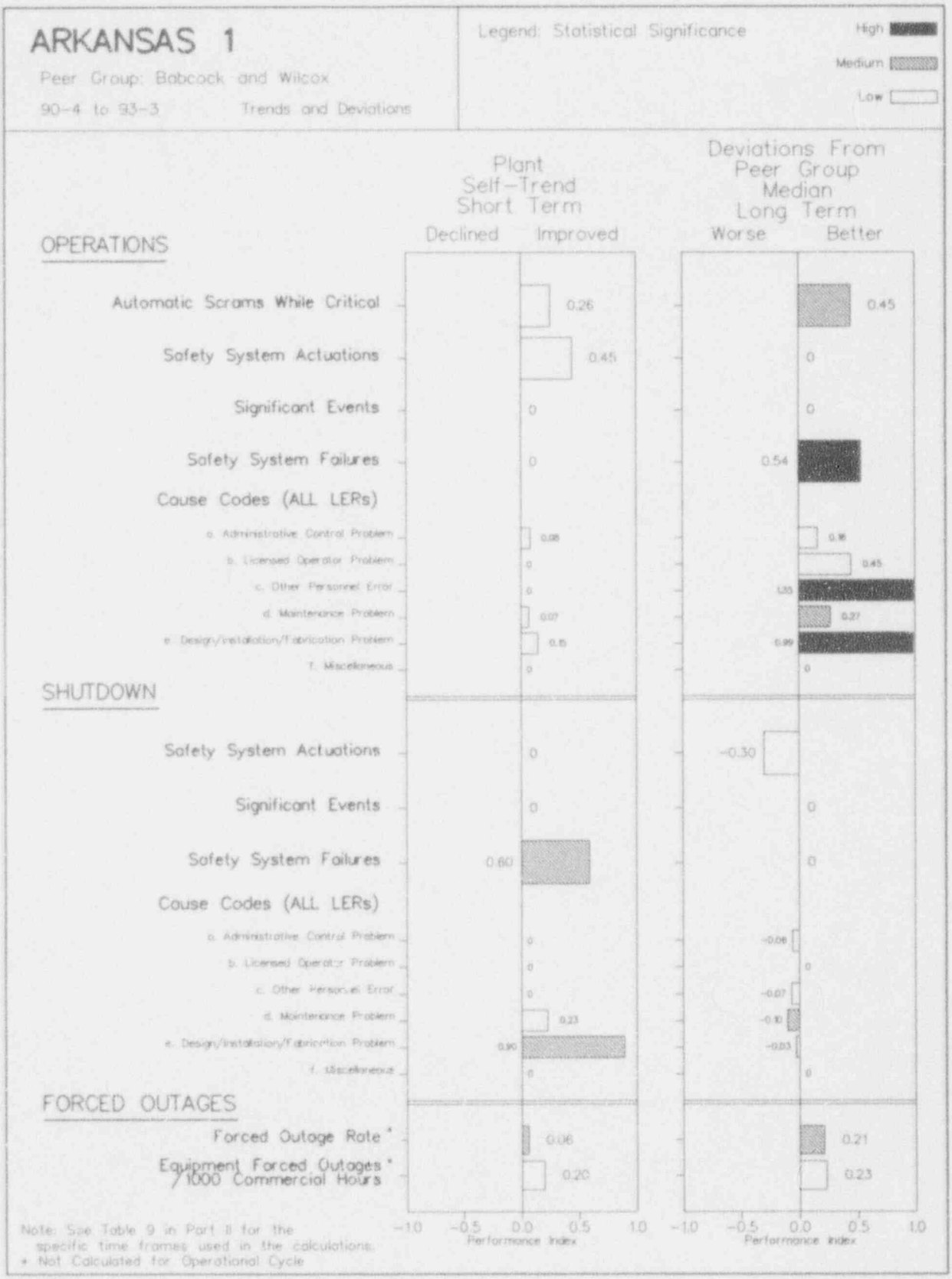

ARKANSAS 1
90-4 to 93-3
Quarterly Data
Legend:
StartUp
Industry Avg. Trend
Operation
Refueling
R
ShutDown
Not Shown Using Op. Cycle
Ops
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM) PWR Average
* Unit Specific Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.1b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.2a

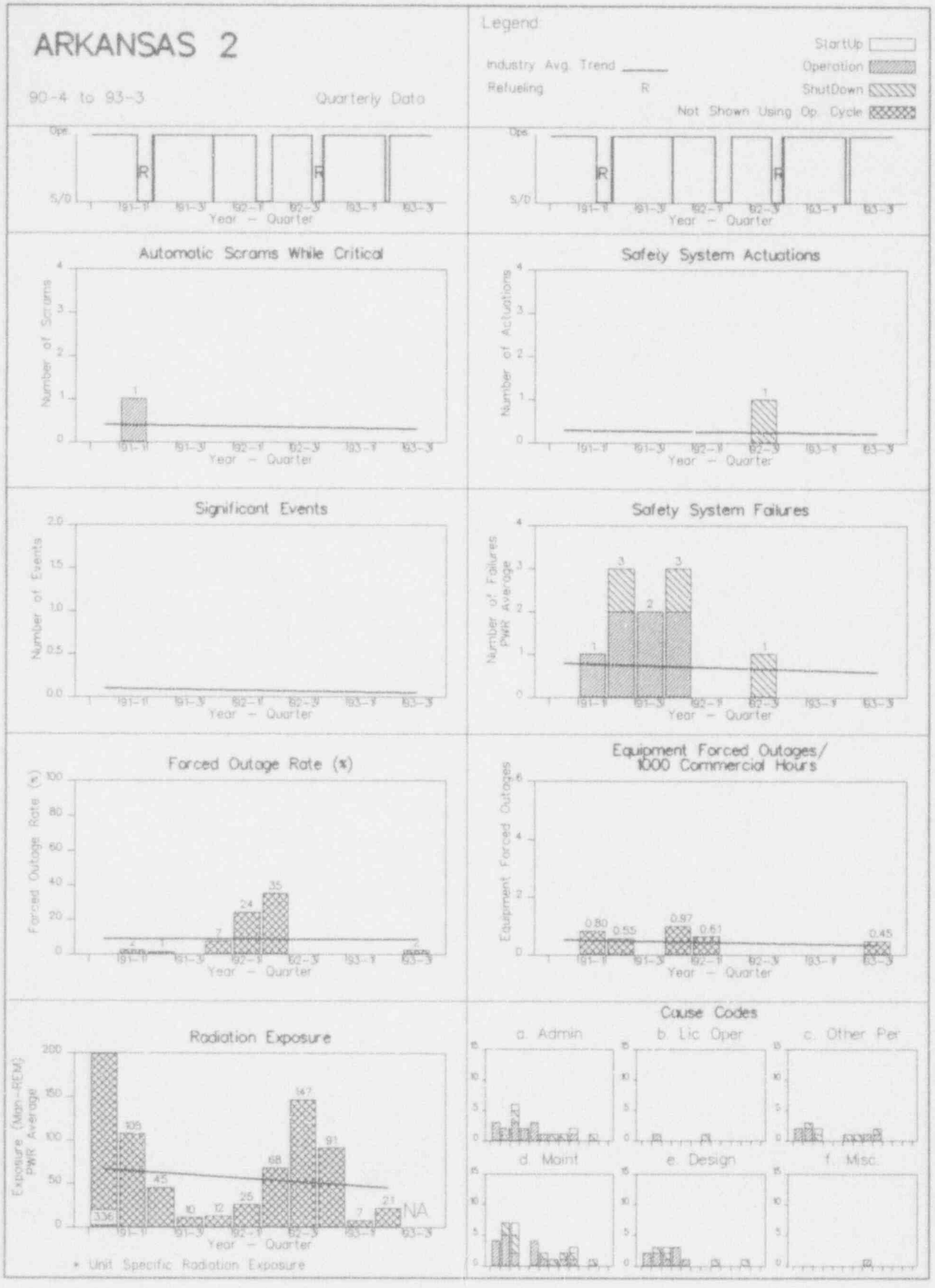
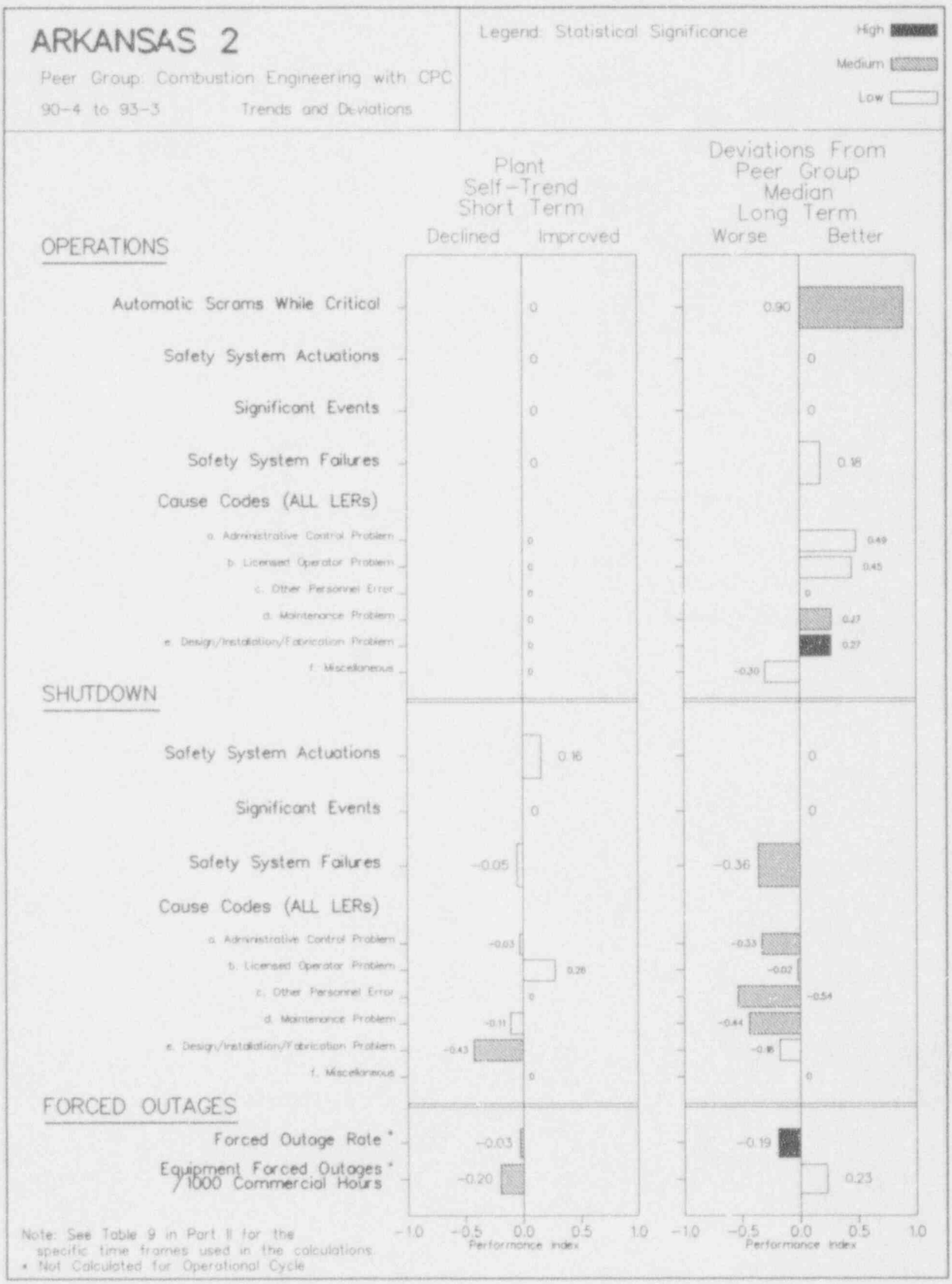

ARKANSAS 2
90-4 to 93-3
Quarterly Data
Legend:
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Industry Avg. Trend
Refueling
R
Ops.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures
PWR Average
Forced Outage Rate (%)
Equipment Forced Outages/
1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM)
PWR Average
* Unit Specific Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.2b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.3a

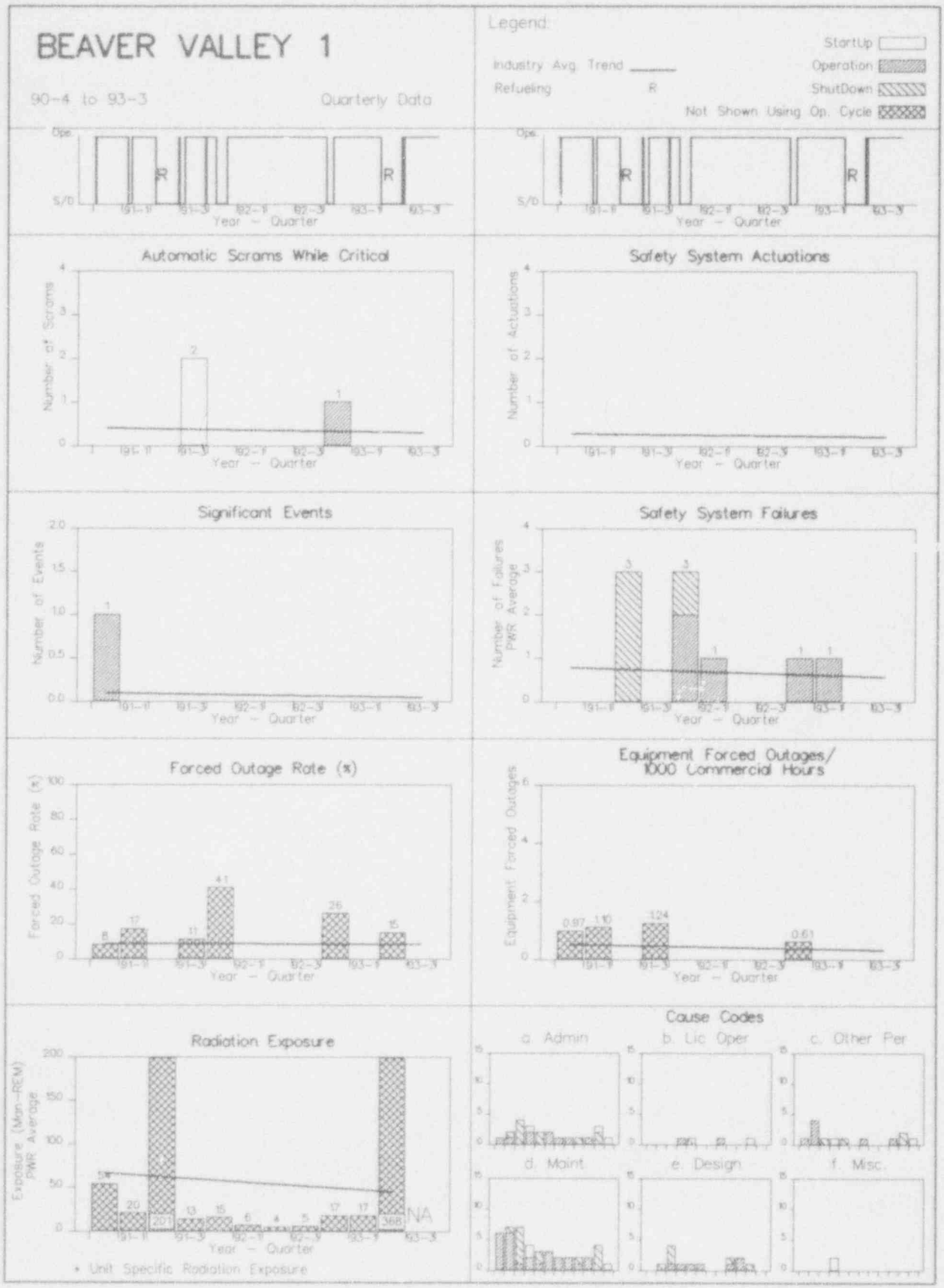
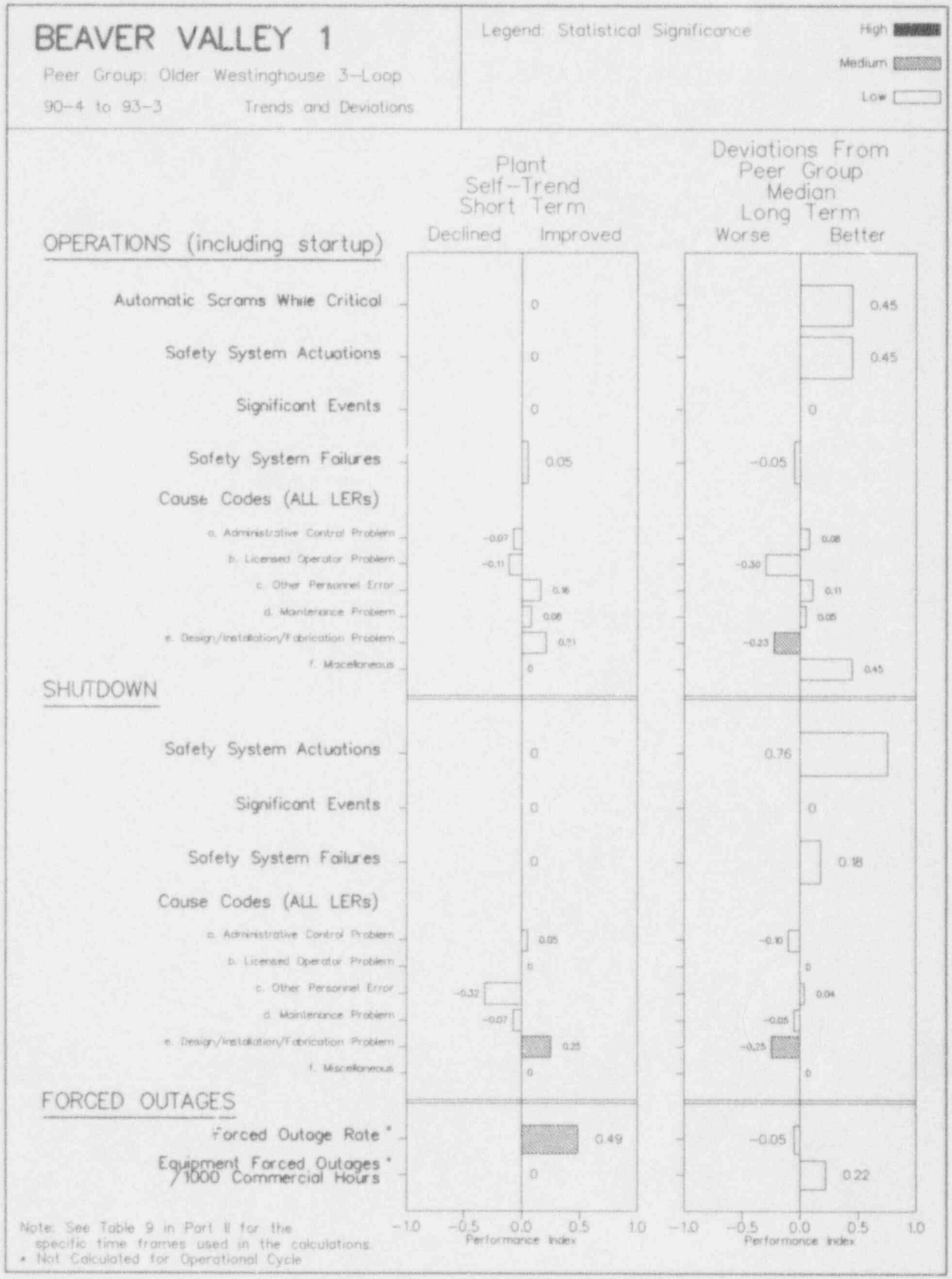

BEAVER VALLEY 1
90-4 to 93-3
Quarterly Data
Legend:
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Industry Avg. Trend
Refueling
R
Ope.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM) PWR Average
NA
* Unit Specific Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE V.3b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.4a

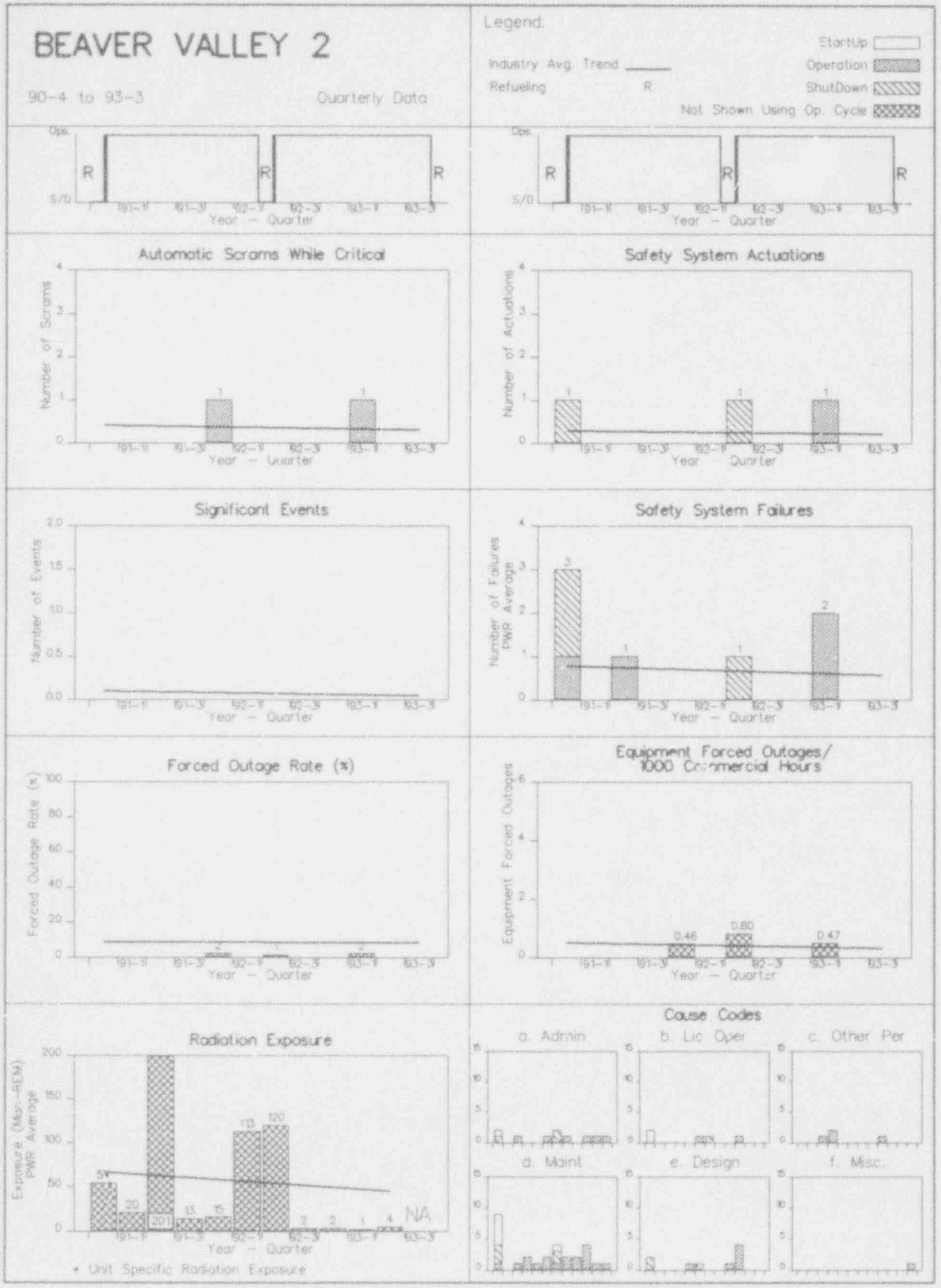
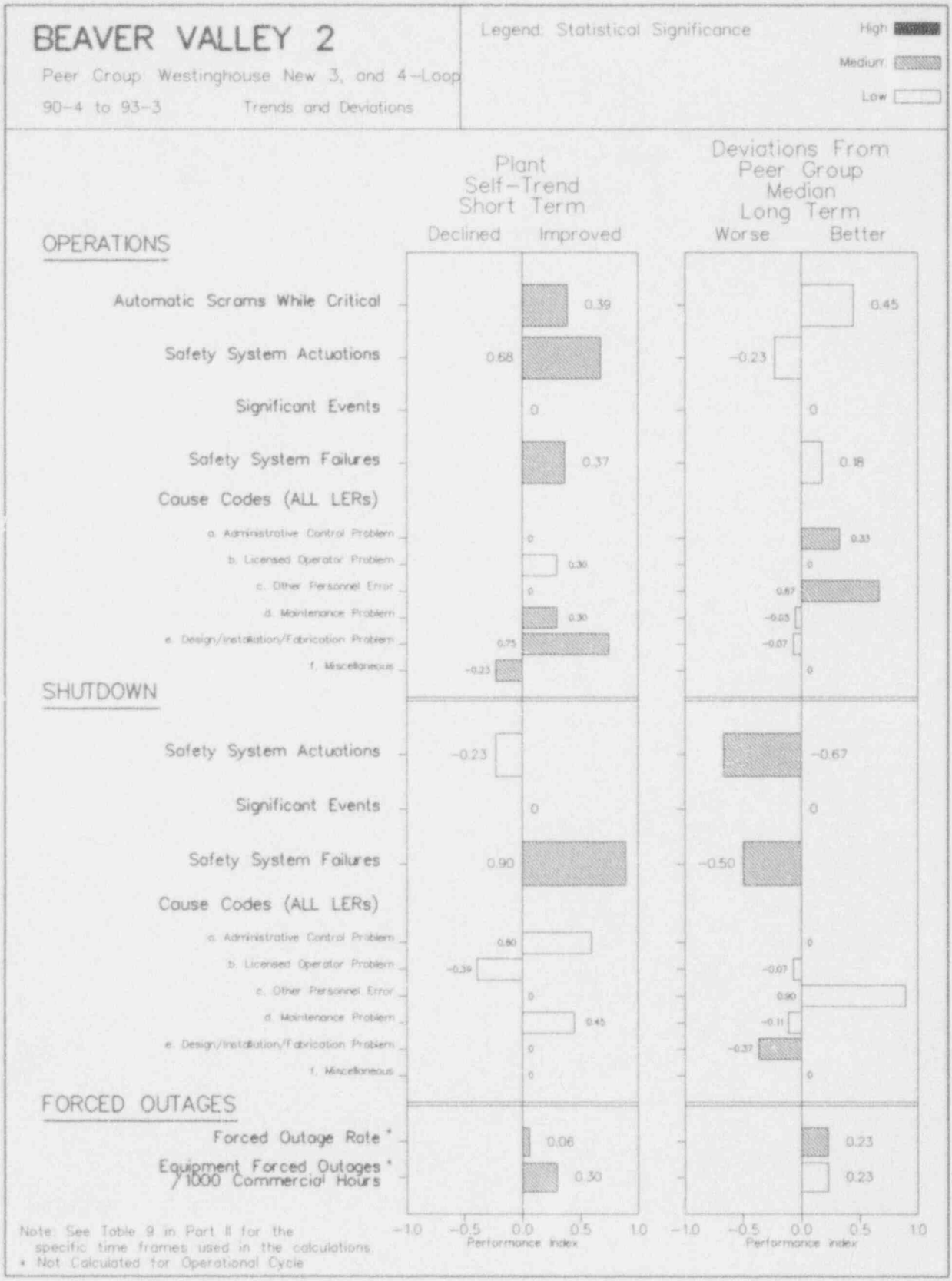

BEAVER VALLEY 2
90-4 to 93-3
Quarterly Data
Legend:
StartUp
Industry Avg. Trend
Operation
Refueling
R
ShutDown
Not Shown Using Op. Cycle
Opn.
S/D
R
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
0.46
0.80
0.47
Radiation Exposure
Exposure (Man-REM) PWR Average
NA
* Unit Specific Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.4b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.5a

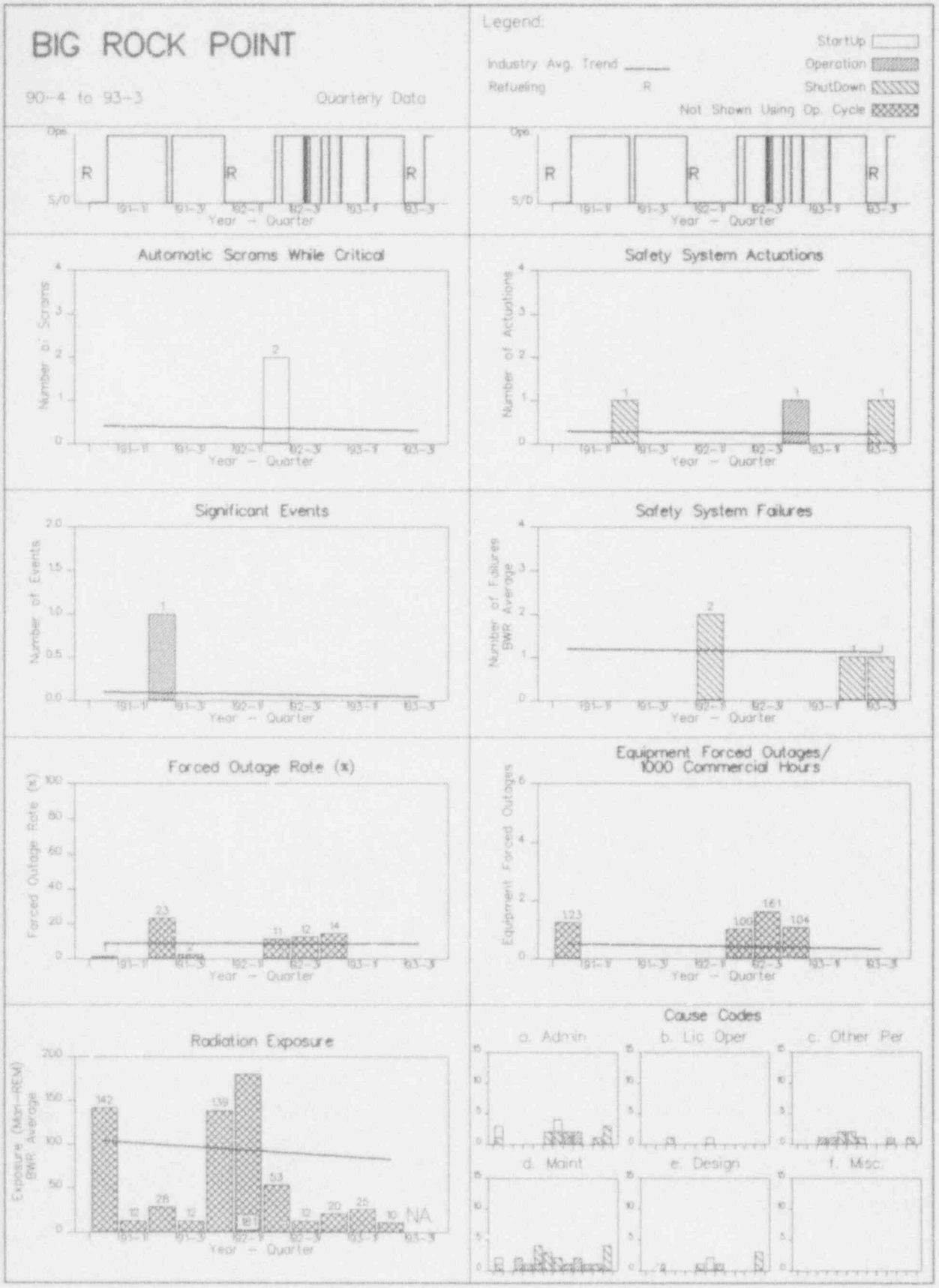
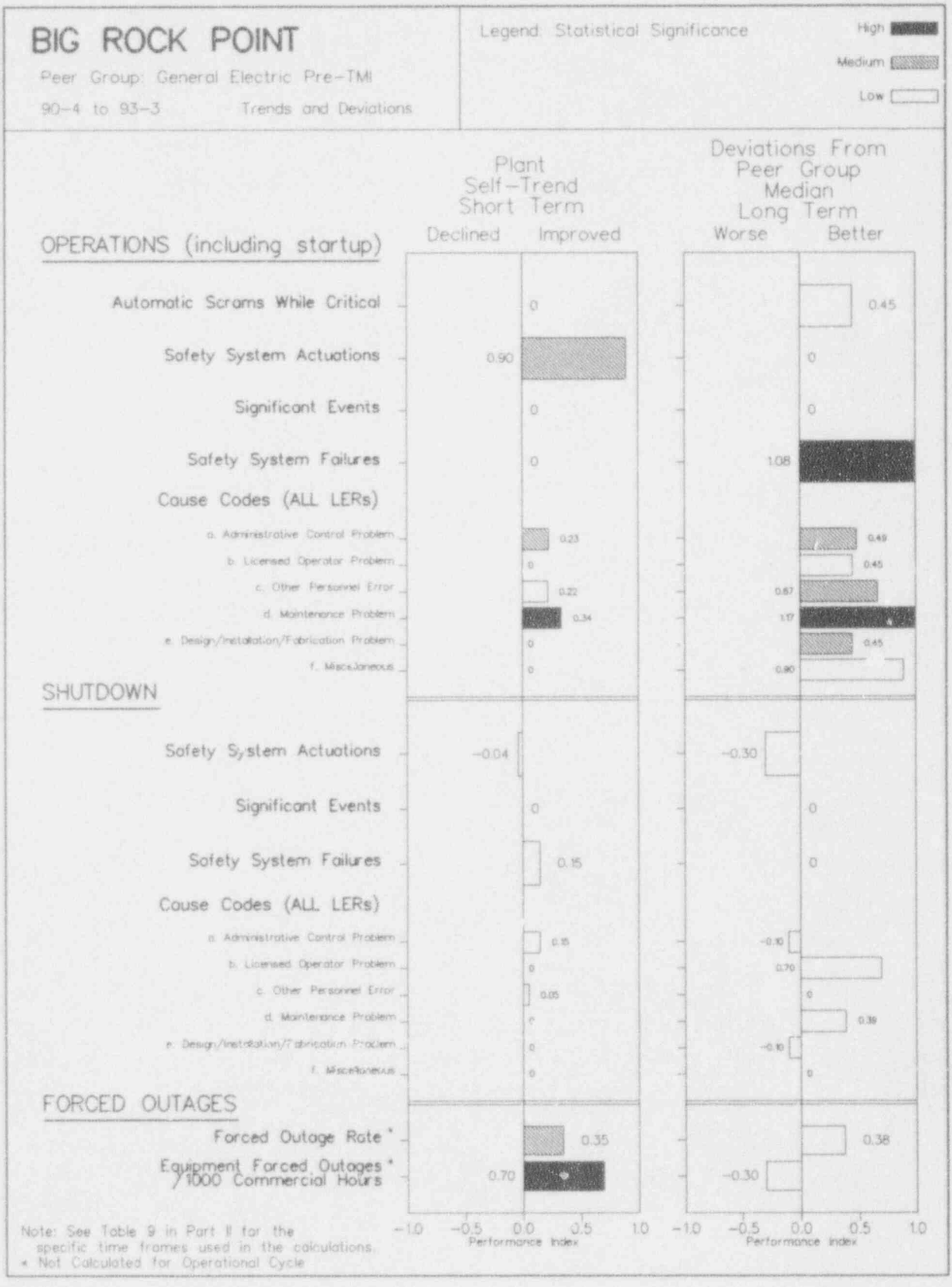

BIG ROCK POINT
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Ope
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures BWR Average
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM) BWR Average
NA
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.5b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.6a

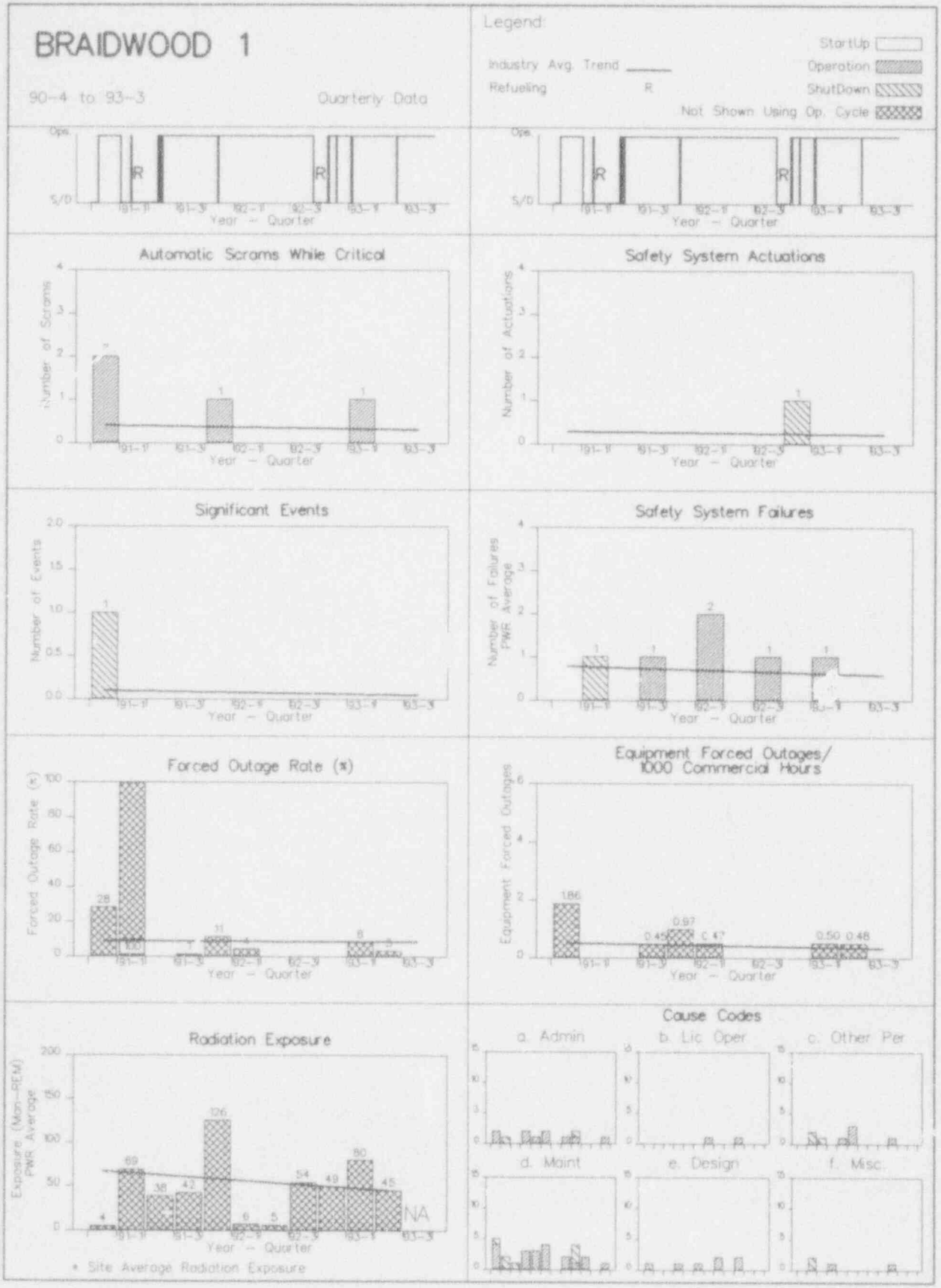
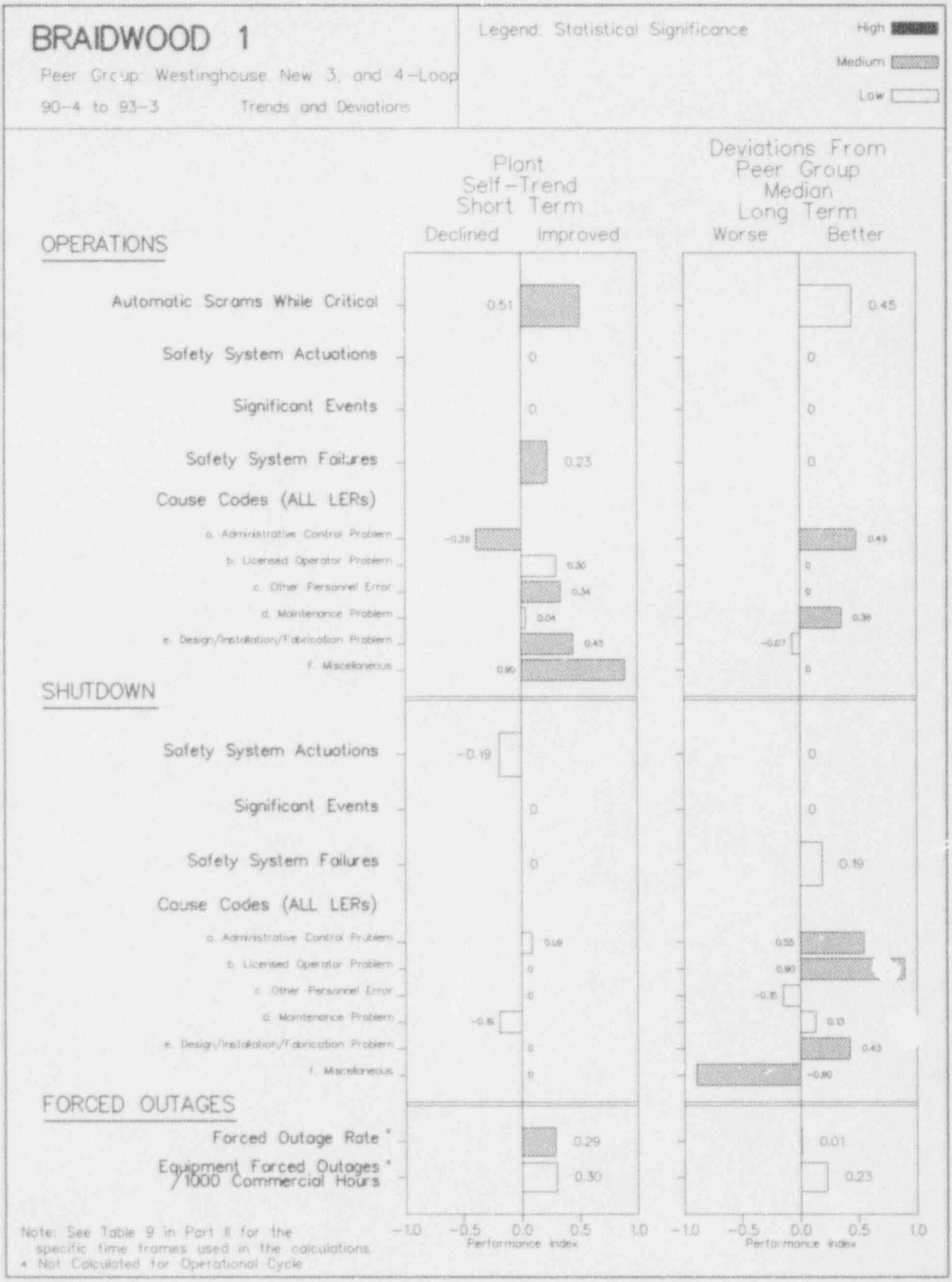

BRAIDWOOD 1
90-4 to 93-3
Quarterly Data
Legend:
StartUp
Industry Avg. Trend
Operation
Refueling R
ShutDown
Not Shown Using Op. Cycle
Ope.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures
PWR Average
Forced Outage Rate (%)
Equipment Forced Outages/
1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM)
PWR Average
NA
* Site Average Radiation Exposure
Cause Codes
a. Admin
b. Lic. Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.6b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.7a

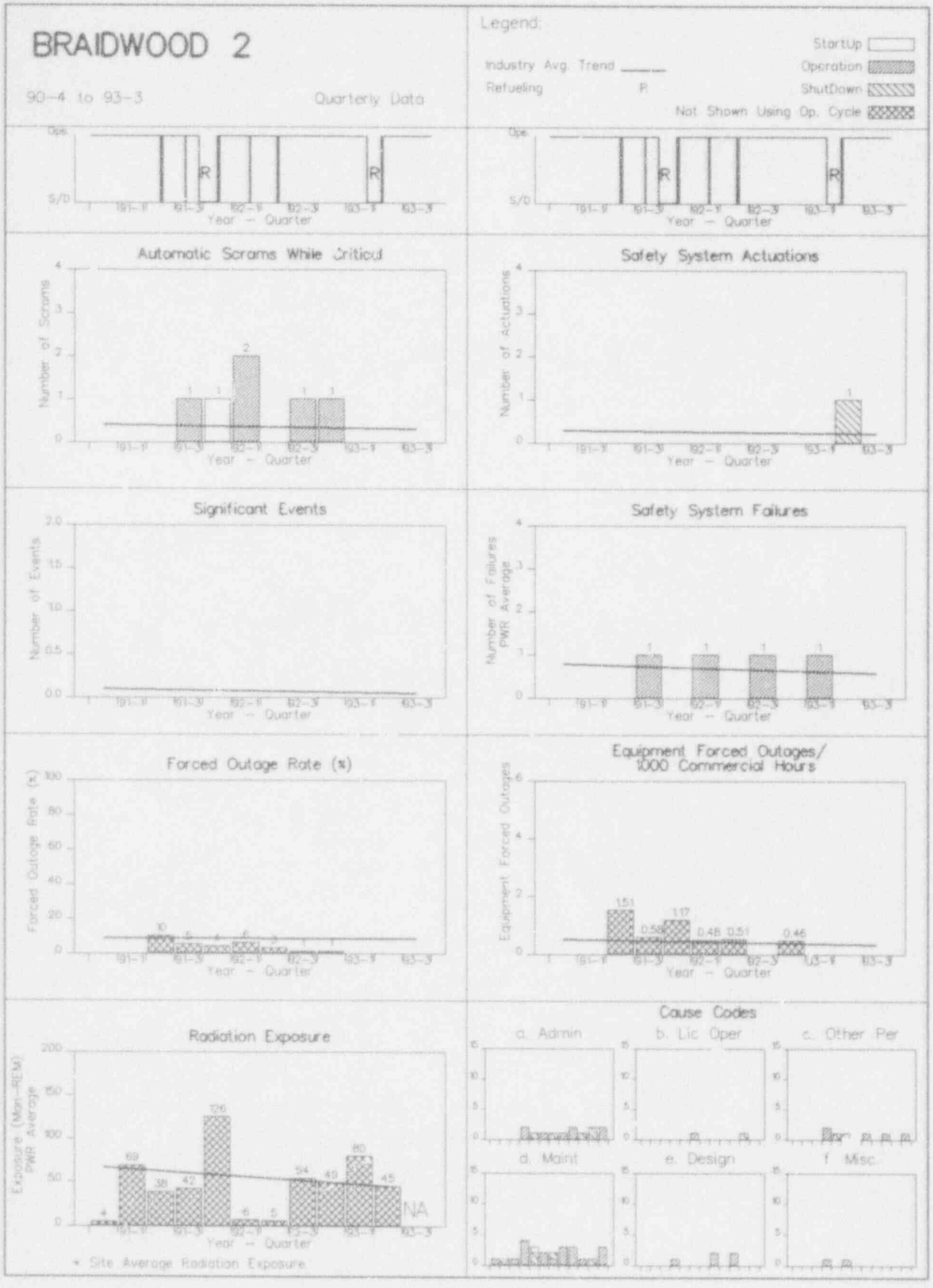

BRAIDWOOD 2
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Ope.
S/D
R
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM) PWR Average
NA
* Site Average Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.7b

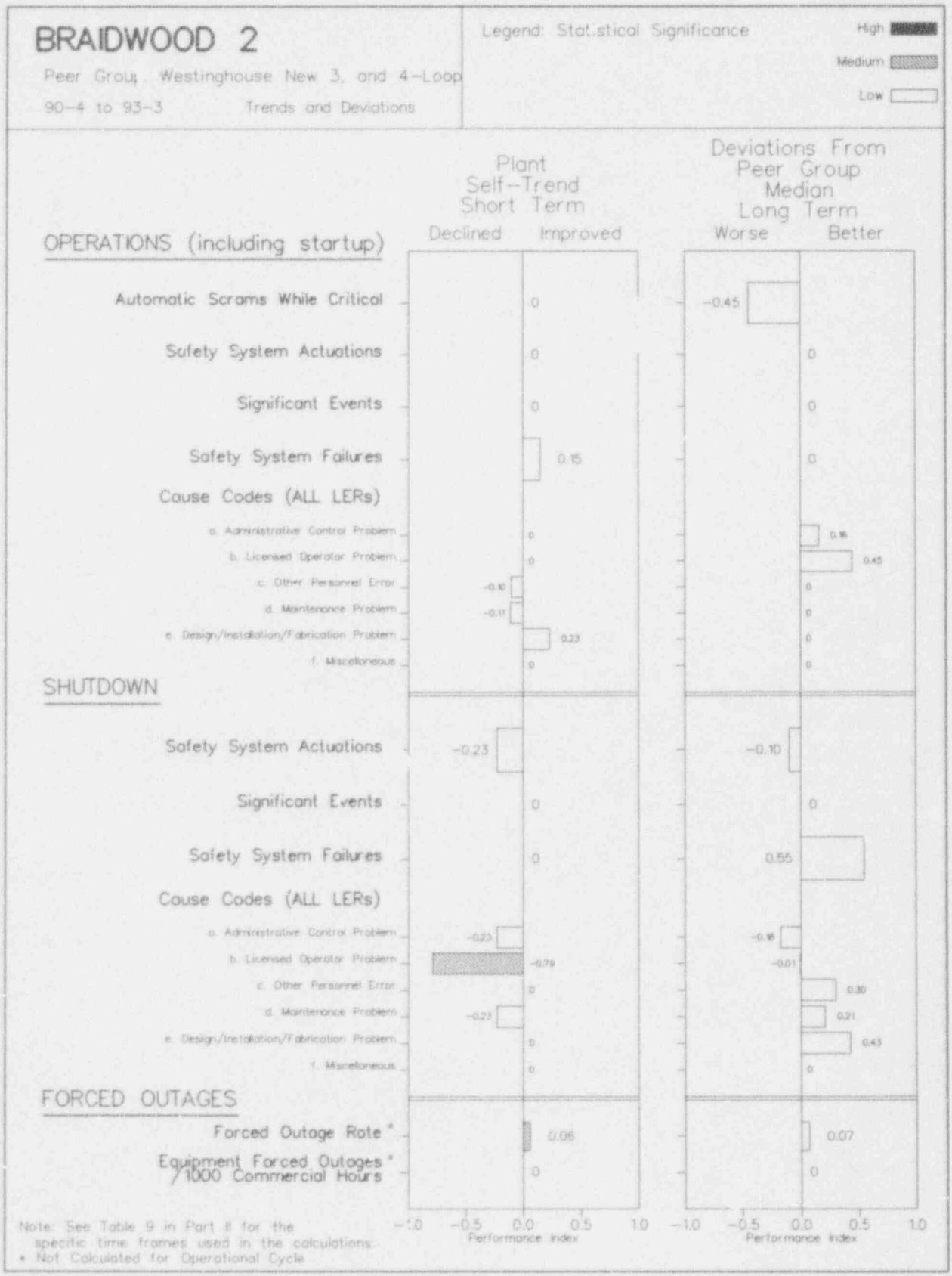

BRAIDWOOD 2
Peer Group: Westinghouse New 3, and 4-Loop
90-4 to 93-3 Trends and Deviations
Legend: Statistical Significance
High
Medium
Low
Plant Self-Trend Short Term
Declined
Improved
Deviations From Peer Group Median Long Term
Worse
Better
OPERATIONS (including startup)
Automatic Scrams While Critical
Safety System Actuations
Significant Events
Safety System Failures
Cause Codes (ALL LERs)
a. Administrative Control Problem
b. Licensed Operator Problem
c. Other Personnel Error
d. Maintenance Problem
e. Design/Installation/Fabrication Problem
f. Miscellaneous
SHUTDOWN
Safety System Actuations
Significant Events
Safety System Failures
Cause Codes (ALL LERs)
a. Administrative Control Problem
b. Licensed Operator Problem
c. Other Personnel Error
d. Maintenance Problem
e. Design/Installation/Fabrication Problem
f. Miscellaneous
FORCED OUTAGES
Forced Outage Rate *
Equipment Forced Outages * /1000 Commercial Hours
-1.0 -0.5 0.0 0.5 1.0
Performance Index
Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.8a

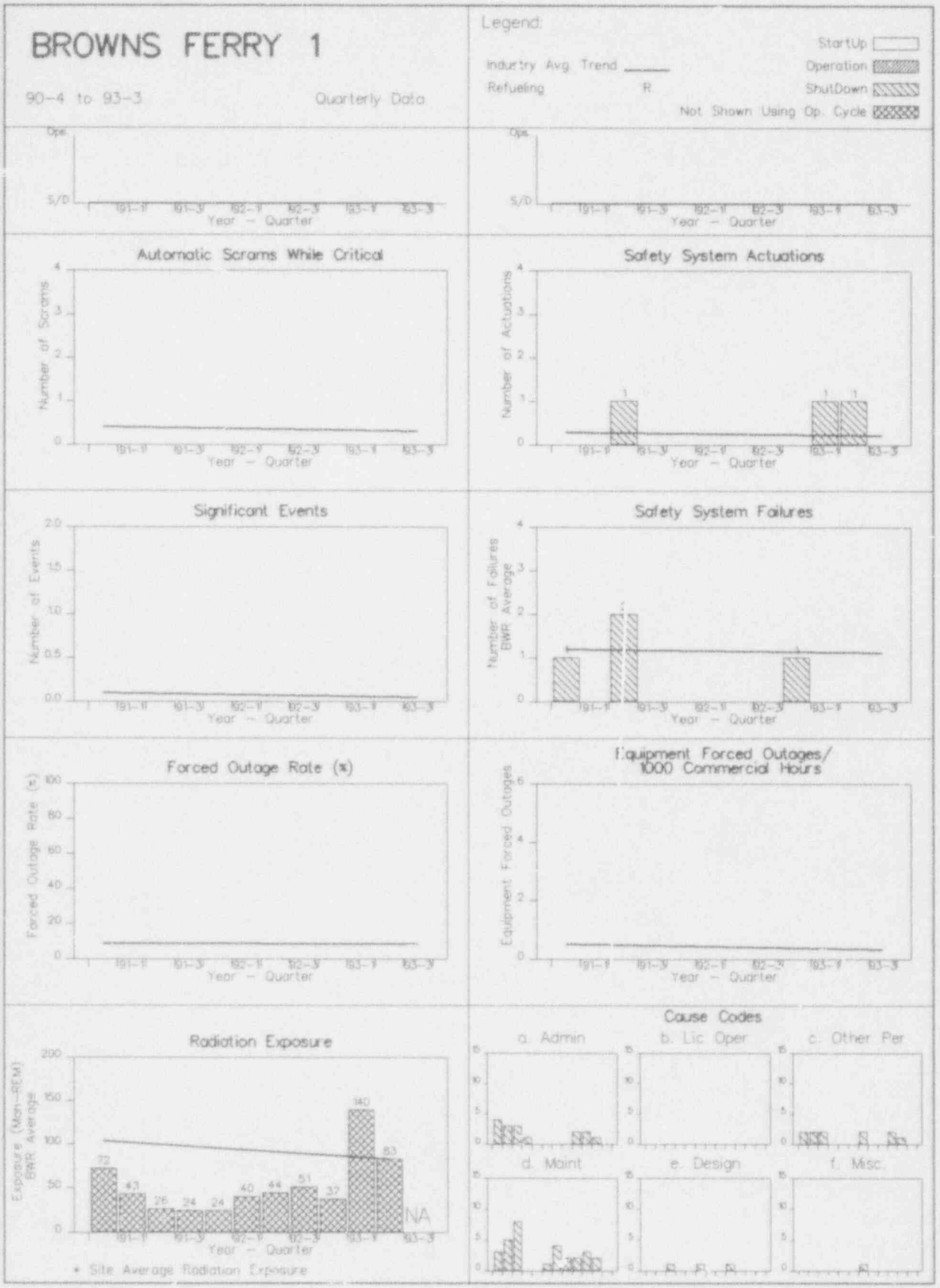
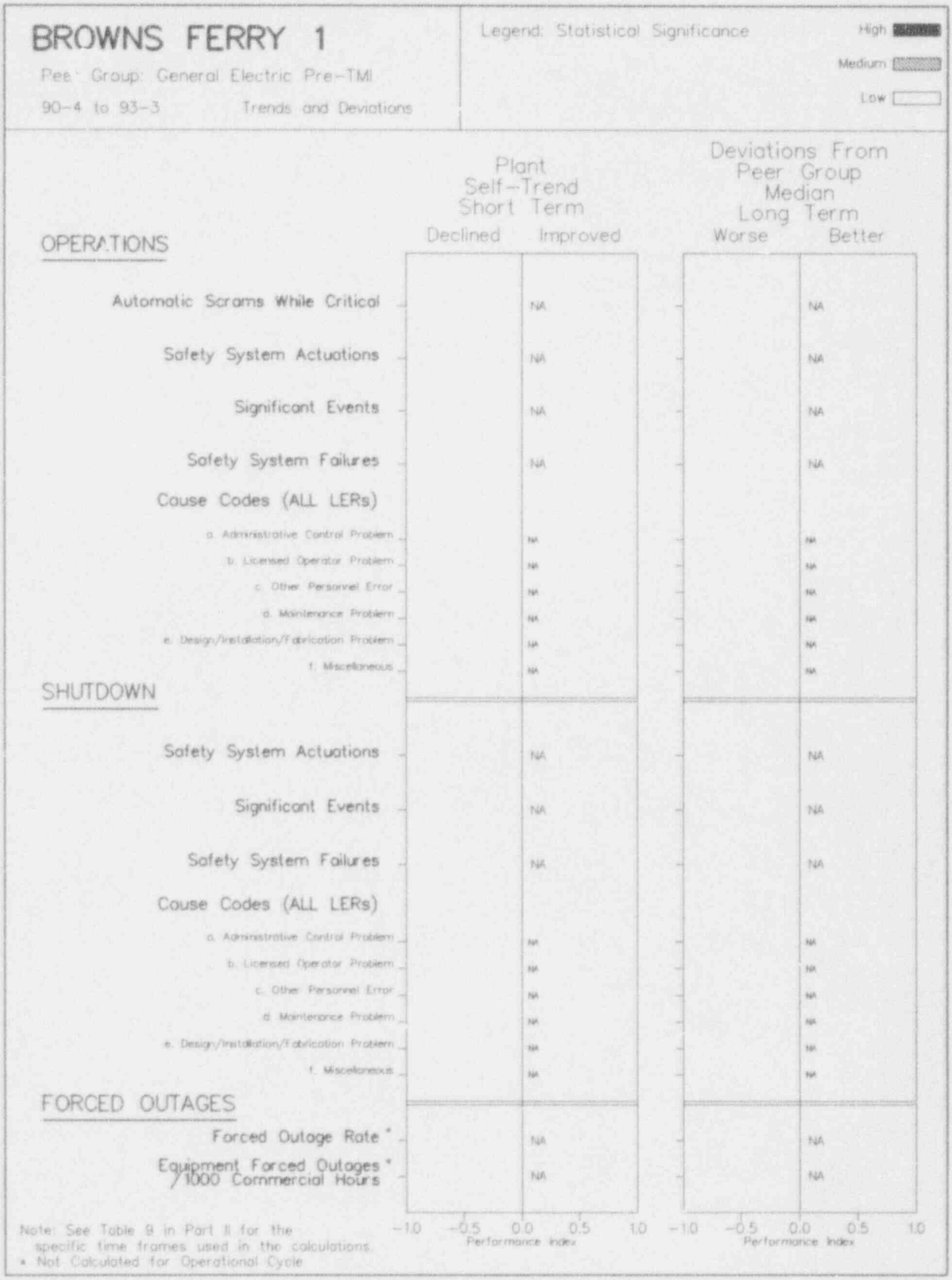

BROWNS FERRY 1
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Ops
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures
BWR Average
Forced Outage Rate (%)
Equipment Forced Outages/
1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM)
BWR Average
72
43
25
24
24
40
44
51
37
140
83
NA
* Site Average Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.8b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.9a

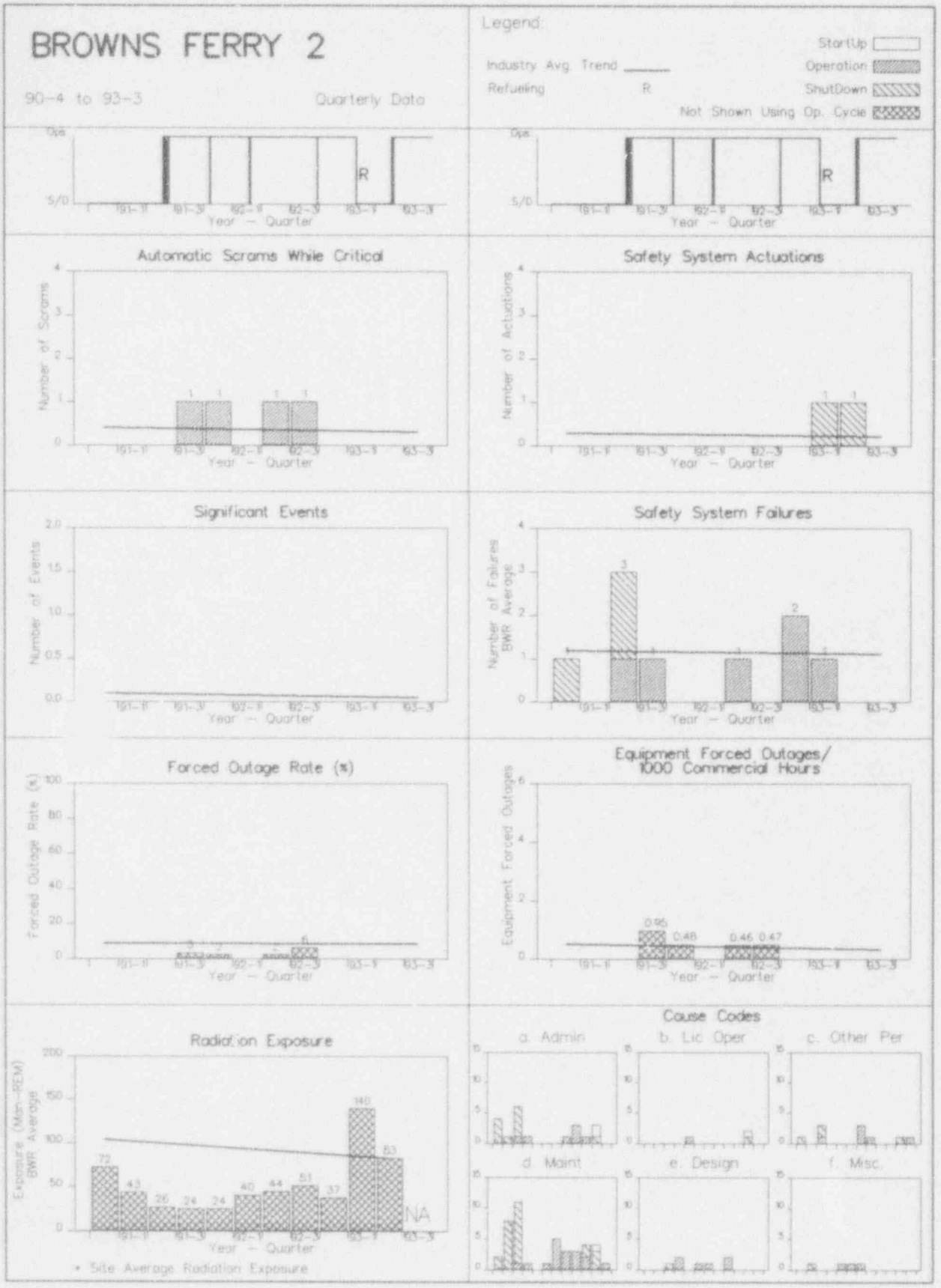
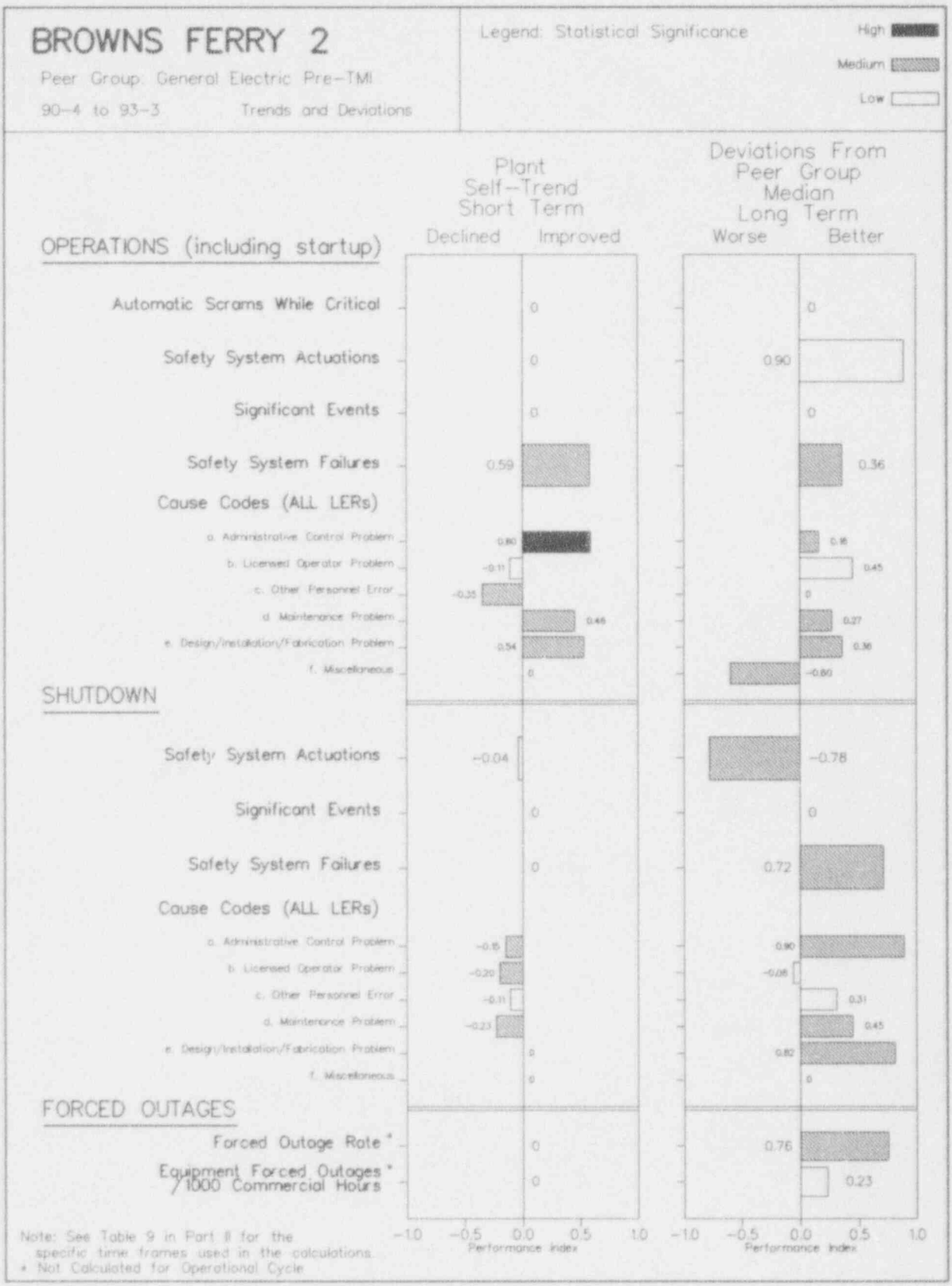

BROWNS FERRY 2
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Ops
S/D
R
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures
BWR Average
Forced Outage Rate (%)
Forced Outage Rate (%)
Equipment Forced Outages/
1000 Commercial Hours
Equipment Forced Outages
0.95
0.48
0.46
0.47
Radiation Exposure
Exposure (Man-REM)
BWR Average
72
43
26
24
24
40
44
51
37
140
83
NA
• Site Average Radiation Exposure
Cause Codes
a. Admin
b. Lic. Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.9b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.10a

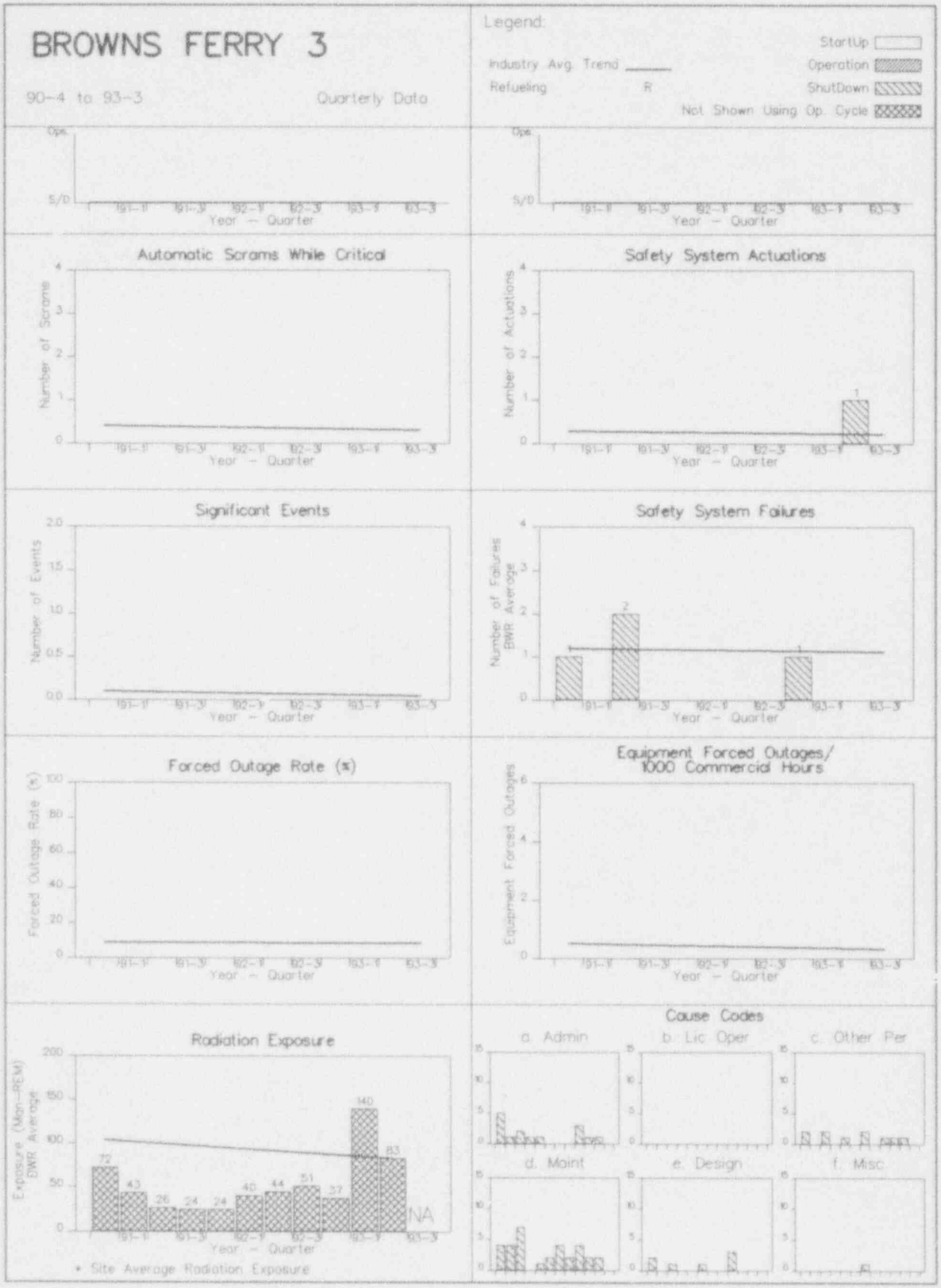

BROWNS FERRY 3
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Ops.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures
BWR Average
Forced Outage Rate (%)
Forced Outage Rate (%)
Equipment Forced Outages/
1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM)
BWR Average
72
43
26
24
24
40
44
51
37
140
83
NA
• Site Average Radiation Exposure
Cause Codes
a. Admin
b. Lic. Oper
c. Other Per
d. Maint
e. Design
f. Misc

FIGURE 7.10b

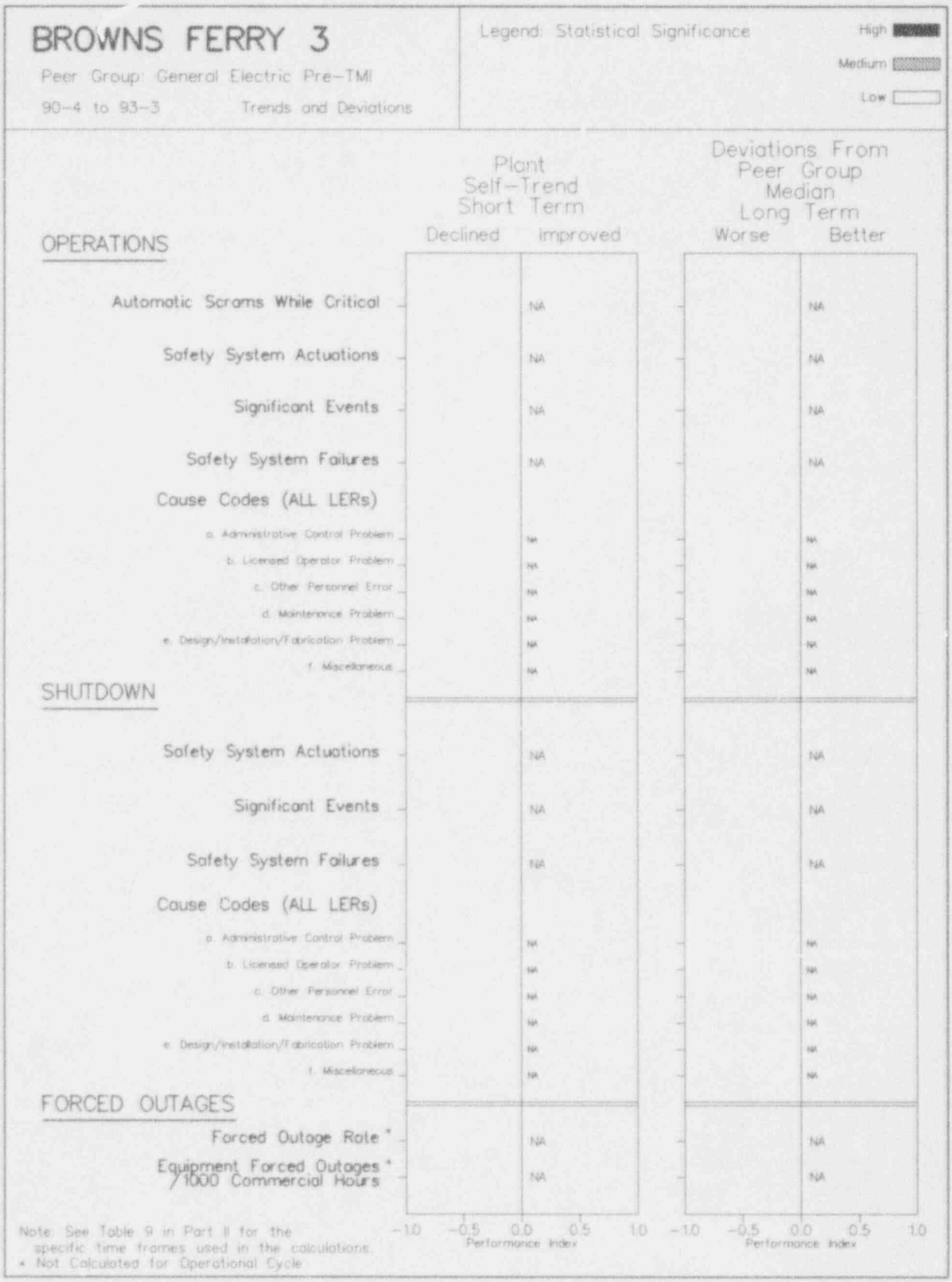

BROWNS FERRY 3
Peer Group: General Electric Pre-TMI
90-4 to 93-3 Trends and Deviations
Legend: Statistical Significance
High
Medium
Low
Plant Self-Trend Short Term
Declined
Improved
Deviations From Peer Group Median Long Term
Worse
Better
OPERATIONS
Automatic Scrams While Critical
Safety System Actuations
Significant Events
Safety System Failures
Cause Codes (ALL LERs)
a. Administrative Control Problem
b. Licensed Operator Problem
c. Other Personnel Error
d. Maintenance Problem
e. Design/Installation/Fabrication Problem
f. Miscellaneous
SHUTDOWN
Safety System Actuations
Significant Events
Safety System Failures
Cause Codes (ALL LERs)
a. Administrative Control Problem
b. Licensed Operator Problem
c. Other Personnel Error
d. Maintenance Problem
e. Design/Installation/Fabrication Problem
f. Miscellaneous
FORCED OUTAGES
Forced Outage Rate *
Equipment Forced Outages * /1000 Commercial Hours
NA
-1.0 -0.5 0.0 0.5 1.0
Performance Index
Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.11a

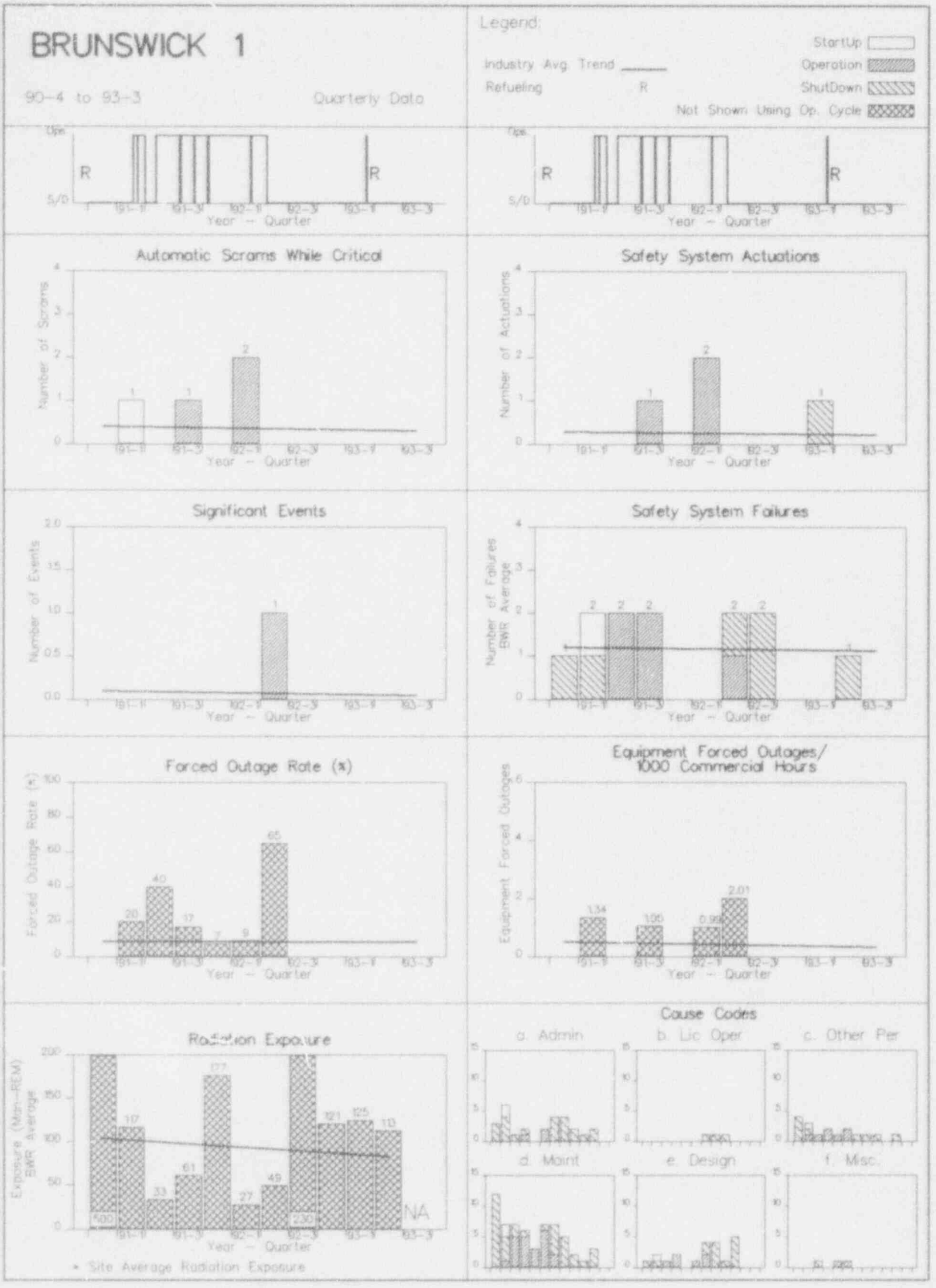
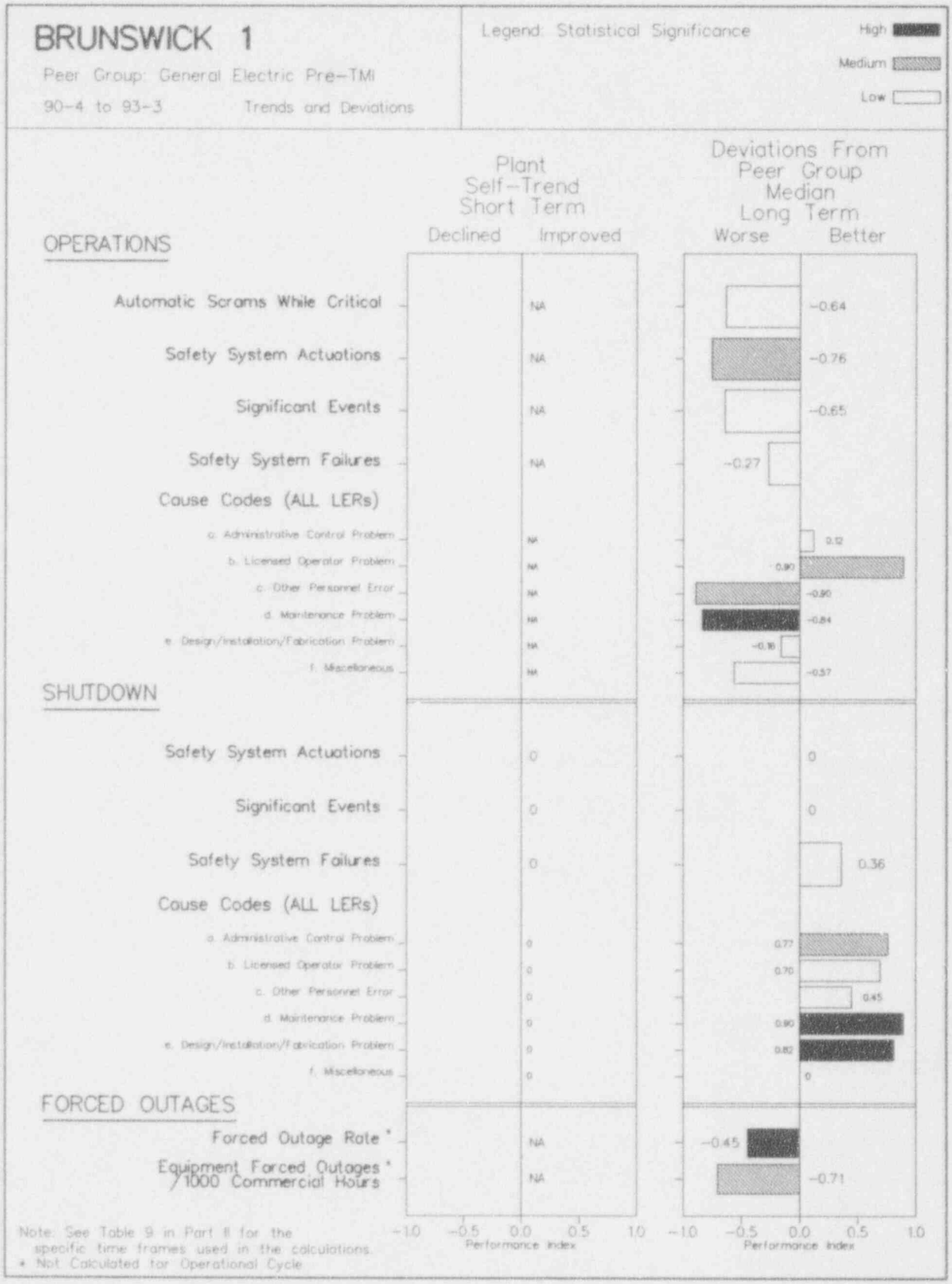

BRUNSWICK 1
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Ops.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures
EWR Average
Forced Outage Rate (%)
Forced Outage Rate (%)
Equipment Forced Outages/
1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM)
EWR Average
* Site Average Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.11b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.12a

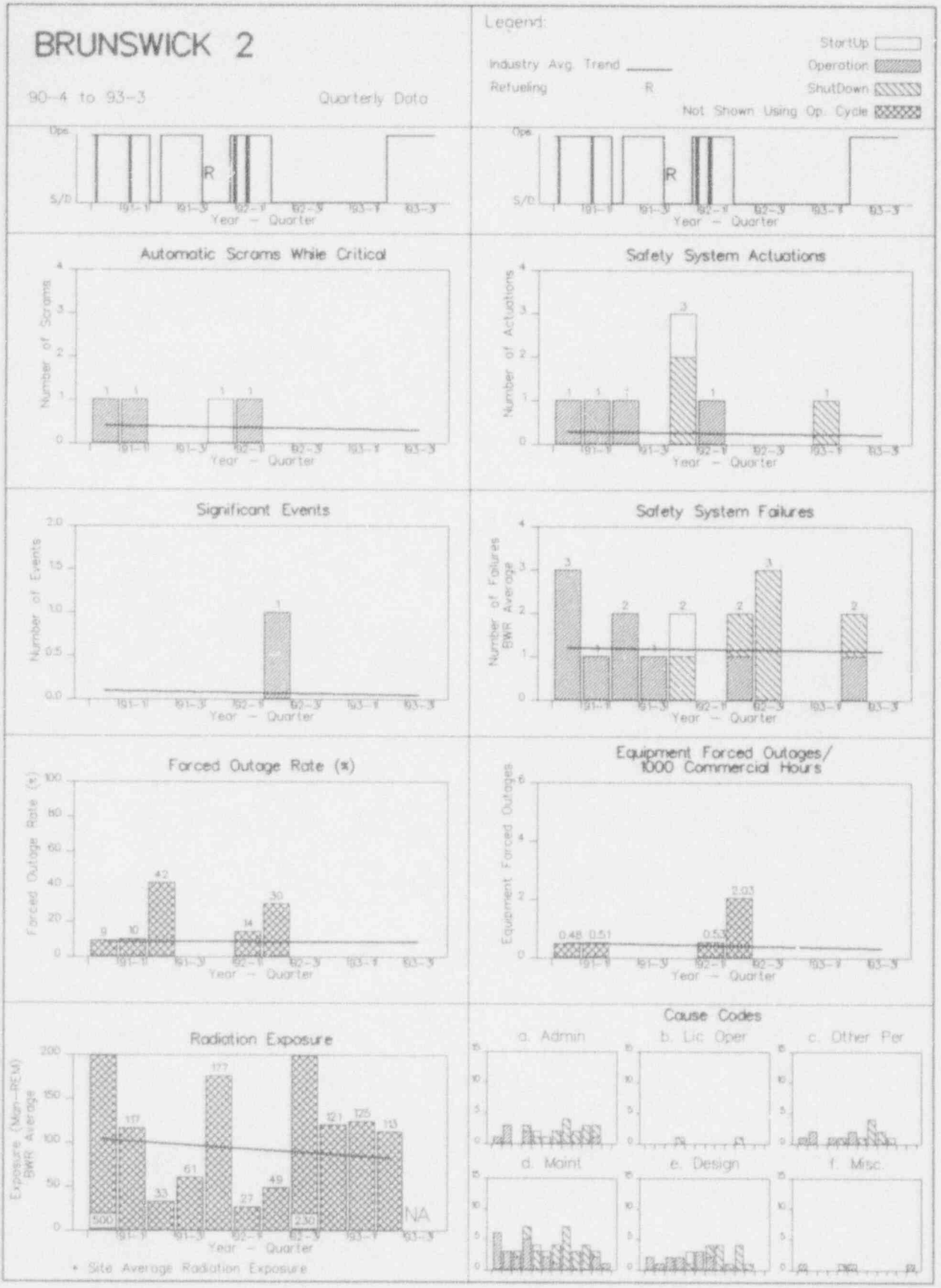

BRUNSWICK 2
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Ope.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures
BWR Average
Forced Outage Rate (%)
Forced Outage Rate (%)
Equipment Forced Outages/
1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM)
BWR Average
NA
* Site Average Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc

FIGURE 7.12b

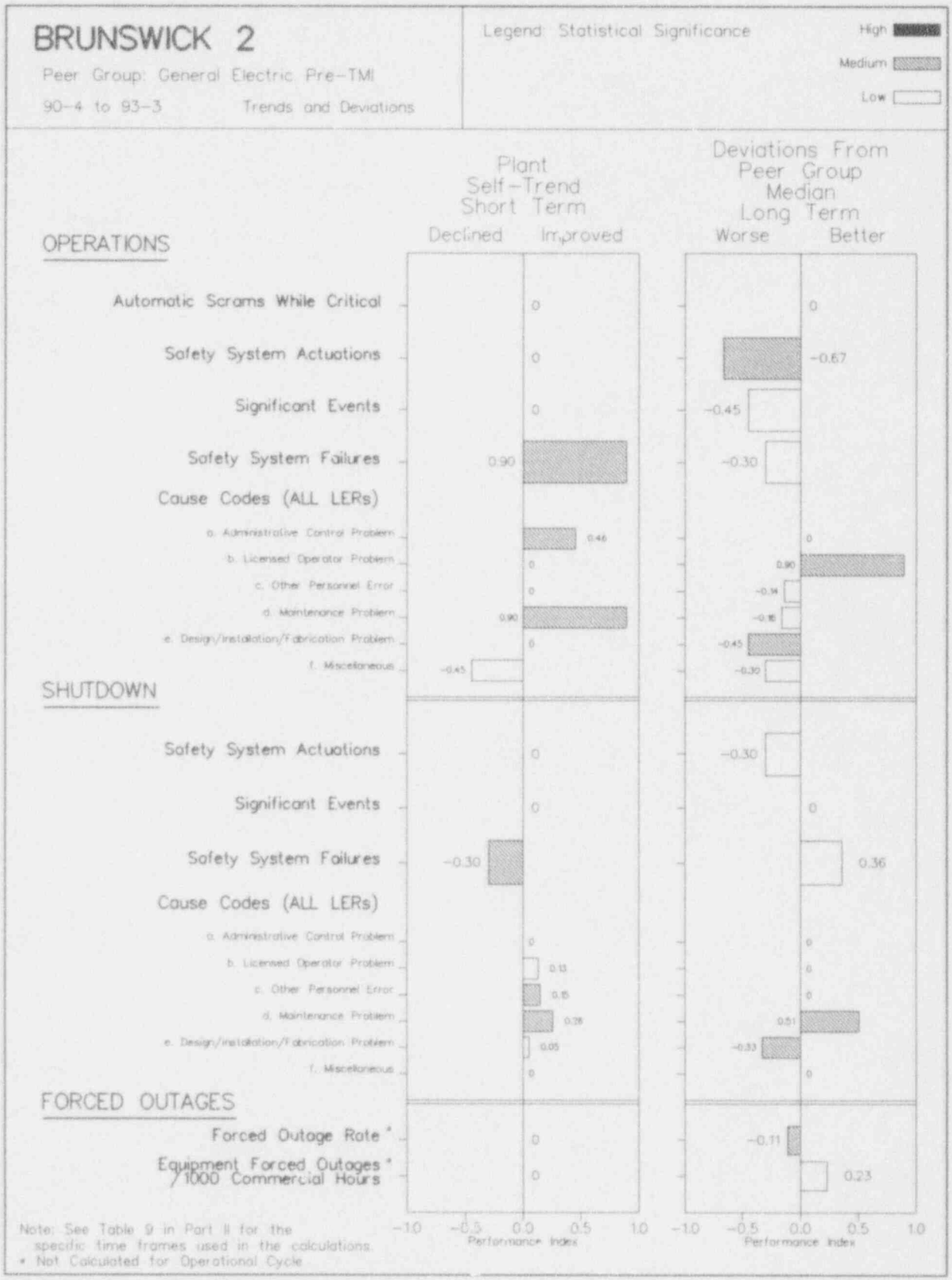

BRUNSWICK 2
Peer Group: General Electric Pre-TMI
90-4 to 93-3 Trends and Deviations
Legend: Statistical Significance
High
Medium
Low
Plant Self-Trend Short Term
Declined
Improved
Deviations From Peer Group Median Long Term
Worse
Better
OPERATIONS
Automatic Scrams While Critical
Safety System Actuations
Significant Events
Safety System Failures
Cause Codes (ALL LERs)
a. Administrative Control Problem
b. Licensed Operator Problem
c. Other Personnel Error
d. Maintenance Problem
e. Design/Installation/Fabrication Problem
f. Miscellaneous
SHUTDOWN
Safety System Actuations
Significant Events
Safety System Failures
Cause Codes (ALL LERs)
a. Administrative Control Problem
b. Licensed Operator Problem
c. Other Personnel Error
d. Maintenance Problem
e. Design/Installation/Fabrication Problem
f. Miscellaneous
FORCED OUTAGES
Forced Outage Rate *
Equipment Forced Outages * /1000 Commercial Hours
-1.0 -0.5 0.0 0.5 1.0
Performance Index
Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.13a

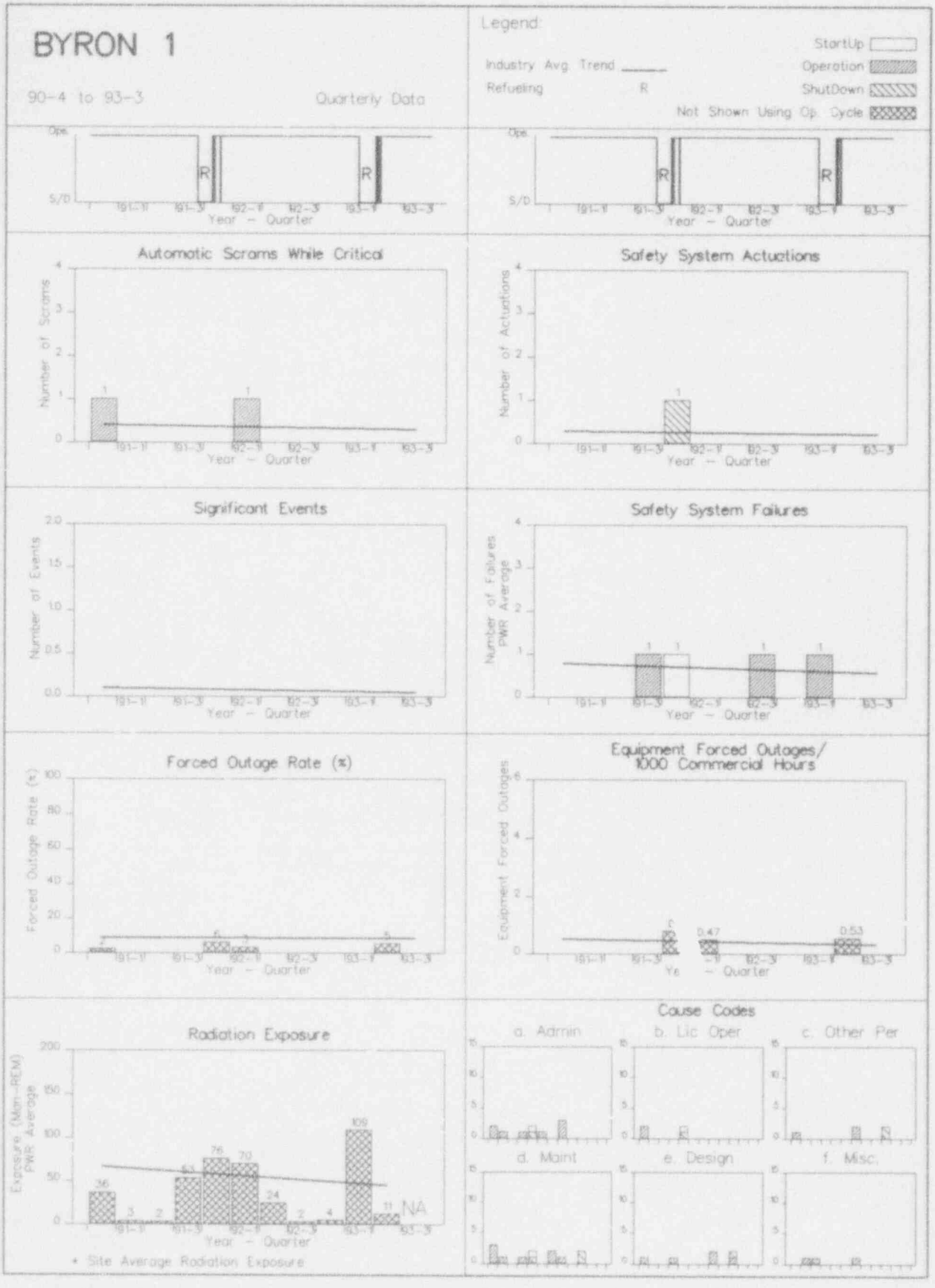
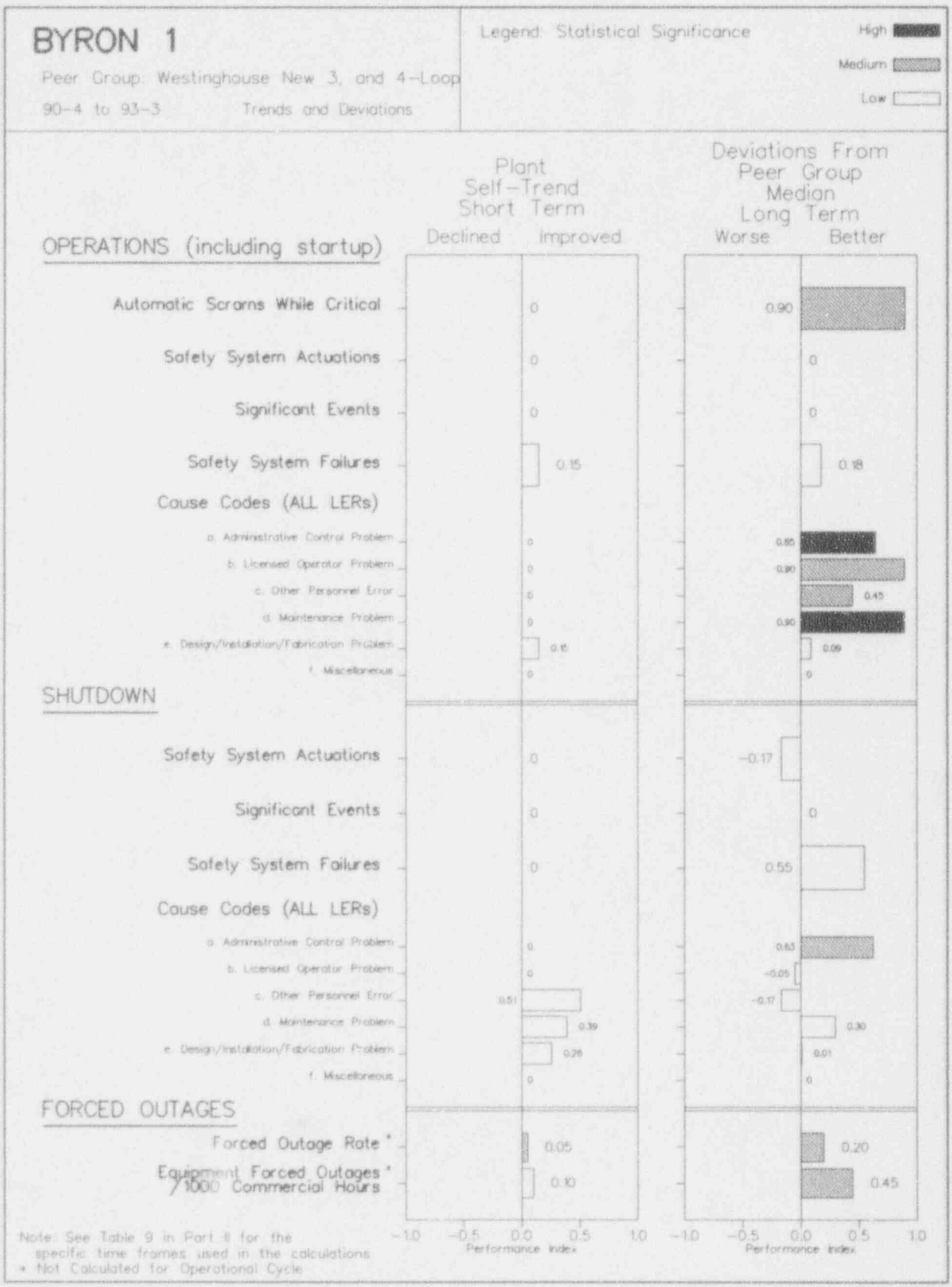

BYRON 1
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Ope.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM) PWR Average
NA
* Site Average Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.13b



Note: See Table 9 in Part II for the specific time frames used in the calculations
* Not Calculated for Operational Cycle

FIGURE 7.14a

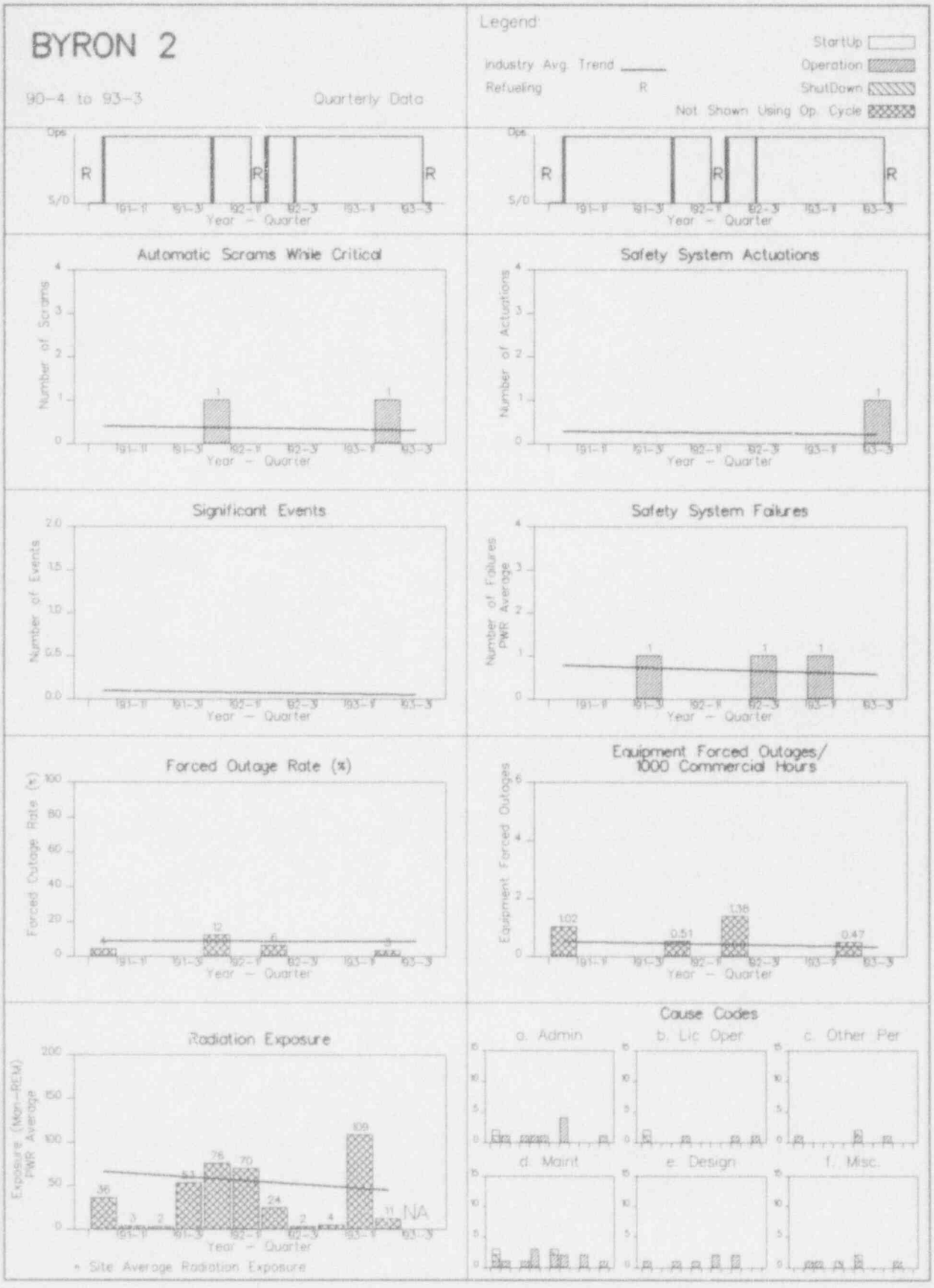

BYRON 2
90-4 to 93-3
Quarterly Data
Legend:
StartUp
Industry Avg. Trend
Operation
Refueling
R
ShutDown
Not Shown Using Op. Cycle
Ope
S/D
R
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
1.02
0.51
1.38
0.47
Radiation Exposure
Exposure (Man-REM) PWR Average
36
3
2
53
78
70
24
2
4
109
11
NA
* Site Average Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.14b

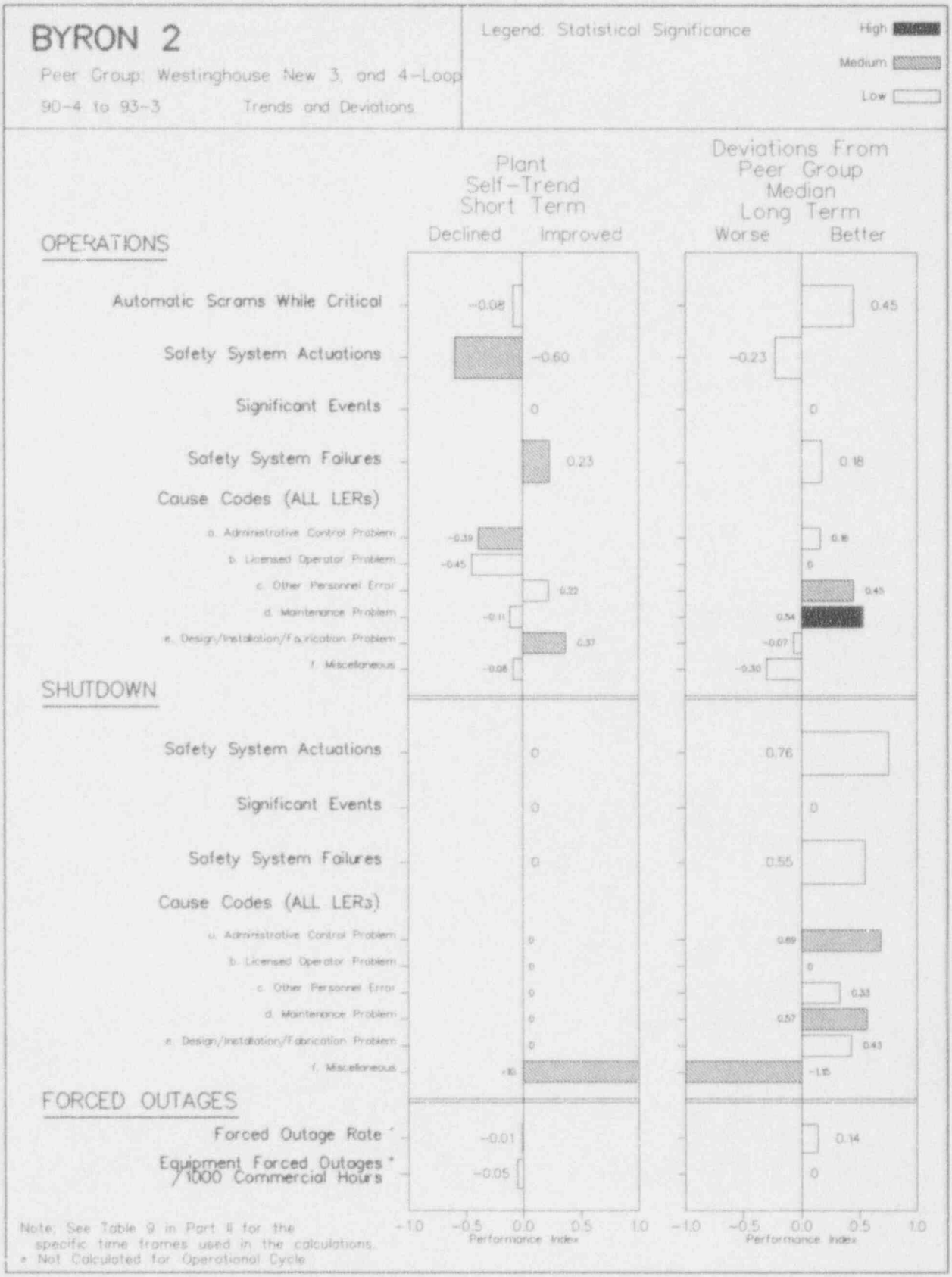

BYRON 2
Peer Group: Westinghouse New 3, and 4-Loop
90-4 to 93-3 Trends and Deviations
Legend: Statistical Significance
High
Medium
Low
Plant Self-Trend Short Term
Declined
Improved
Deviations From Peer Group Median Long Term
Worse
Better
OPERATIONS
Automatic Scrams While Critical
-0.08
0.45
Safety System Actuations
-0.60
-0.23
Significant Events
0
0
Safety System Failures
0.23
0.18
Cause Codes (ALL LERs)
a. Administrative Control Problem
-0.39
0.16
b. Licensed Operator Problem
-0.45
0
c. Other Personnel Error
0.22
0.45
d. Maintenance Problem
-0.11
0.54
e. Design/Installation/Fabrication Problem
0.37
-0.07
f. Miscellaneous
-0.08
-0.30
SHUTDOWN
Safety System Actuations
0
0.76
Significant Events
0
0
Safety System Failures
0
0.55
Cause Codes (ALL LERs)
a. Administrative Control Problem
0
0.69
b. Licensed Operator Problem
0
0
c. Other Personnel Error
0
0.33
d. Maintenance Problem
0
0.57
e. Design/Installation/Fabrication Problem
0
0.43
f. Miscellaneous
-1.0
-1.15
FORCED OUTAGES
Forced Outage Rate *
-0.01
0.14
Equipment Forced Outages * /1000 Commercial Hours
-0.05
0
-1.0
-0.5
0.0
0.5
1.0
Performance Index
Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.15a

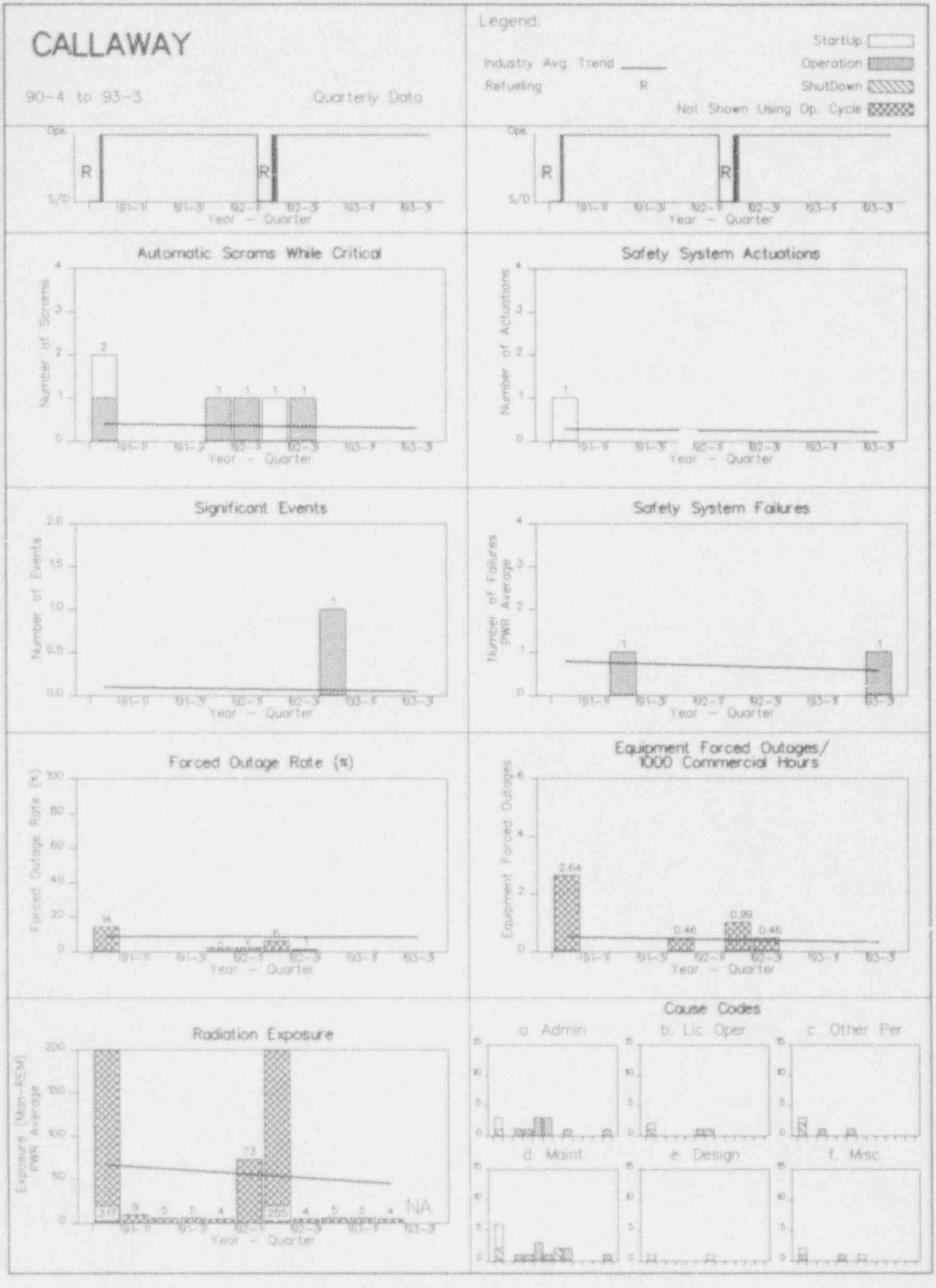
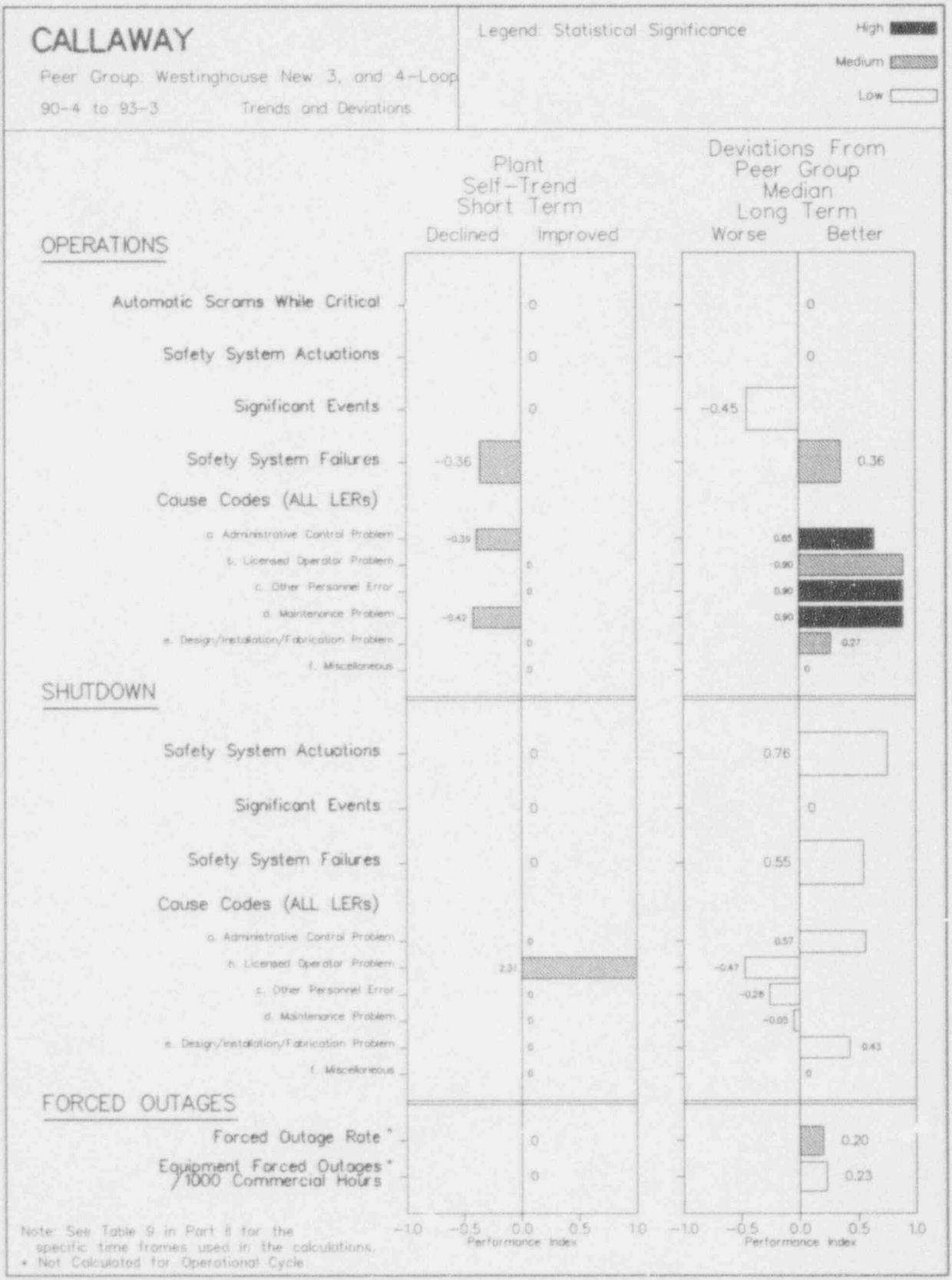

CALLAWAY
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Opn.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures
PWR Average
Forced Outage Rate (%)
Equipment Forced Outages/
1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM)
PWR Average
NA
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.15b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.16a

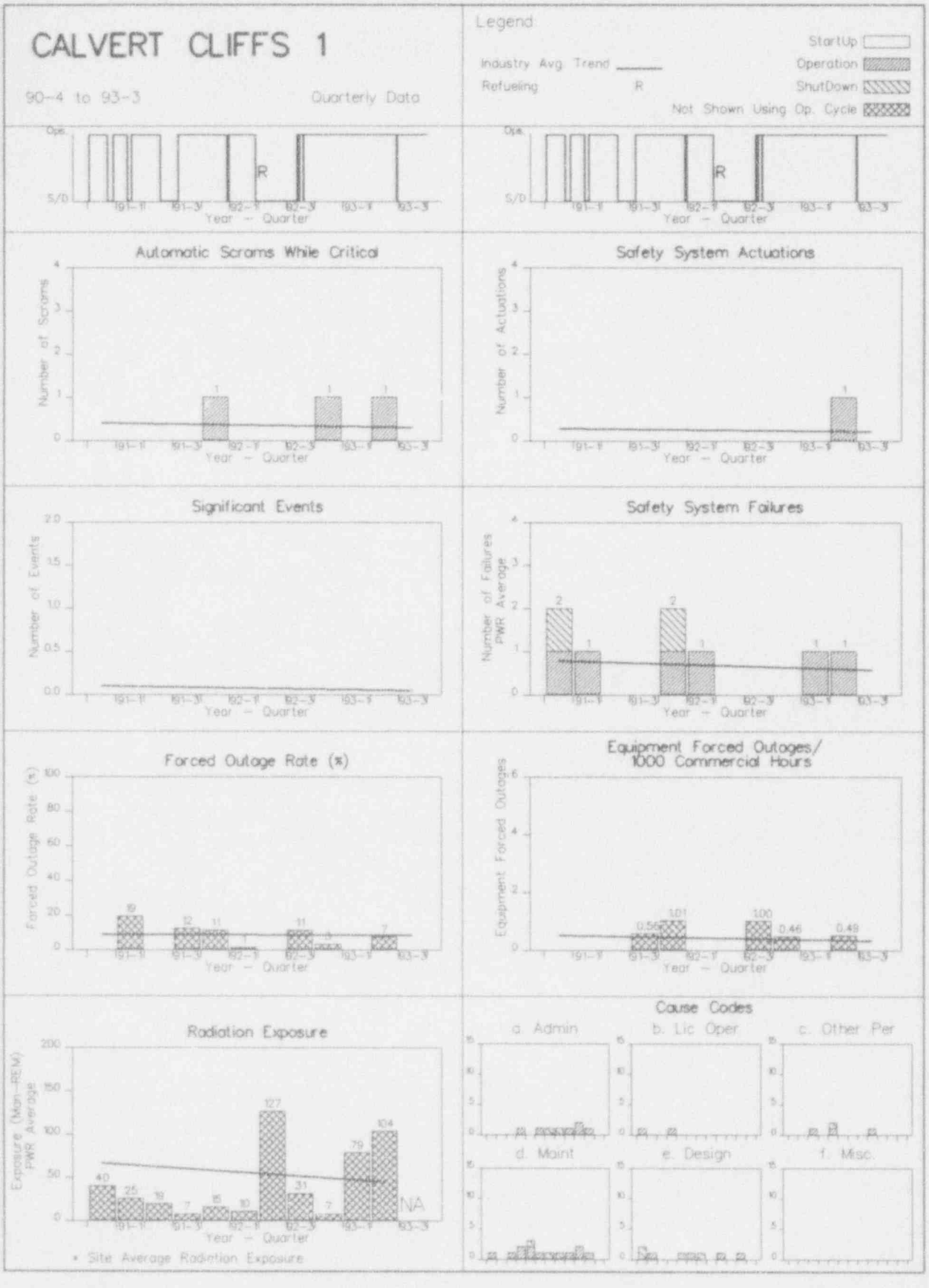
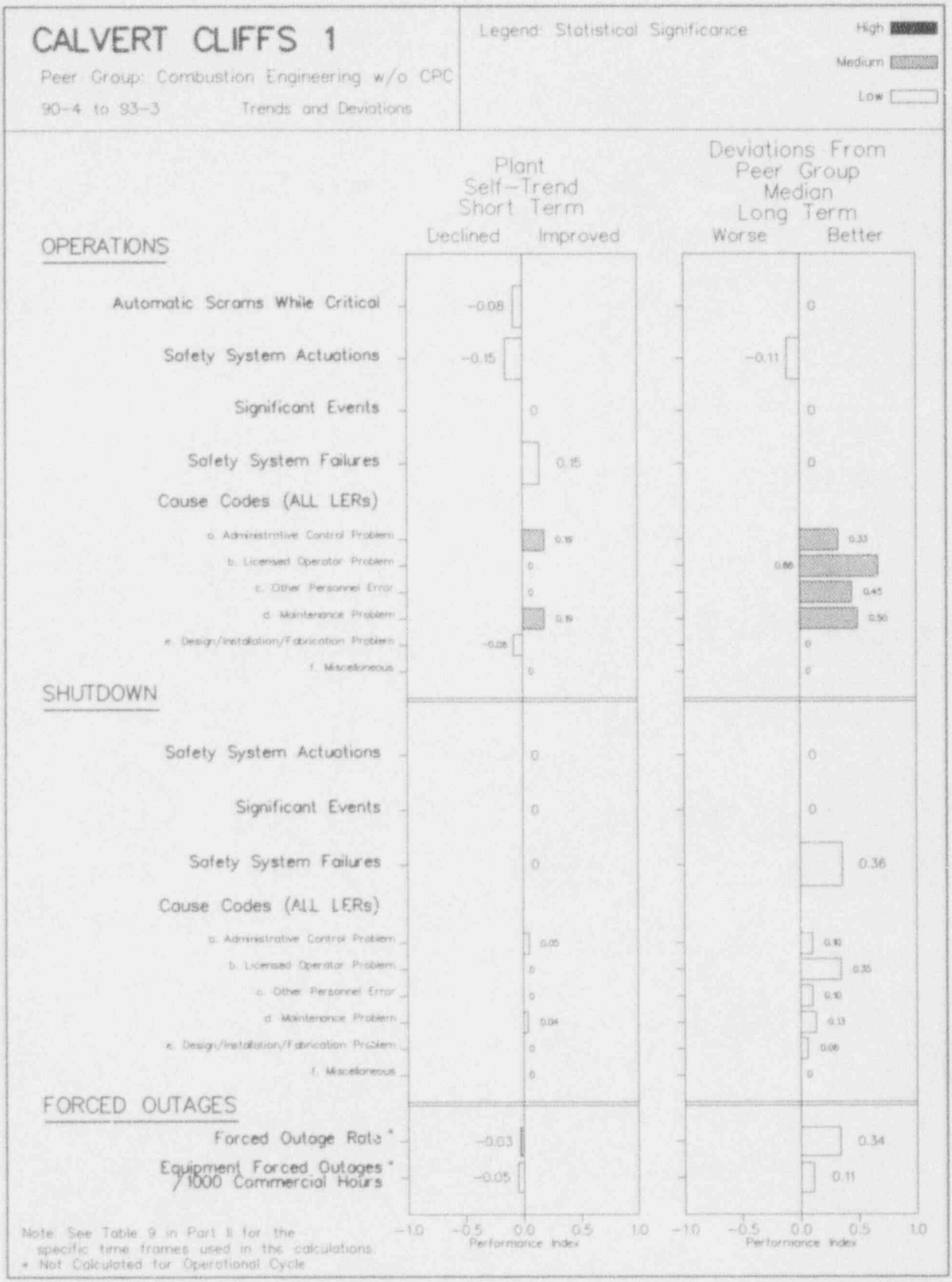

CALVERT CLIFFS 1
90--4 to 93-3
Quarterly Data
Legend
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Ops.
S/D
Year -- Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures
PWR Average
Forced Outage Rate (%)
Equipment Forced Outages/
1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM)
PWR Average
NA
* Site Average Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.16b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.17a

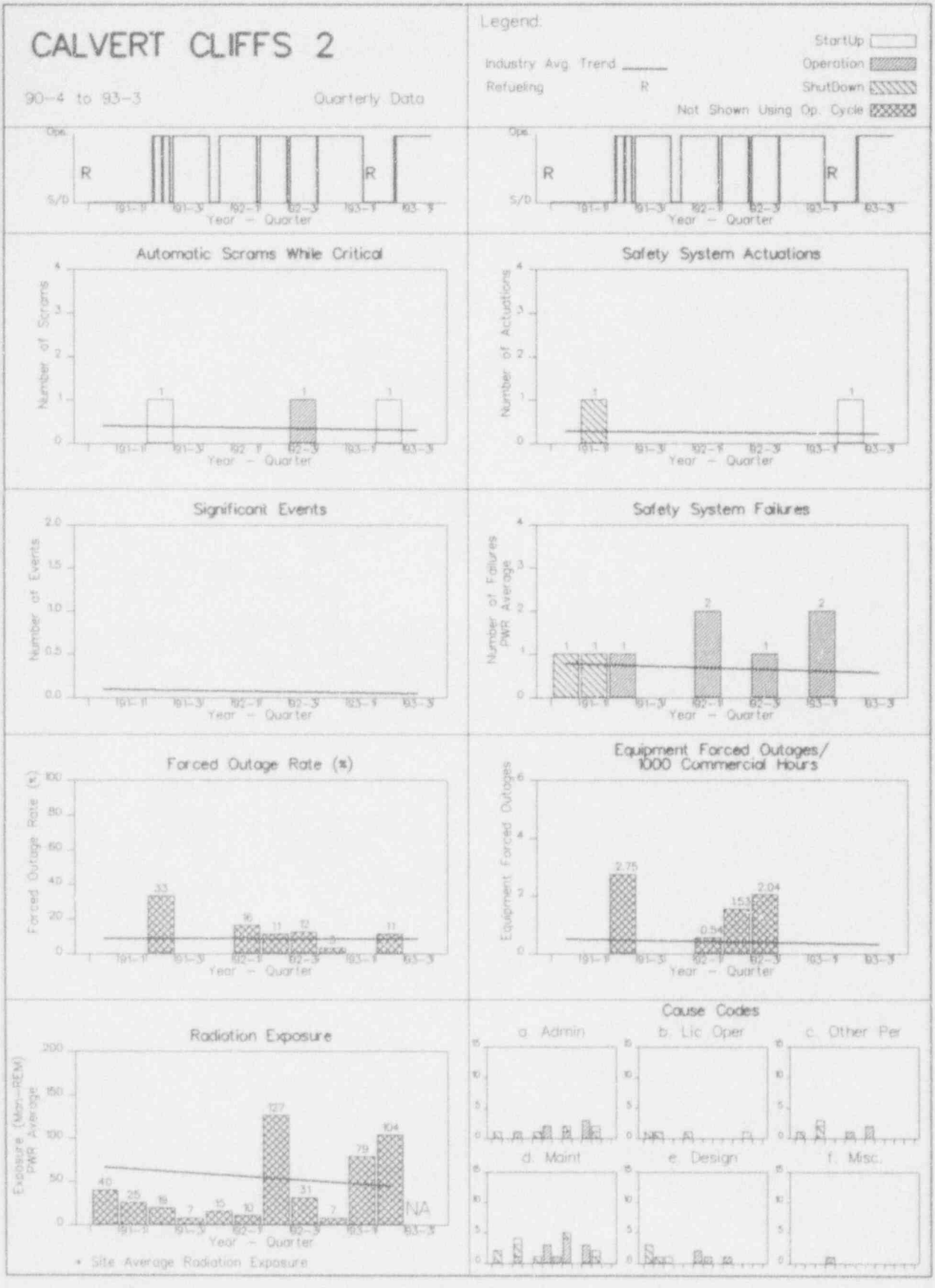

CALVERT CLIFFS 2
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Ops.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM) PWR Average
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.
NA
* Site Average Radiation Exposure

FIGURE 7.17b

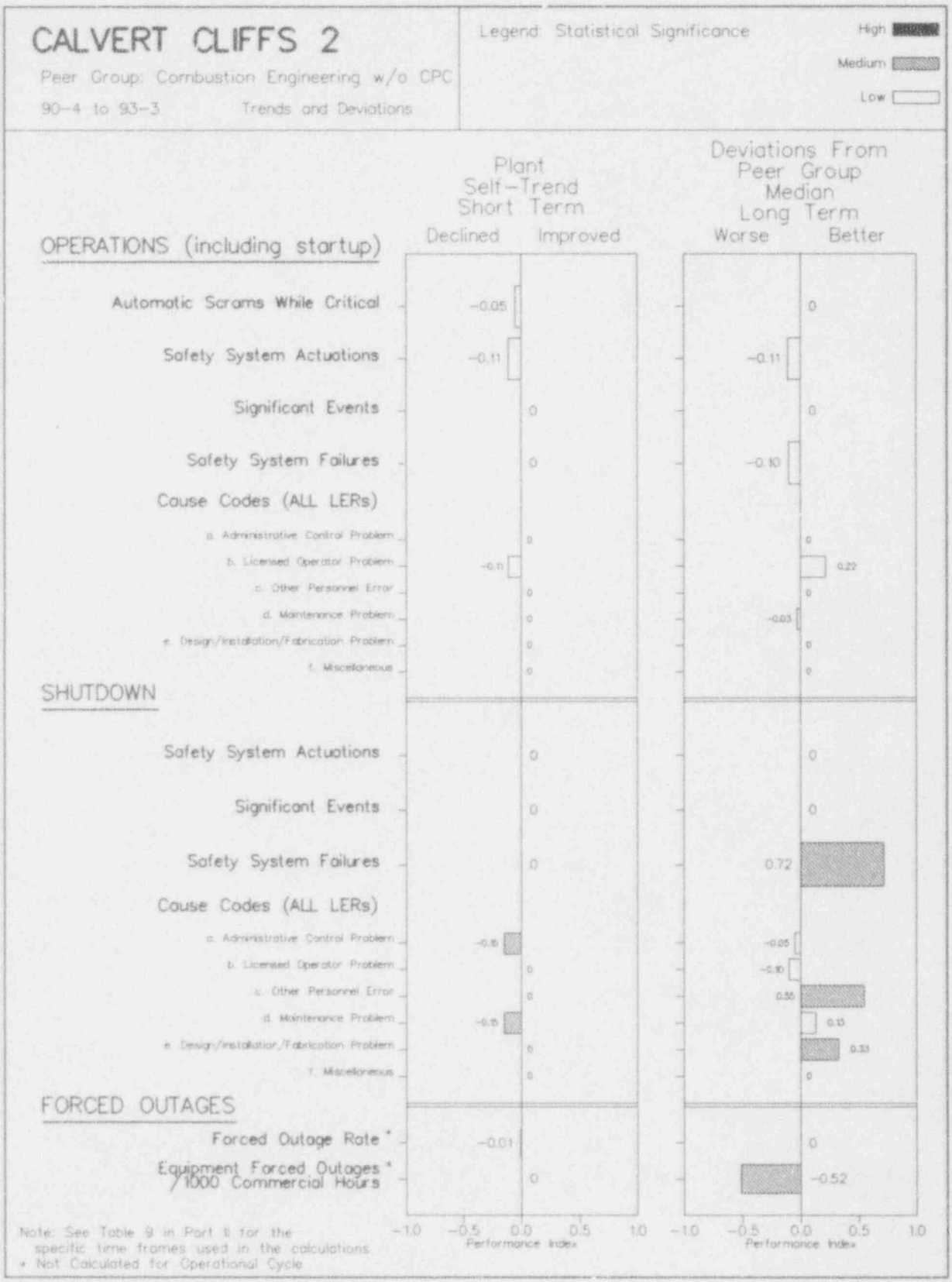

CALVERT CLIFFS 2
Peer Group: Combustion Engineering w/o CPC
90-4 to 93-3 Trends and Deviations
Legend: Statistical Significance
High
Medium
Low
Plant Self-Trend Short Term
Declined
Improved
Deviations From Peer Group Median Long Term
Worse
Better
OPERATIONS (including startup)
Automatic Scrams While Critical
-0.05
0
Safety System Actuations
-0.11
-0.11
Significant Events
0
0
Safety System Failures
0
-0.10
Cause Codes (ALL LERs)
a. Administrative Control Problem
0
0
b. Licensed Operator Problem
-0.11
0.22
c. Other Personnel Error
0
0
d. Maintenance Problem
0
-0.03
e. Design/Installation/Fabrication Problem
0
0
f. Miscellaneous
0
0
SHUTDOWN
Safety System Actuations
0
0
Significant Events
0
0
Safety System Failures
0
0.72
Cause Codes (ALL LERs)
a. Administrative Control Problem
-0.18
-0.05
b. Licensed Operator Problem
0
-0.10
c. Other Personnel Error
0
0.55
d. Maintenance Problem
-0.15
0.13
e. Design/Installation/Fabrication Problem
0
0.33
f. Miscellaneous
0
0
FORCED OUTAGES
Forced Outage Rate *
-0.01
0
Equipment Forced Outages * /1000 Commercial Hours
0
-0.52
-1.0
-0.5
0.0
0.5
1.0
Performance Index
Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.18a

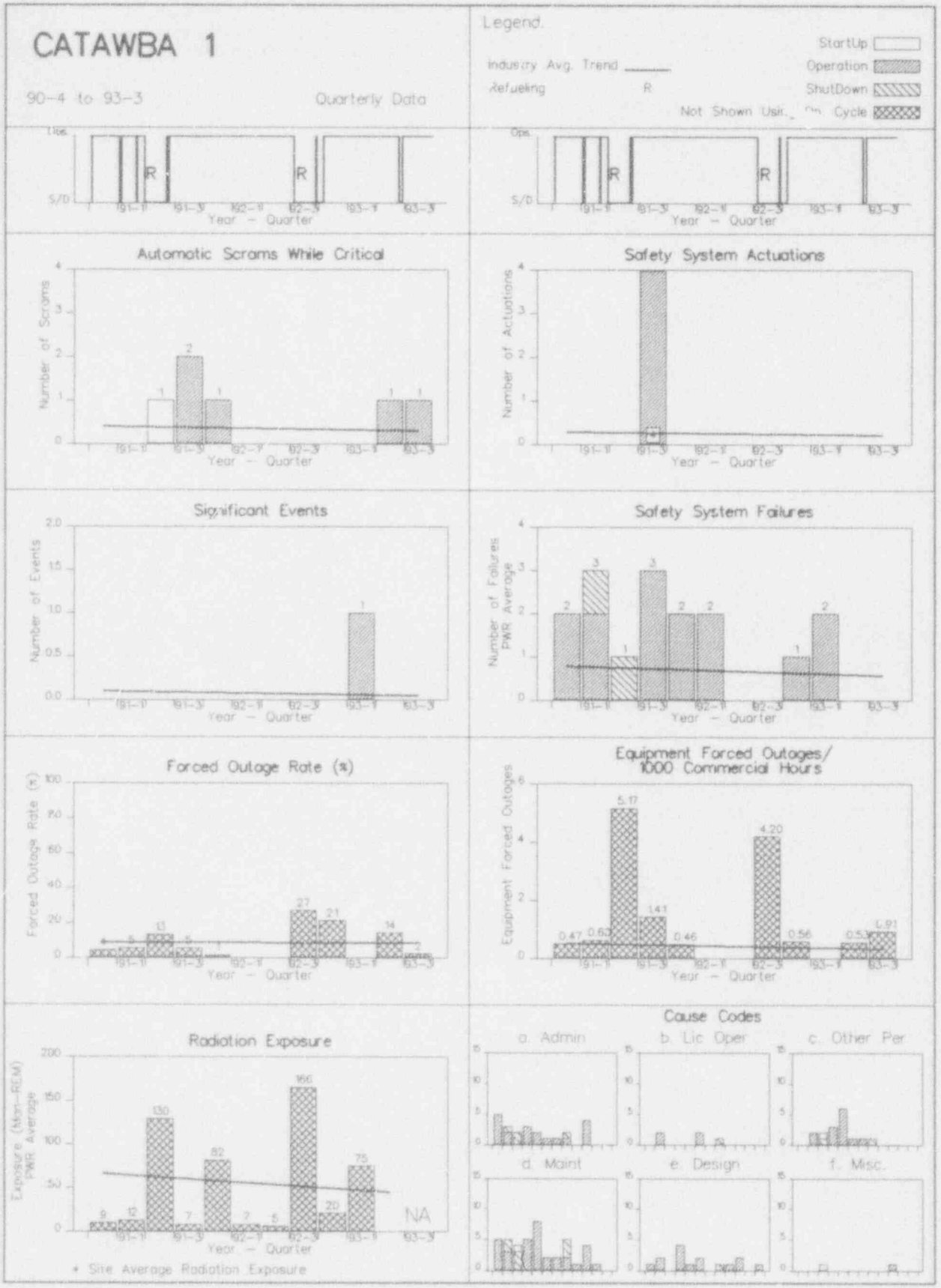

CATAWBA 1
90-4 to 93-3
Quarterly Data
Legend:
StartUp
Operation
ShutDown
Not Shown Usr. Def. Cycle
Industry Avg. Trend
Refueling
R
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM) PWR Average
* Site Average Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.
Year - Quarter

FIGURE 7.18b

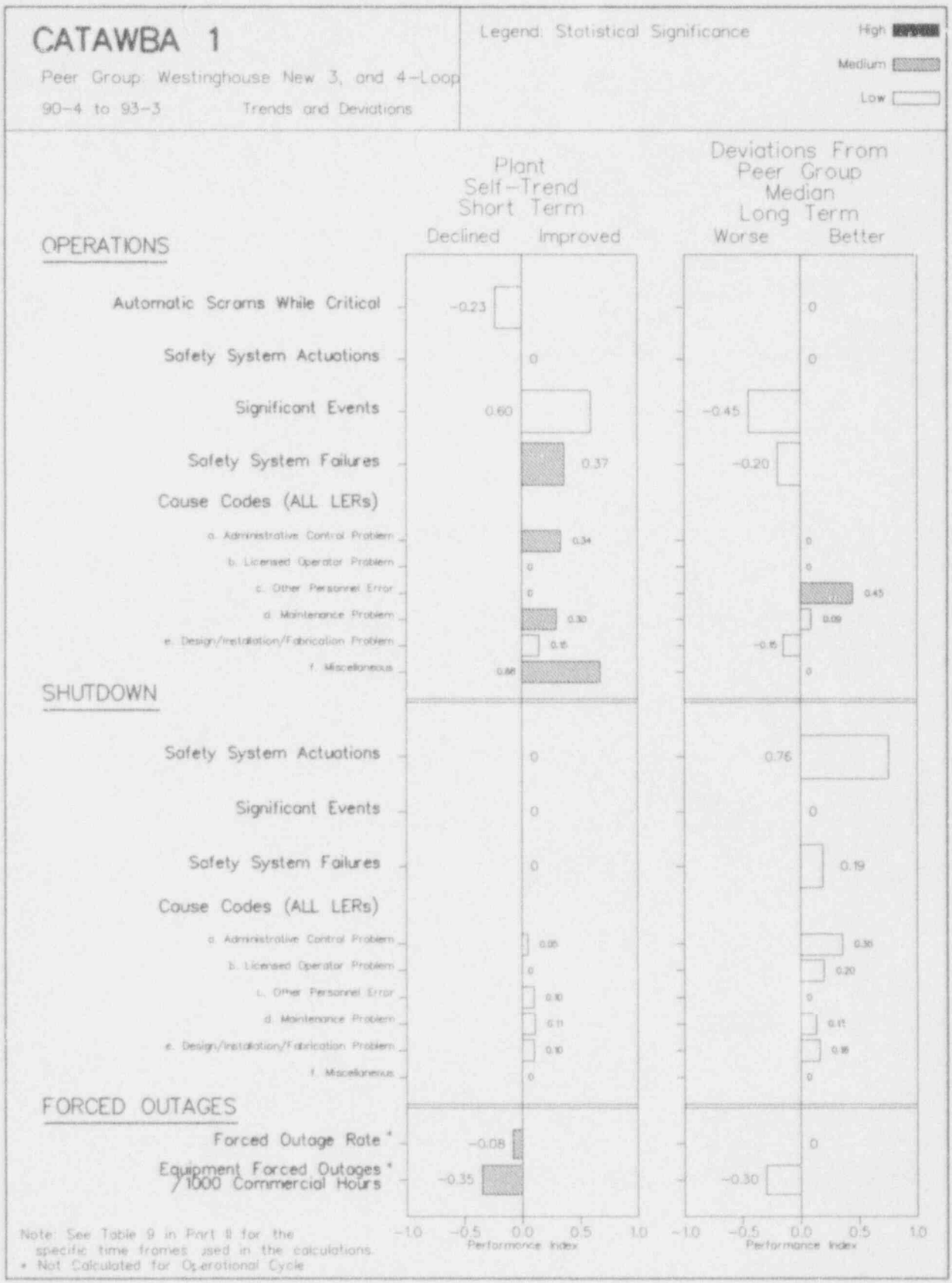

CATAWBA 1
Peer Group: Westinghouse New 3, and 4-Loop
90-4 to 93-3 Trends and Deviations
Legend: Statistical Significance
High
Medium
Low
Plant Self-Trend Short Term
Declined
Improved
Deviations From Peer Group Median Long Term
Worse
Better
OPERATIONS
Automatic Scrams While Critical
-0.23
0
Safety System Actuations
0
0
Significant Events
0.60
-0.45
Safety System Failures
0.37
-0.20
Cause Codes (ALL LERs)
a. Administrative Control Problem
0.34
0
b. Licensed Operator Problem
0
0
c. Other Personnel Error
0
0.45
d. Maintenance Problem
0.30
0.09
e. Design/Installation/Fabrication Problem
0.15
-0.15
f. Miscellaneous
0.88
0
SHUTDOWN
Safety System Actuations
0
0.76
Significant Events
0
0
Safety System Failures
0
0.19
Cause Codes (ALL LERs)
a. Administrative Control Problem
0.05
0.36
b. Licensed Operator Problem
0
0.20
c. Other Personnel Error
0.10
0
d. Maintenance Problem
0.11
0.11
e. Design/Installation/Fabrication Problem
0.10
0.18
f. Miscellaneous
0
0
FORCED OUTAGES
Forced Outage Rate *
-0.08
0
Equipment Forced Outages * / 1000 Commercial Hours
-0.35
-0.30
-1.0 -0.5 0.0 0.5 1.0
Performance Index
-1.0 -0.5 0.0 0.5 1.0
Performance Index
Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.19a

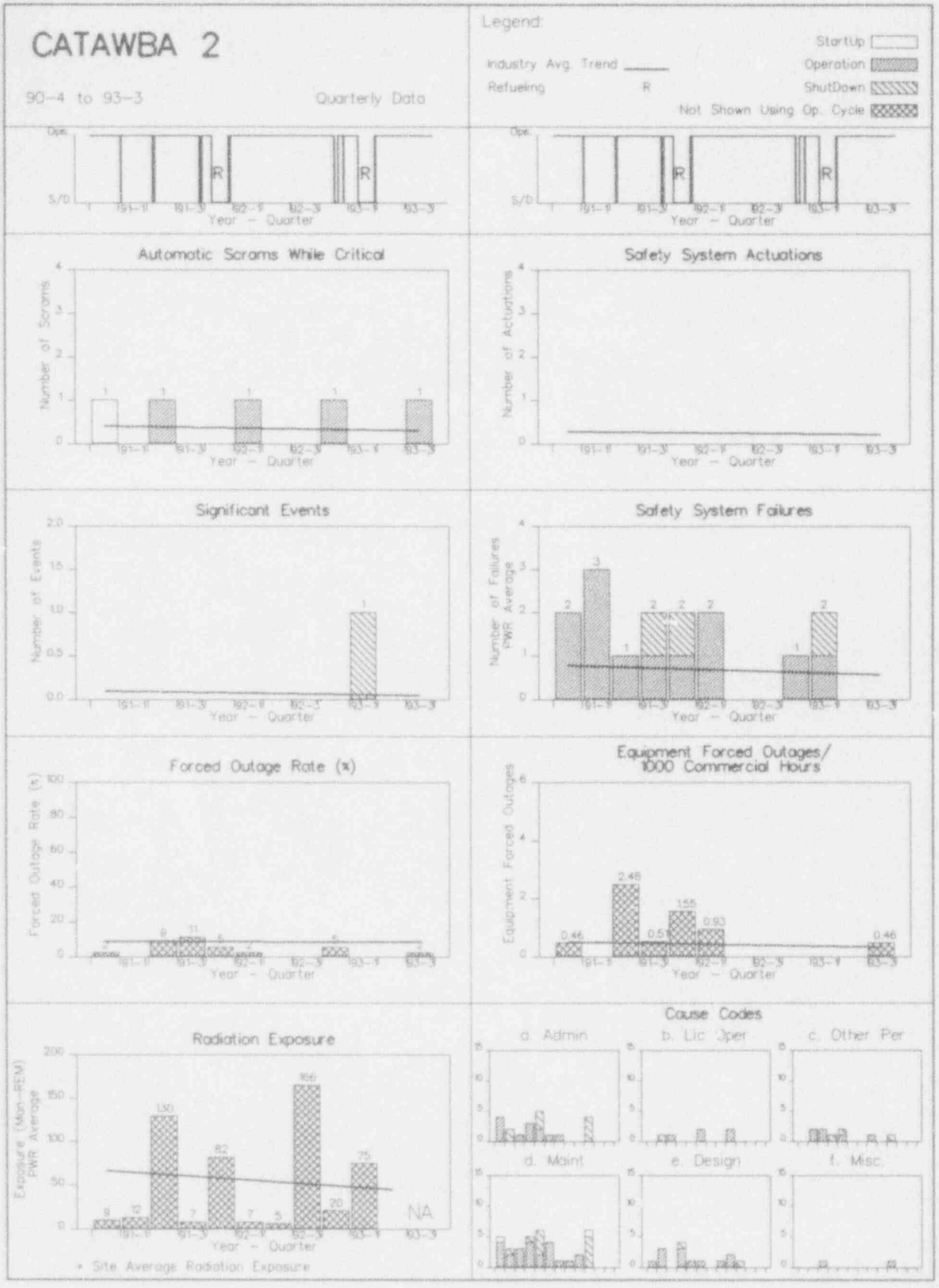

CATAWBA 2
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Opn.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures
PWR Average
Forced Outage Rate (%)
Equipment Forced Outages/
1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM)
PWR Average
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.
NA
* Site Average Radiation Exposure

FIGURE 7.19b

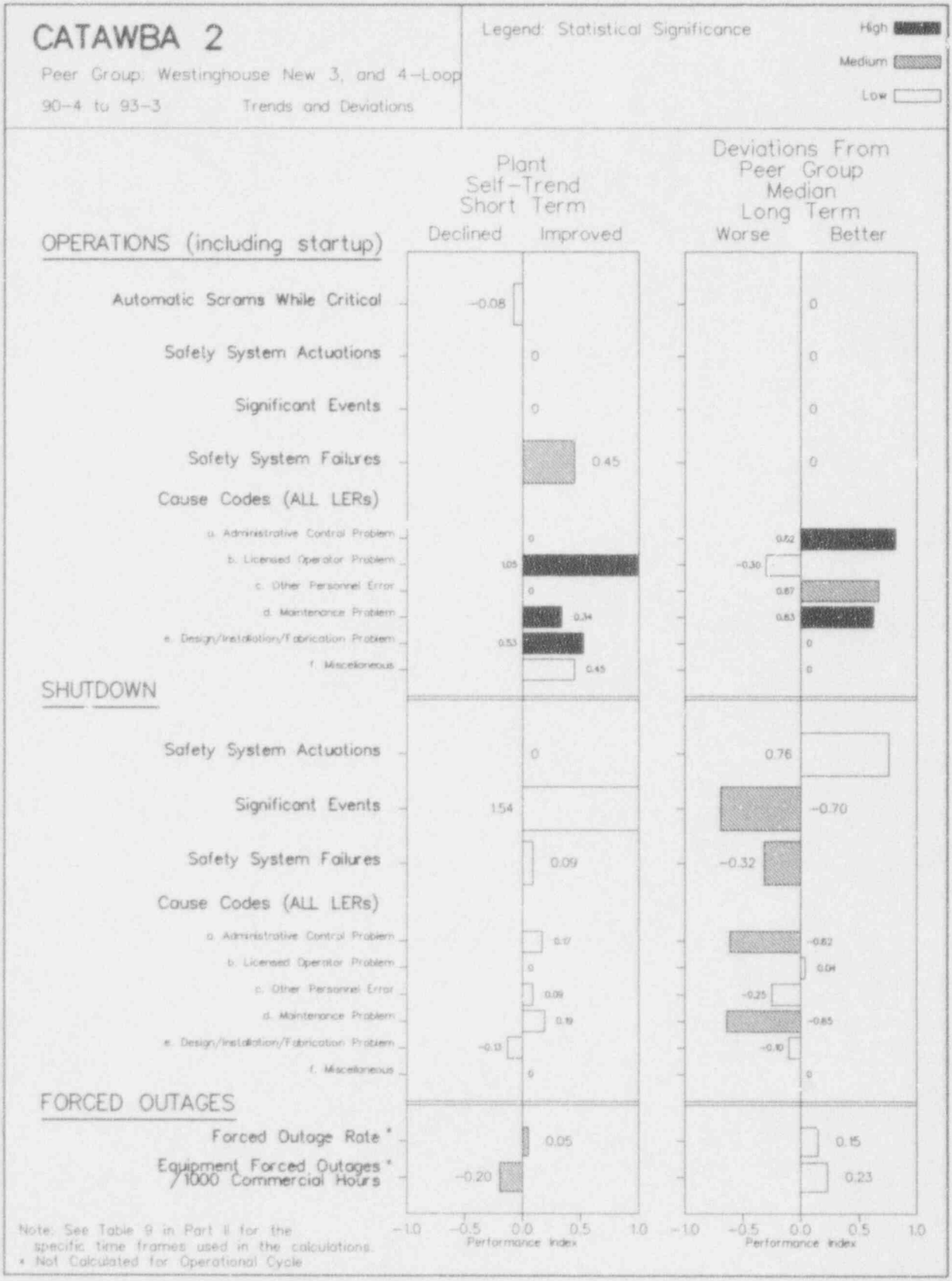

CATAWBA 2
Peer Group: Westinghouse New 3, and 4-Loop
90-4 to 93-3 Trends and Deviations
Legend: Statistical Significance
High
Medium
Low
Plant Self-Trend Short Term
Declined
Improved
Deviations From Peer Group Median Long Term
Worse
Better
OPERATIONS (including startup)
Automatic Scrams While Critical
-0.08
0
Safety System Actuations
0
0
Significant Events
0
0
Safety System Failures
0.45
0
Cause Codes (ALL LERs)
a. Administrative Control Problem
0
0.62
b. Licensed Operator Problem
1.05
-0.30
c. Other Personnel Error
0
0.87
d. Maintenance Problem
0.34
0.83
e. Design/Installation/Fabrication Problem
0.53
0
f. Miscellaneous
0.45
0
SHUTDOWN
Safety System Actuations
0
0.76
Significant Events
1.54
-0.70
Safety System Failures
0.09
-0.32
Cause Codes (ALL LERs)
a. Administrative Control Problem
0.17
-0.62
b. Licensed Operator Problem
0
0.04
c. Other Personnel Error
0.09
-0.25
d. Maintenance Problem
0.19
-0.85
e. Design/Installation/Fabrication Problem
-0.13
-0.10
f. Miscellaneous
0
0
FORCED OUTAGES
Forced Outage Rate *
0.05
0.15
Equipment Forced Outages * /1000 Commercial Hours
-0.20
0.23
-1.0 -0.5 0.0 0.5 1.0
Performance Index
-1.0 -0.5 0.0 0.5 1.0
Performance Index
Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.20a

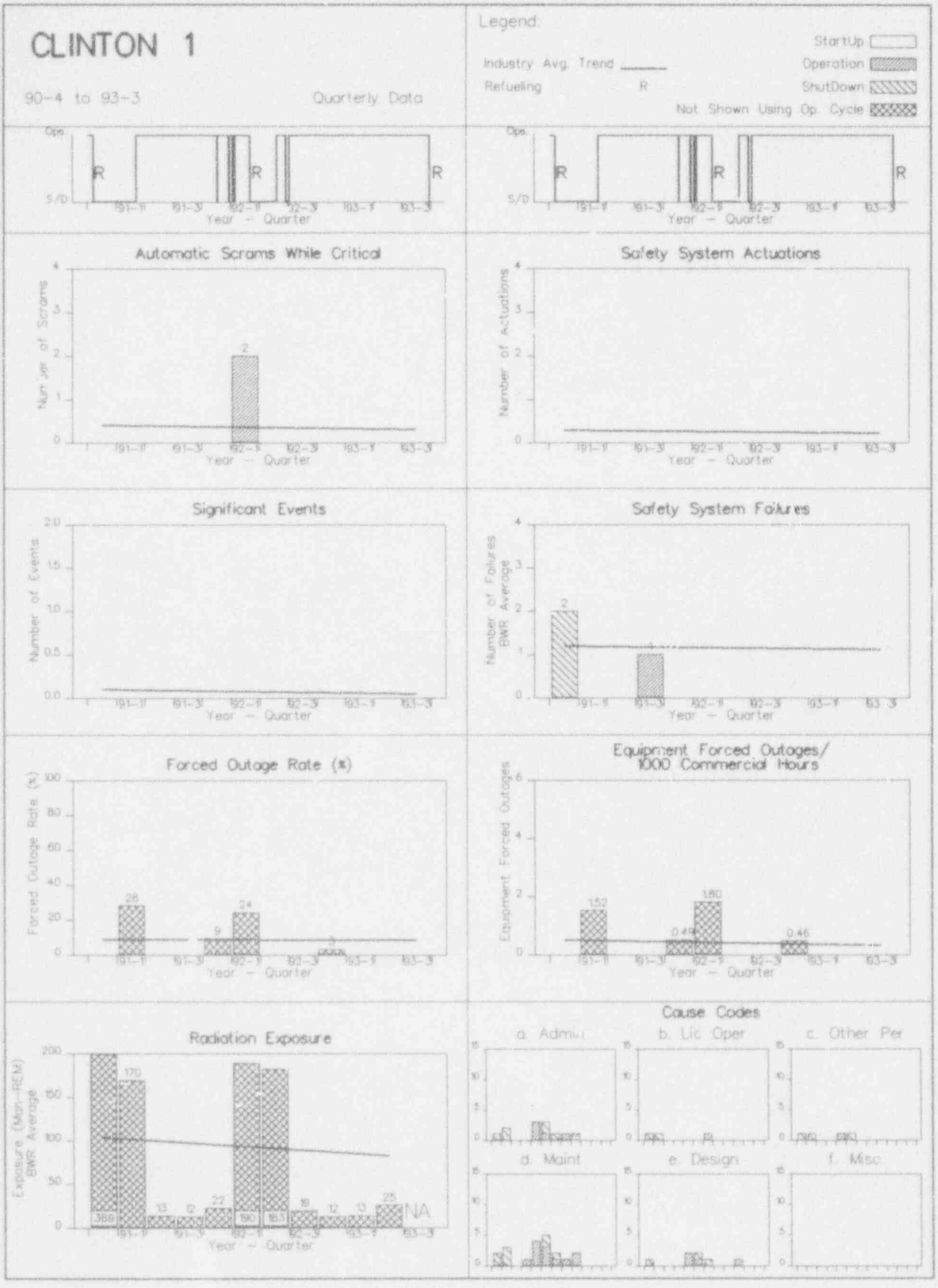

CLINTON 1
90-4 to 93-3
Quarterly Data
Legend:
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Industry Avg. Trend
Refueling
R
Ops
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures
BWR Average
Forced Outage Rate (%)
Equipment Forced Outages/
1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM)
BWR Average
NA
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc

FIGURE 7.20b

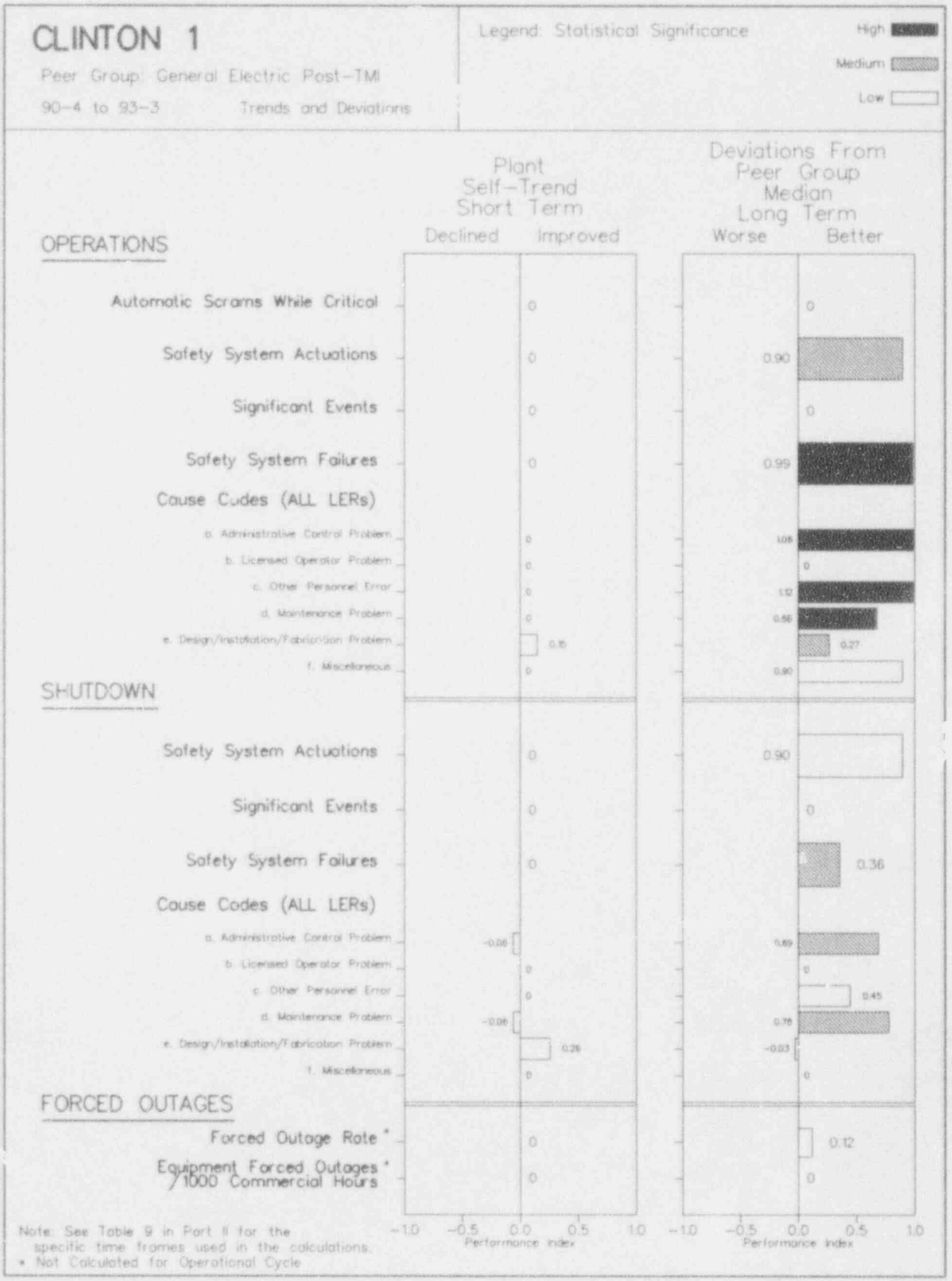

CLINTON 1
Peer Group: General Electric Post-TMI
90-4 to 93-3 Trends and Deviations
Legend: Statistical Significance
High
Medium
Low
Plant Self-Trend Short Term
Declined
Improved
Deviations From Peer Group Median Long Term
Worse
Better
OPERATIONS
Automatic Scrams While Critical
Safety System Actuations
Significant Events
Safety System Failures
Cause Codes (ALL LERs)
a. Administrative Control Problem
b. Licensed Operator Problem
c. Other Personnel Error
d. Maintenance Problem
e. Design/Installation/Fabrication Problem
f. Miscellaneous
SHUTDOWN
Safety System Actuations
Significant Events
Safety System Failures
Cause Codes (ALL LERs)
a. Administrative Control Problem
b. Licensed Operator Problem
c. Other Personnel Error
d. Maintenance Problem
e. Design/Installation/Fabrication Problem
f. Miscellaneous
FORCED OUTAGES
Forced Outage Rate *
Equipment Forced Outages * /1000 Commercial Hours
0.90
0.99
1.08
1.12
0.56
0.27
0.36
0.69
0.45
0.78
0.12
-1.0
-0.5
0.0
0.5
1.0
Performance Index
Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.21o

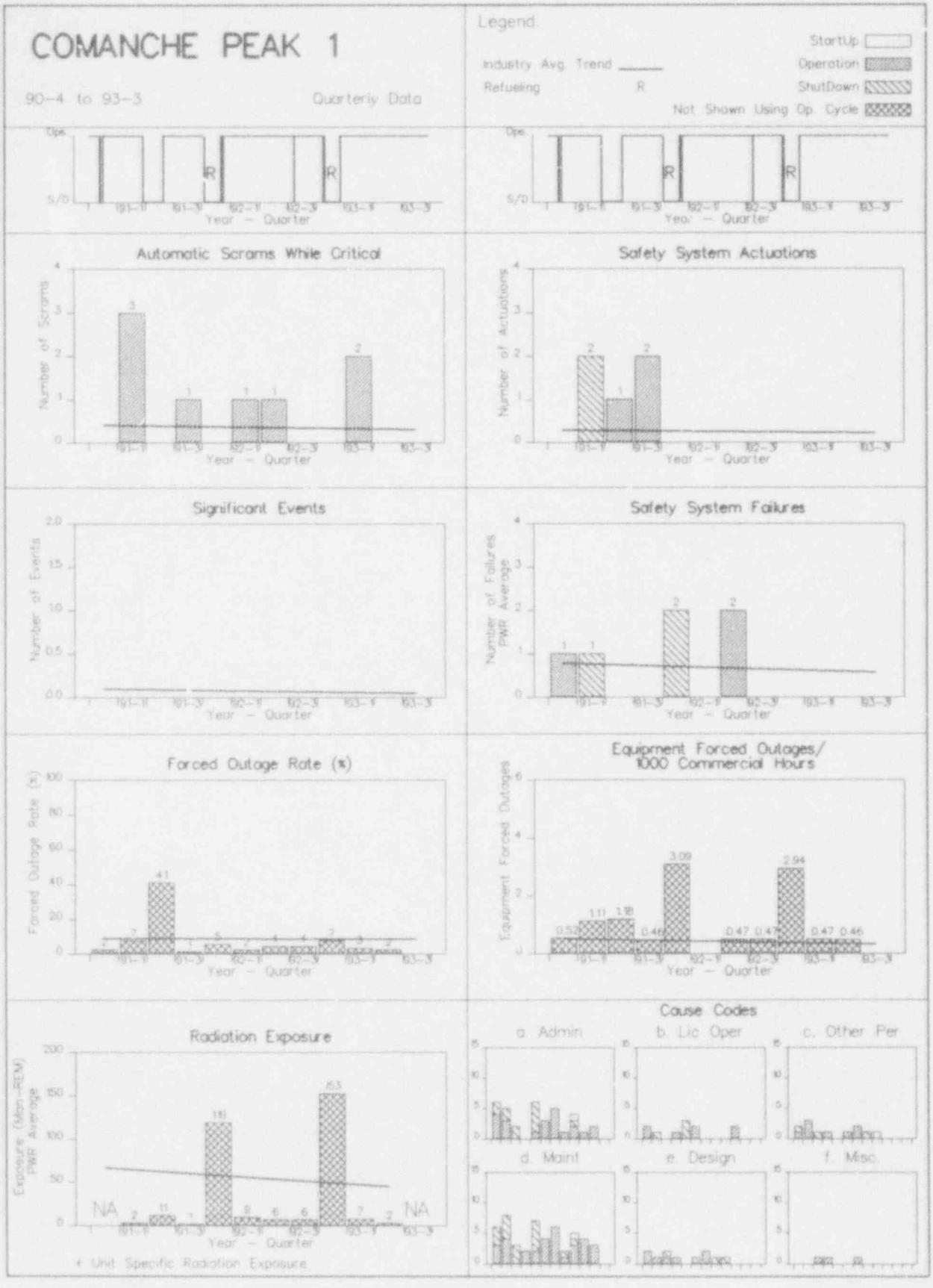
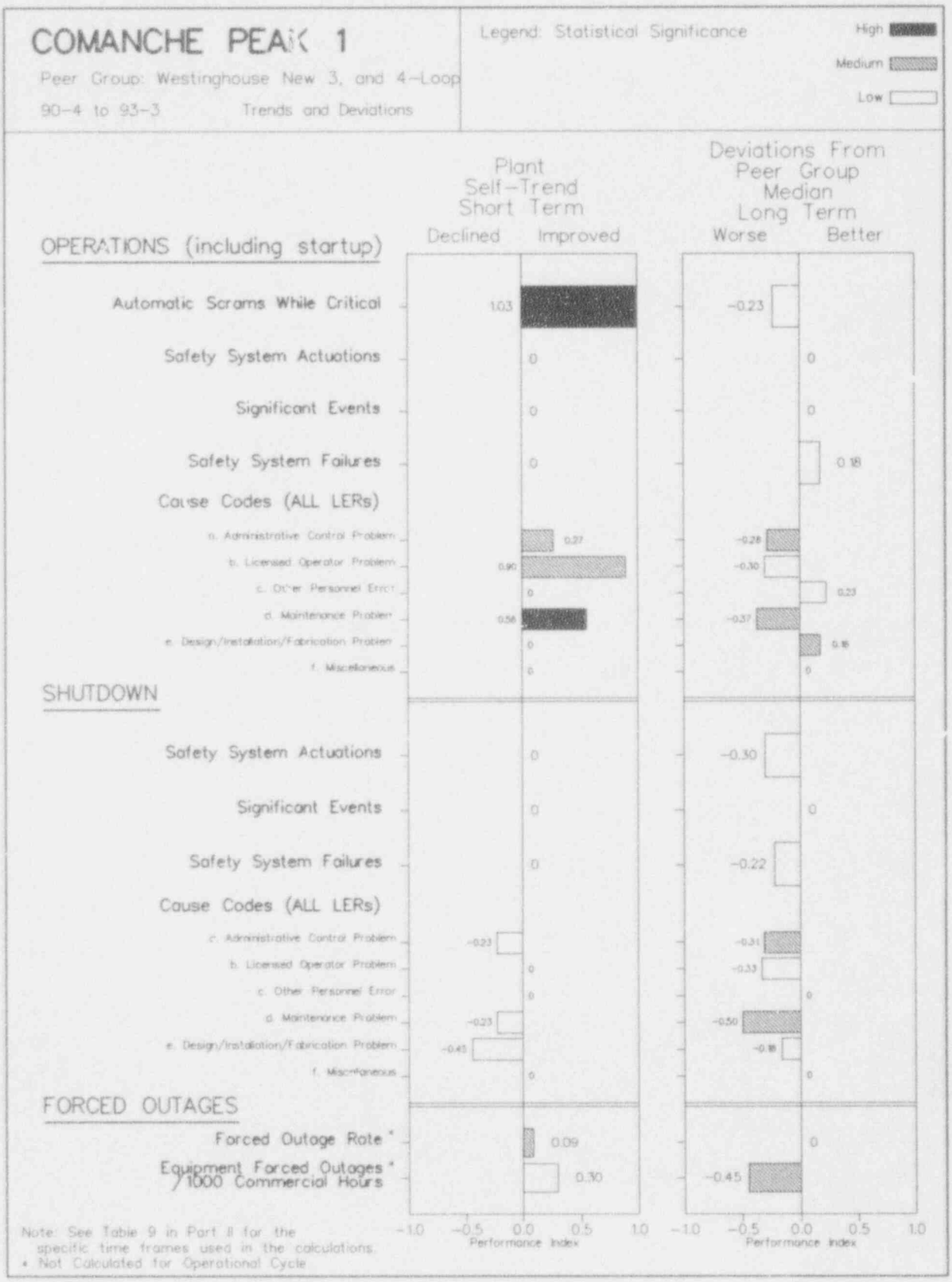

COMANCHE PEAK 1
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Ope.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM) PWR Average
NA
Unit Specific Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.21b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.22a

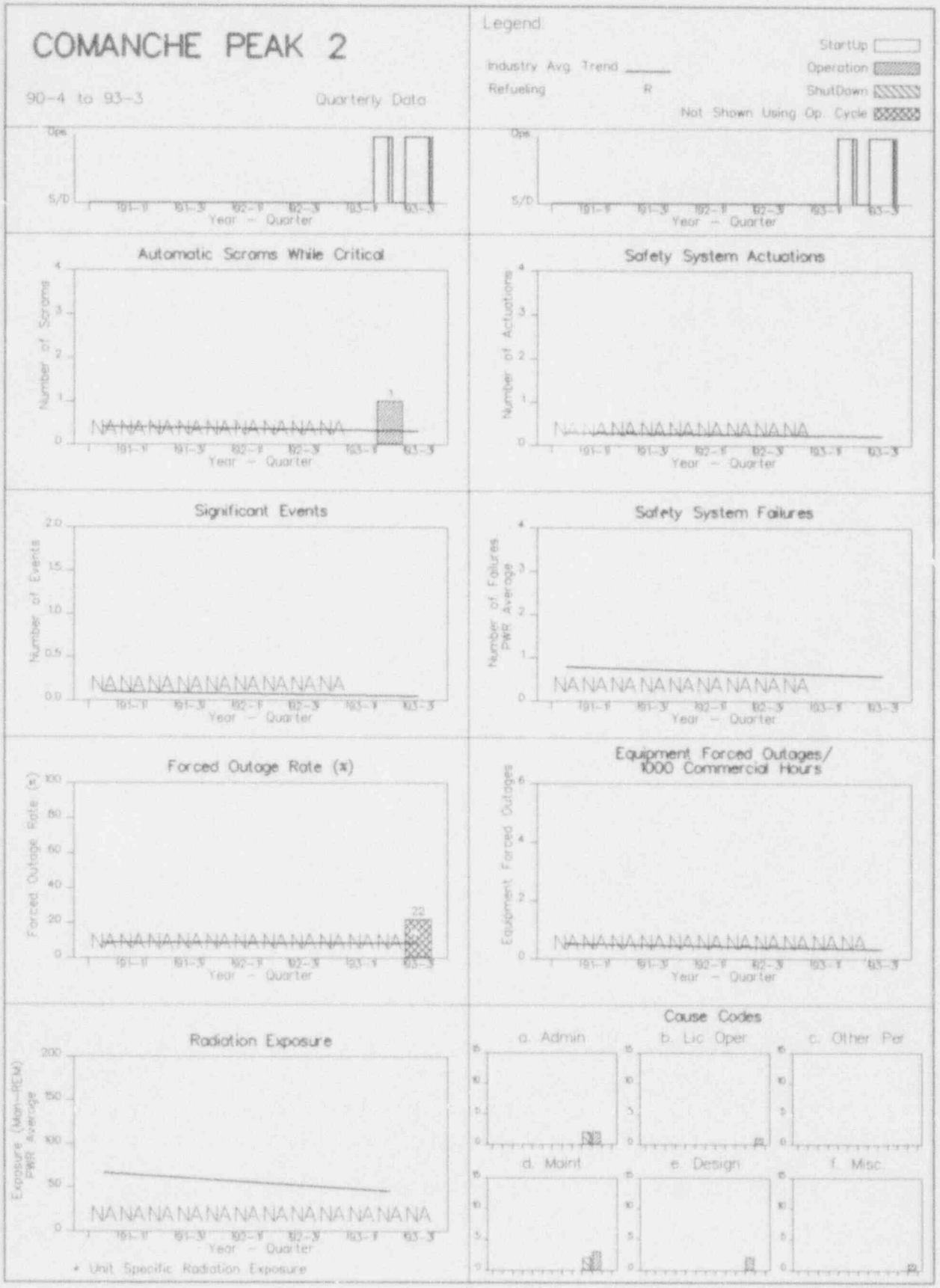

COMANCHE PEAK 2
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Ops
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM) PWR Average
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.
* Unit Specific Radiation Exposure

FIGURE 7.22b

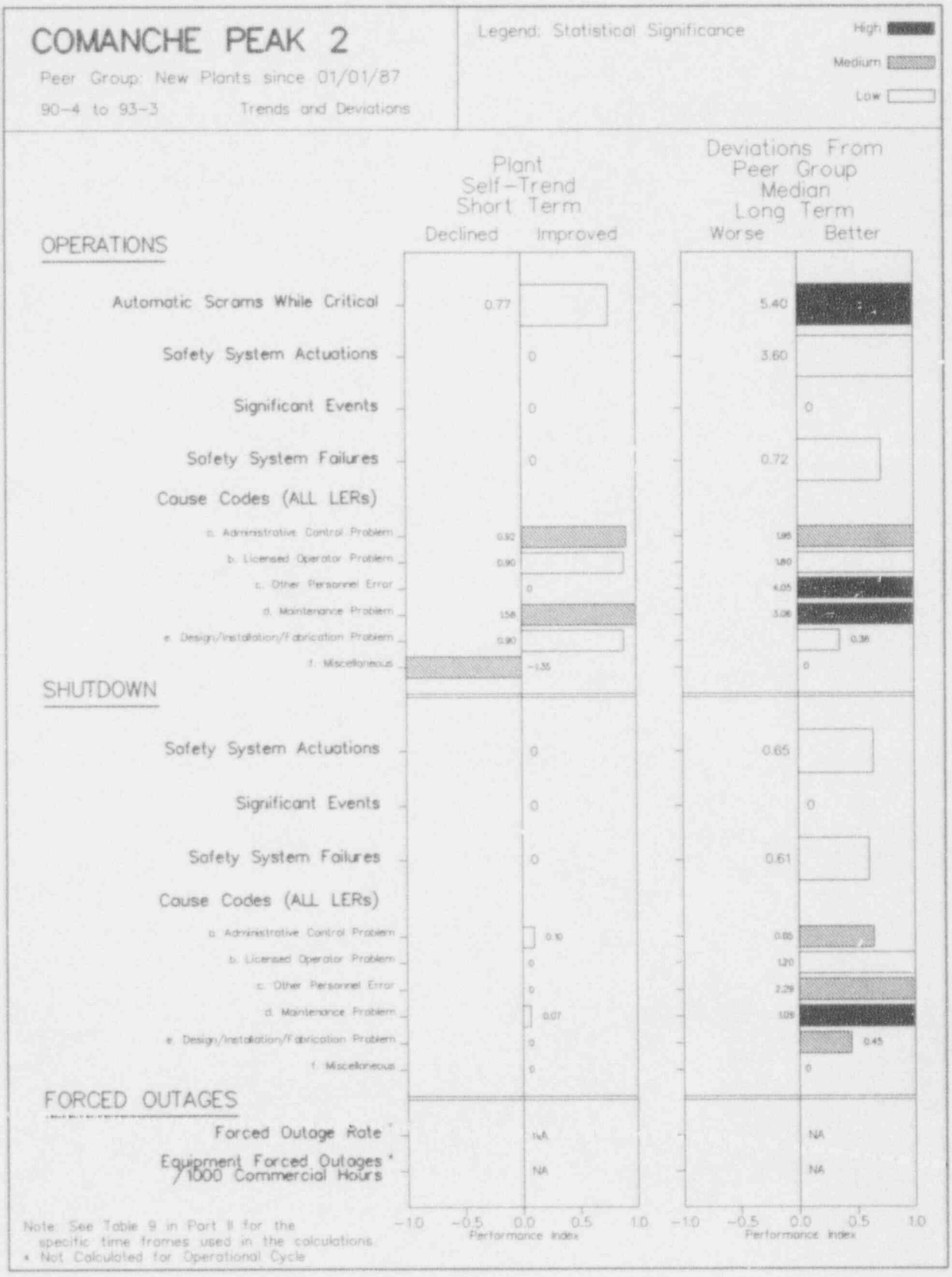

COMANCHE PEAK 2
Peer Group: New Plants since 01/01/87
90-4 to 93-3 Trends and Deviations
Legend: Statistical Significance
High
Medium
Low
Plant Self-Trend Short Term
Declined
Improved
Deviations From Peer Group Median Long Term
Worse
Better
OPERATIONS
Automatic Scrams While Critical
0.77
5.40
Safety System Actuations
0
3.60
Significant Events
0
0
Safety System Failures
0
0.72
Cause Codes (ALL LERs)
a. Administrative Control Problem
0.92
1.95
b. Licensed Operator Problem
0.90
1.80
c. Other Personnel Error
0
4.05
d. Maintenance Problem
1.58
3.06
e. Design/Installation/Fabrication Problem
0.90
0.36
f. Miscellaneous
-1.35
0
SHUTDOWN
Safety System Actuations
0
0.65
Significant Events
0
0
Safety System Failures
0
0.61
Cause Codes (ALL LERs)
a. Administrative Control Problem
0.10
0.85
b. Licensed Operator Problem
0
1.20
c. Other Personnel Error
0
2.29
d. Maintenance Problem
0.07
3.09
e. Design/Installation/Fabrication Problem
0
0.45
f. Miscellaneous
0
0
FORCED OUTAGES
Forced Outage Rate *
NA
NA
Equipment Forced Outages * /1000 Commercial Hours
NA
NA
-1.0
-0.5
0.0
0.5
1.0
Performance Index
Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.23a

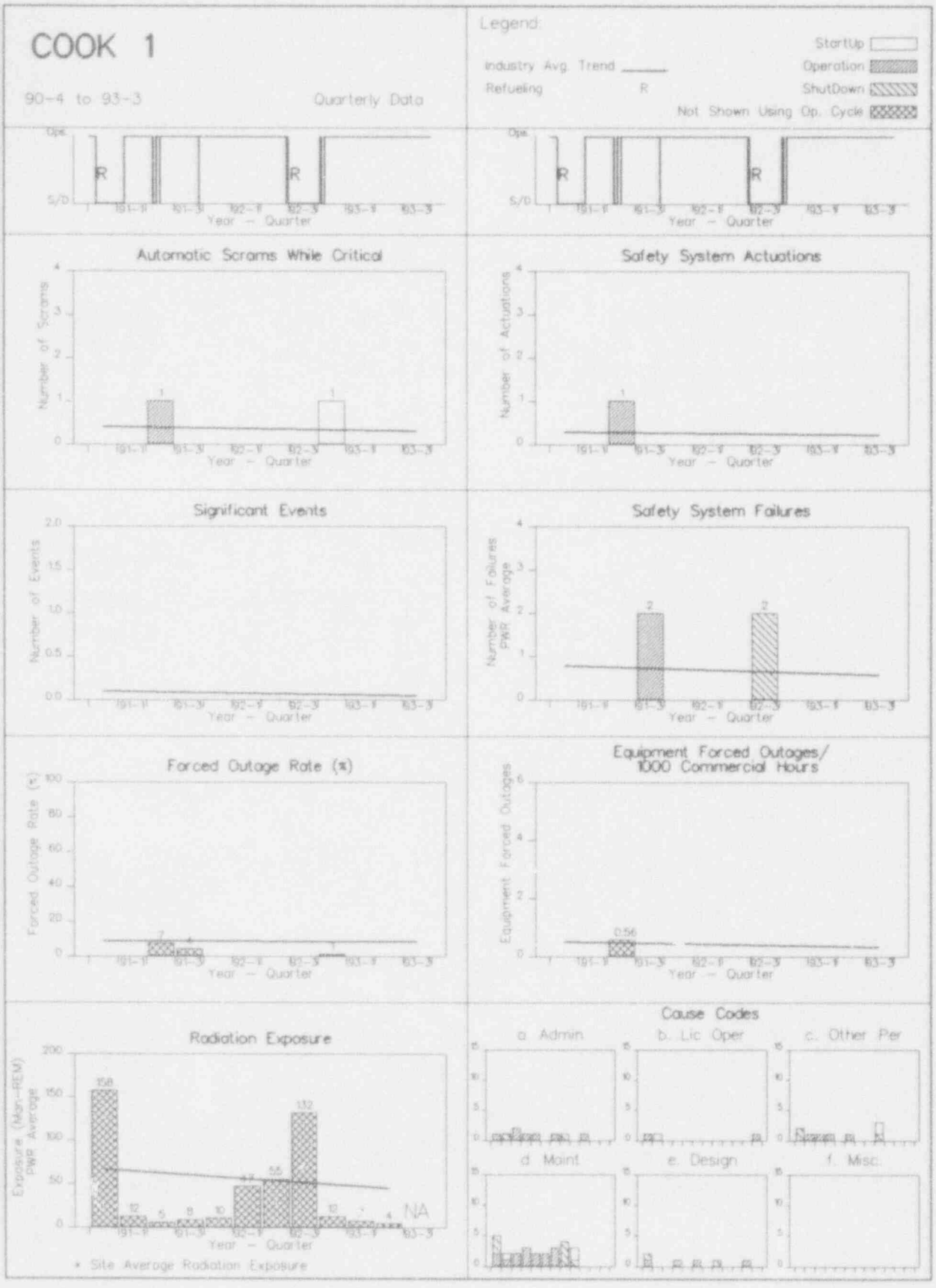
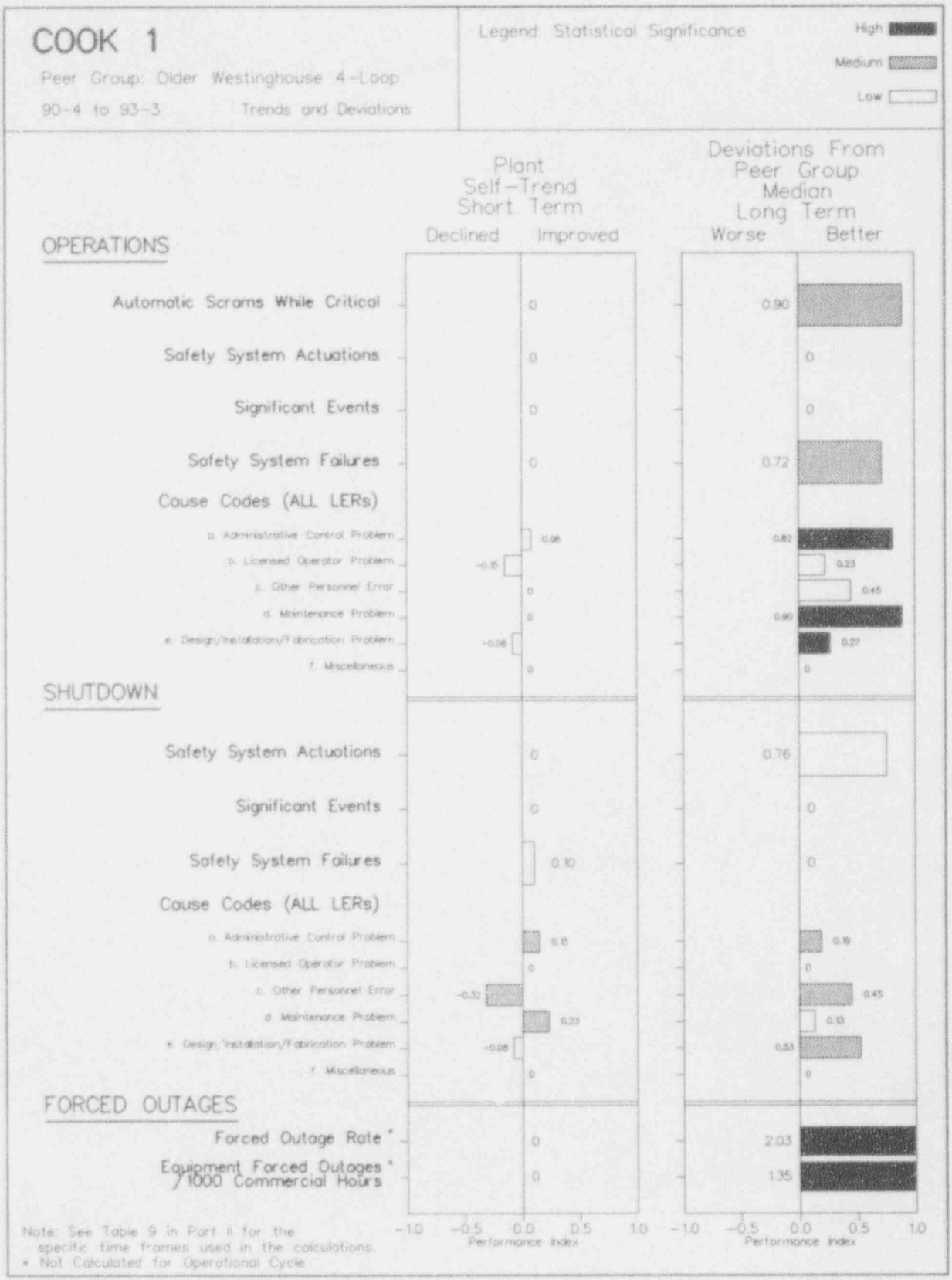

COOK 1
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Opr.
S/D
R
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
0.56
Radiation Exposure
Exposure (Man-REM) PWR Average
158
132
55
NA
* Site Average Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.23b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.24a

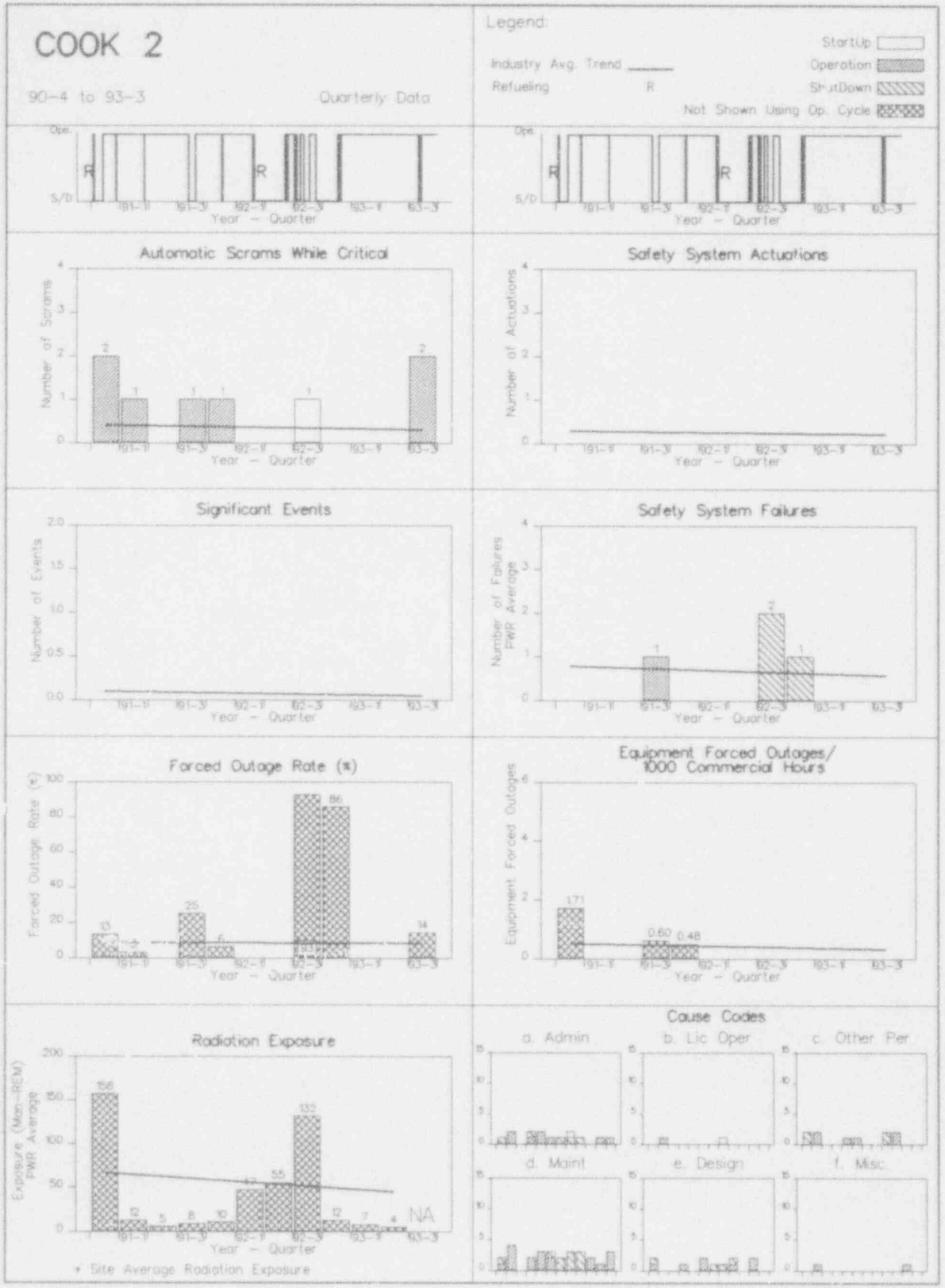
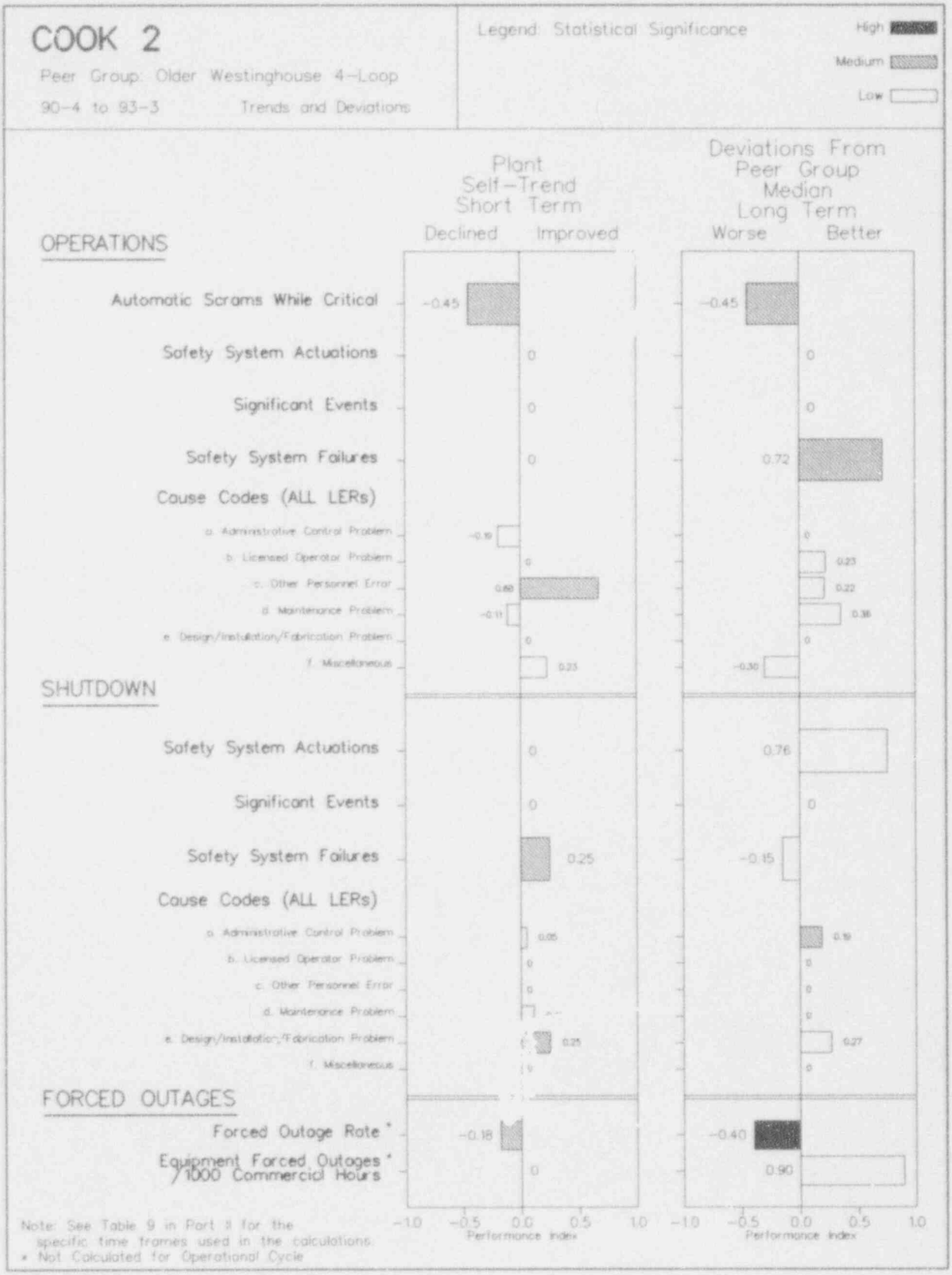

COOK 2
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Ope.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures
PWR Average
Forced Outage Rate (%)
Equipment Forced Outages/
1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM)
PWR Average
NA
* Site Average Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc

FIGURE 7.24b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.25a

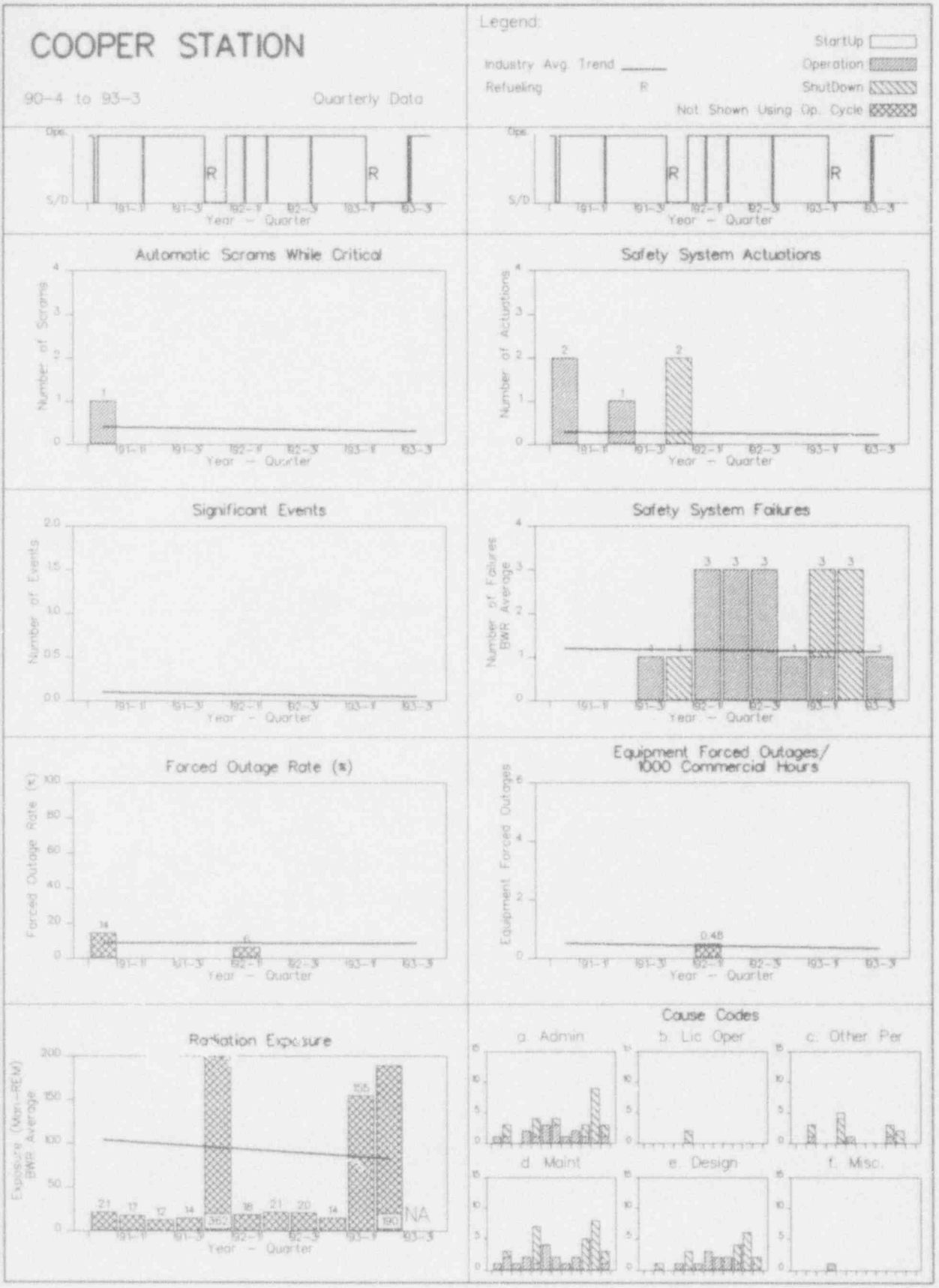

COOPER STATION
90-4 to 93-3
Quarterly Data
Legend:
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Industry Avg. Trend
Refueling
R
Ops.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures
BWR Average
Forced Outage Rate (%)
Forced Outage Rate (%)
Equipment Forced Outages/
1000 Commercial Hours
Equipment Forced Outages
0.48
Radiation Exposure
Exposure (Man-REM)
BWR Average
NA
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.25b

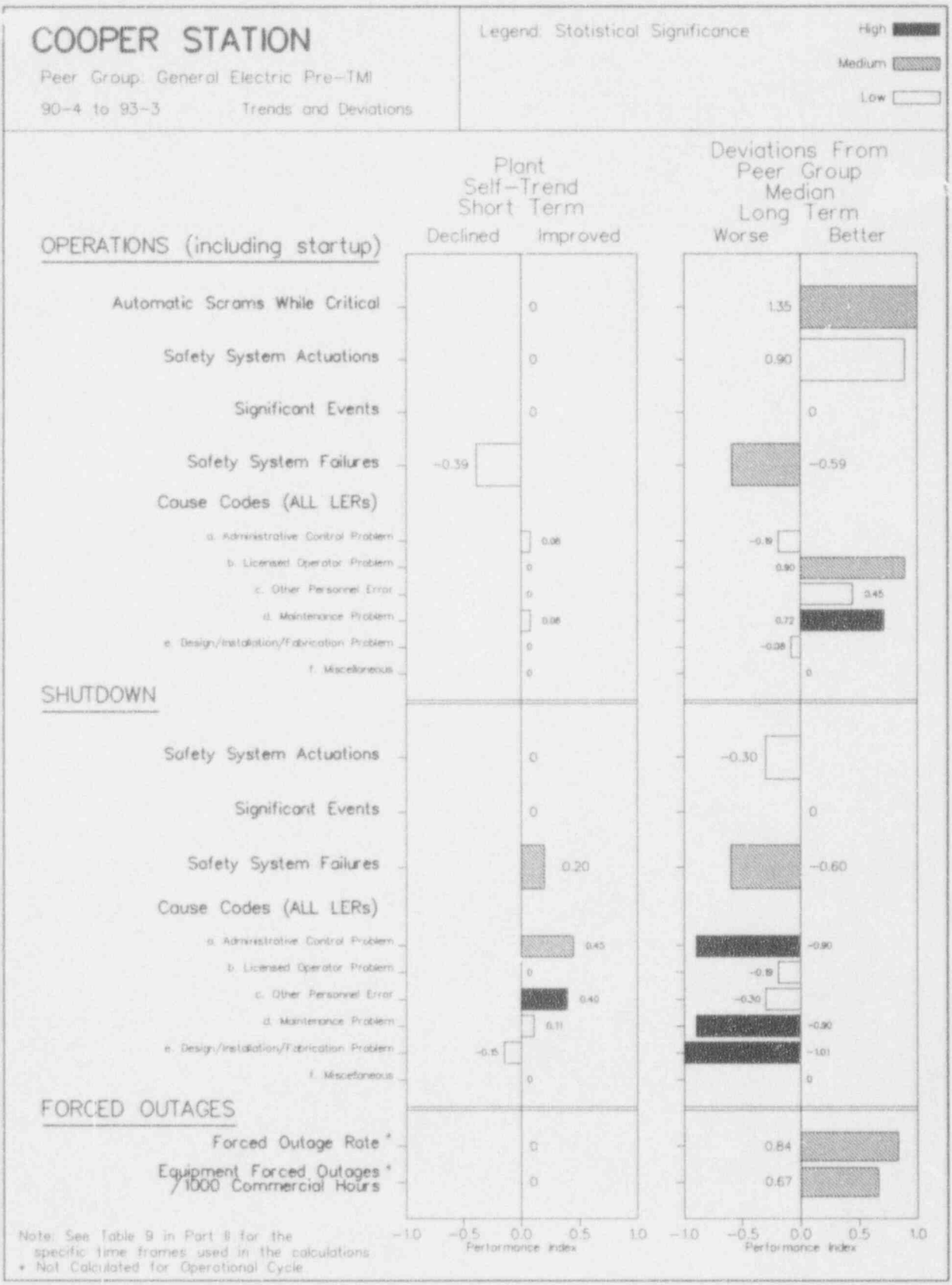

COOPER STATION
Peer Group: General Electric Pre-TMI
90-4 to 93-3 Trends and Deviations
Legend: Statistical Significance
High
Medium
Low
Plant Self-Trend Short Term
Declined
Improved
Deviations From Peer Group Median Long Term
Worse
Better
OPERATIONS (including startup)
Automatic Scrams While Critical
0
1.35
Safety System Actuations
0
0.90
Significant Events
0
0
Safety System Failures
-0.39
-0.59
Cause Codes (ALL LERs)
a. Administrative Control Problem
0.08
-0.19
b. Licensed Operator Problem
0
0.90
c. Other Personnel Error
0
0.45
d. Maintenance Problem
0.08
0.72
e. Design/Installation/Fabrication Problem
0
-0.08
f. Miscellaneous
0
0
SHUTDOWN
Safety System Actuations
0
-0.30
Significant Events
0
0
Safety System Failures
0.20
-0.60
Cause Codes (ALL LERs)
a. Administrative Control Problem
0.45
-0.90
b. Licensed Operator Problem
0
-0.19
c. Other Personnel Error
0.40
-0.30
d. Maintenance Problem
0.11
-0.90
e. Design/Installation/Fabrication Problem
-0.15
-1.01
f. Miscellaneous
0
0
FORCED OUTAGES
Forced Outage Rate *
0
0.84
Equipment Forced Outages * /1000 Commercial Hours
0
0.67
-1.0 -0.5 0.0 0.5 1.0
Performance Index
-1.0 -0.5 0.0 0.5 1.0
Performance Index
Note: See Table 9 in Part II for the specific time frames used in the calculations
* Not Calculated for Operational Cycle

FIGURE 7.26a

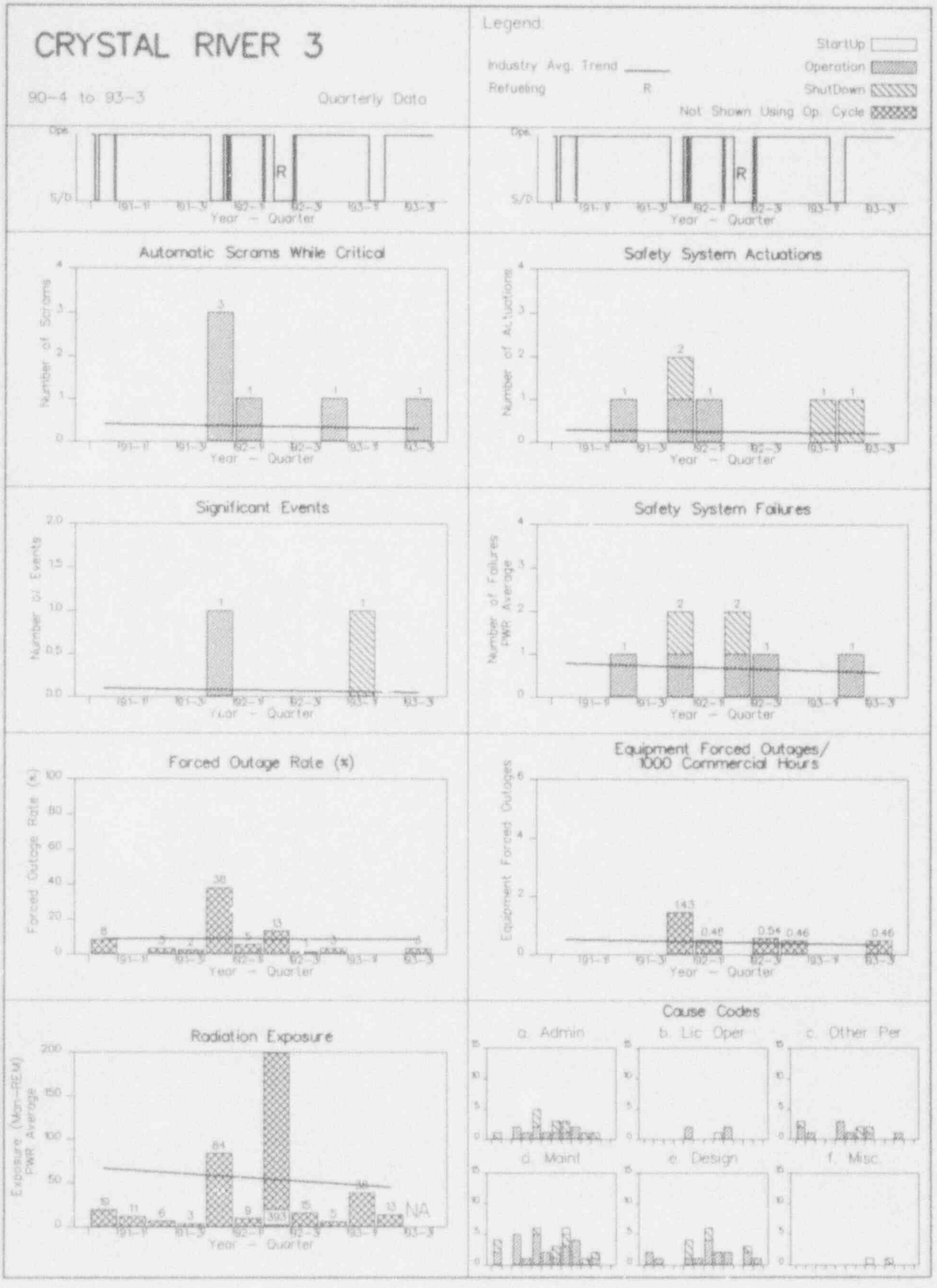
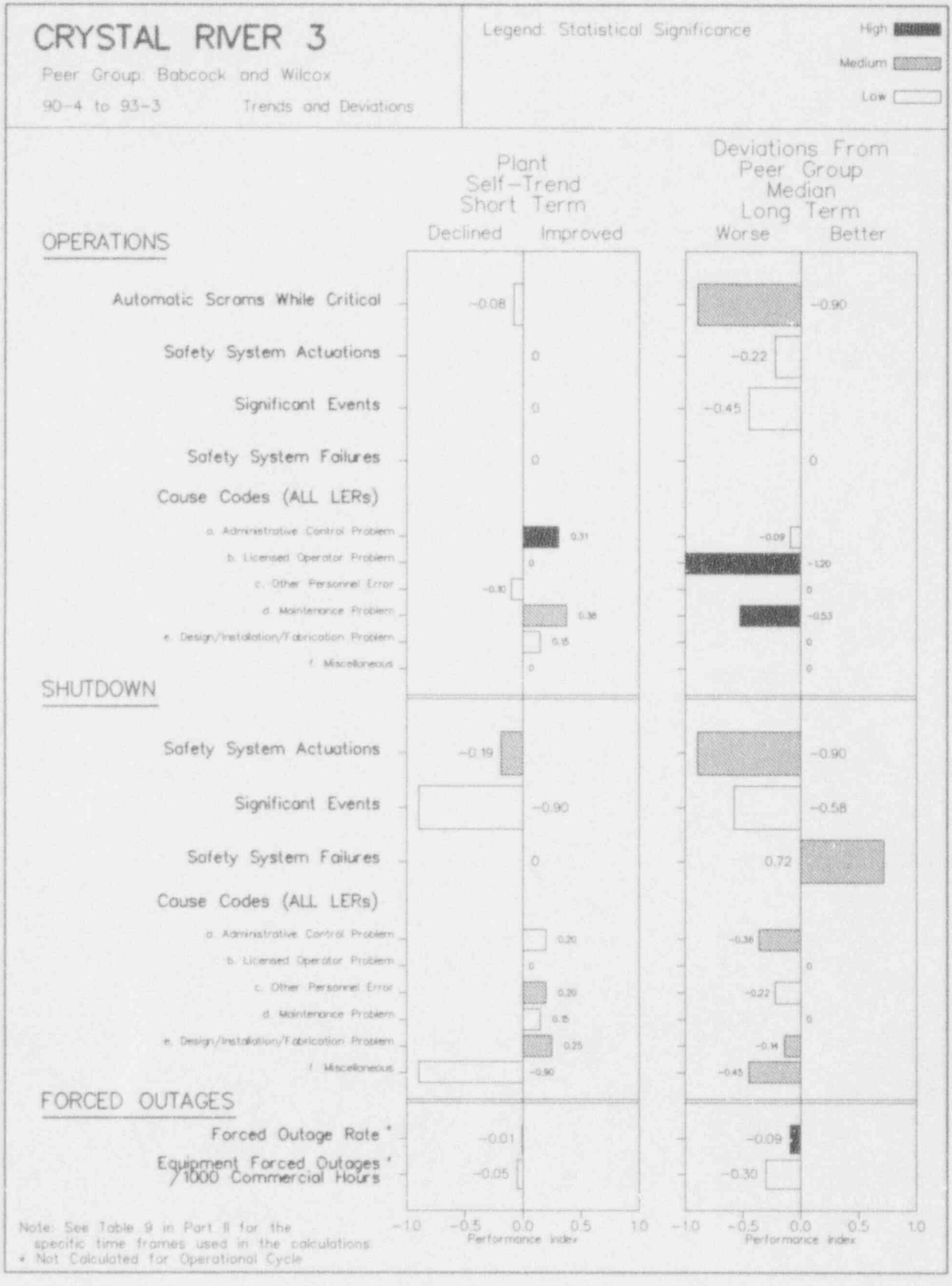

CRYSTAL RIVER 3
90-4 to 93-3
Quarterly Data
Legend:
StartUp
Industry Avg. Trend
Operation
Refueling
R
ShutDown
Not Shown Using Op. Cycle
Opn.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM) PWR Average
NA
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.26b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.27a

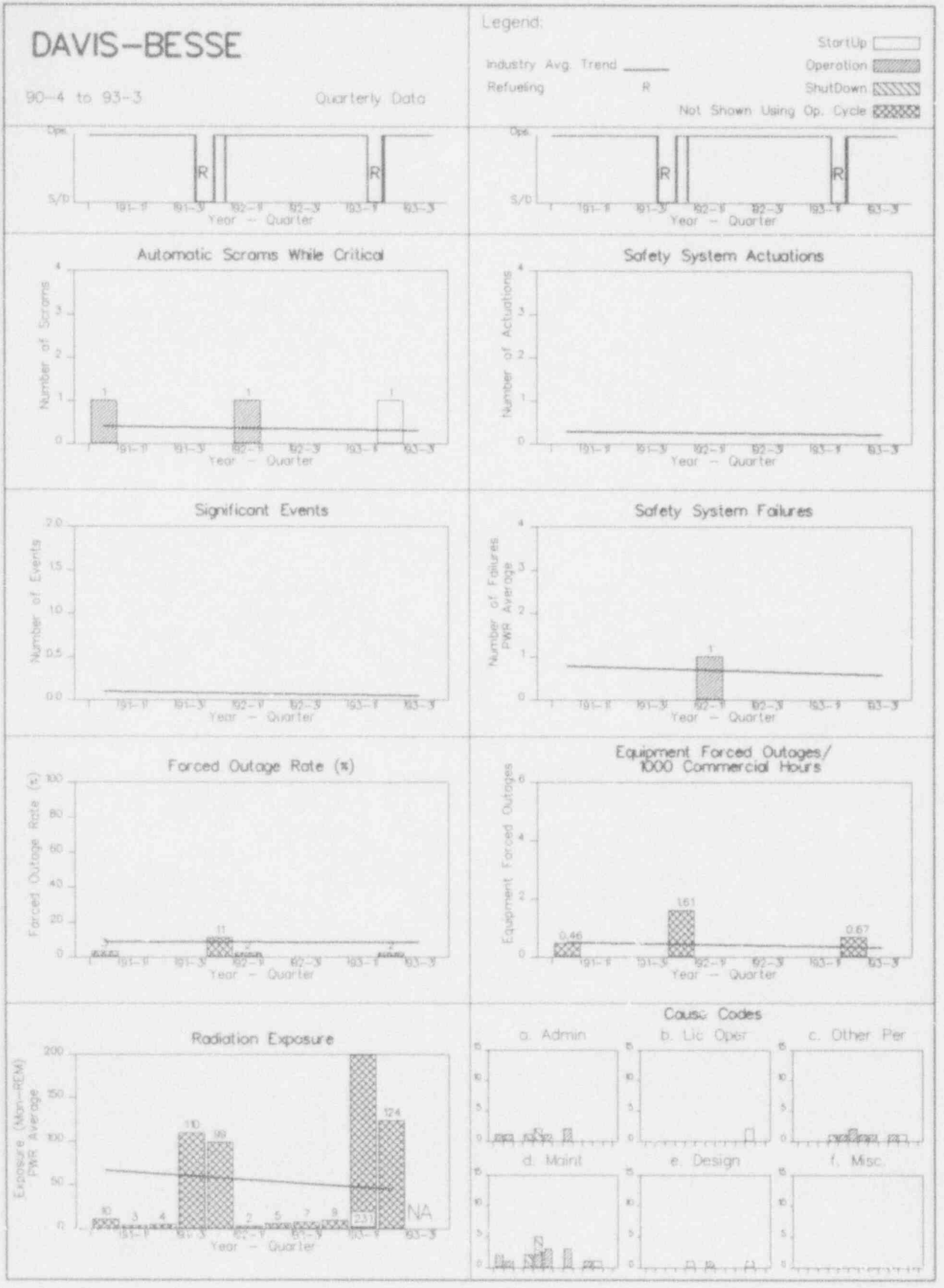

DAVIS-BESSE
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Ops.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
0.46
1.61
0.67
Radiation Exposure
Exposure (Man-REM) PWR Average
110
99
124
NA
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.27b

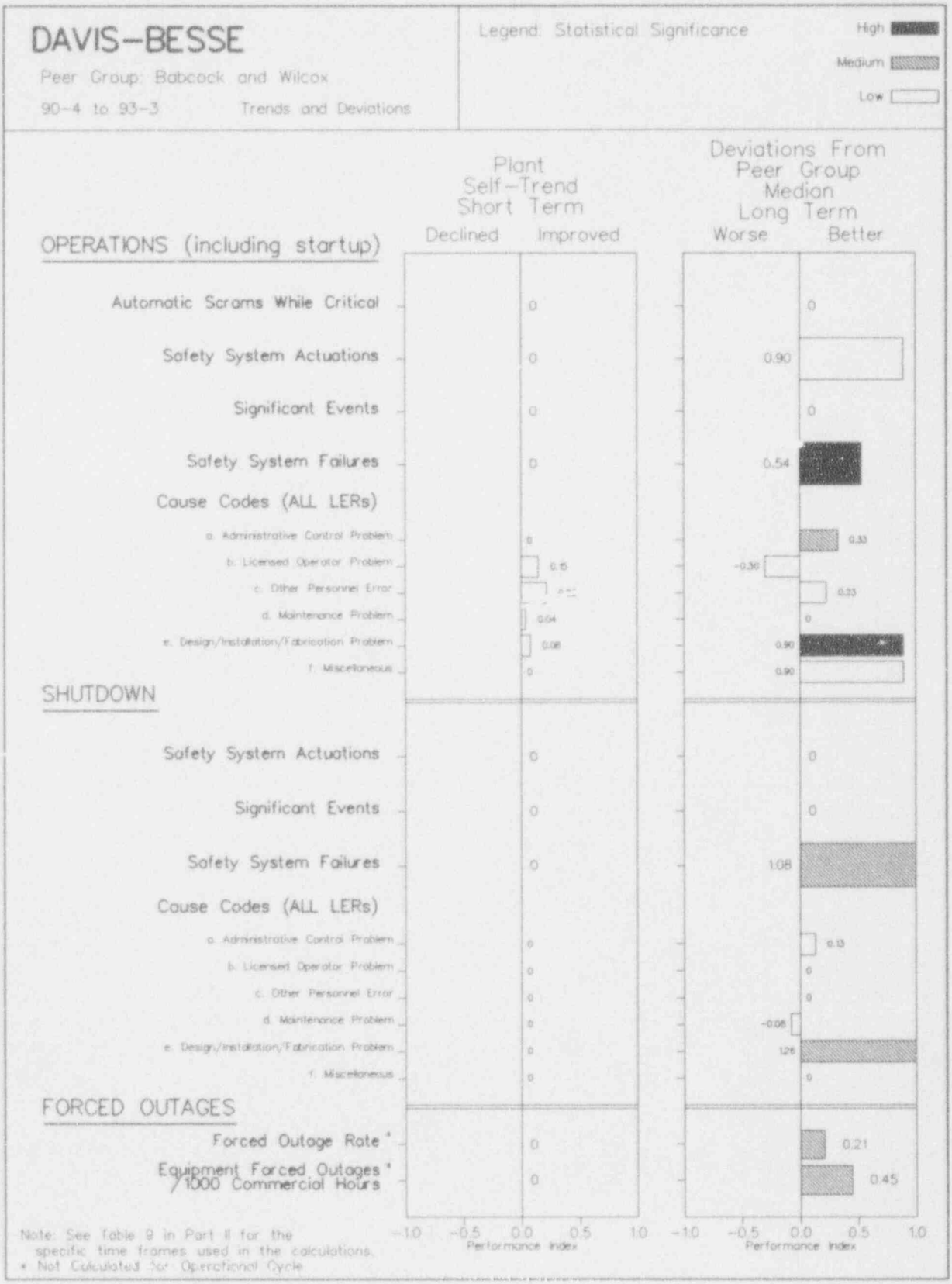

DAVIS-BESSE
Peer Group: Babcock and Wilcox
90-4 to 93-3 Trends and Deviations
Legend: Statistical Significance
High
Medium
Low
Plant Self-Trend Short Term
Declined
Improved
Deviations From Peer Group Median Long Term
Worse
Better
OPERATIONS (including startup)
Automatic Scrams While Critical
Safety System Actuations
Significant Events
Safety System Failures
Cause Codes (ALL LERs)
a. Administrative Control Problem
b. Licensed Operator Problem
c. Other Personnel Error
d. Maintenance Problem
e. Design/Installation/Fabrication Problem
f. Miscellaneous
SHUTDOWN
Safety System Actuations
Significant Events
Safety System Failures
Cause Codes (ALL LERs)
a. Administrative Control Problem
b. Licensed Operator Problem
c. Other Personnel Error
d. Maintenance Problem
e. Design/Installation/Fabrication Problem
f. Miscellaneous
FORCED OUTAGES
Forced Outage Rate *
Equipment Forced Outages * /1000 Commercial Hours
0.90
0.54
0.33
-0.30
0.23
0.90
0.90
0.15
0.04
0.08
1.08
0.13
-0.08
1.26
0.21
0.45
-1.0
-0.5
0.0
0.5
1.0
Performance Index
Note: See table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.28a

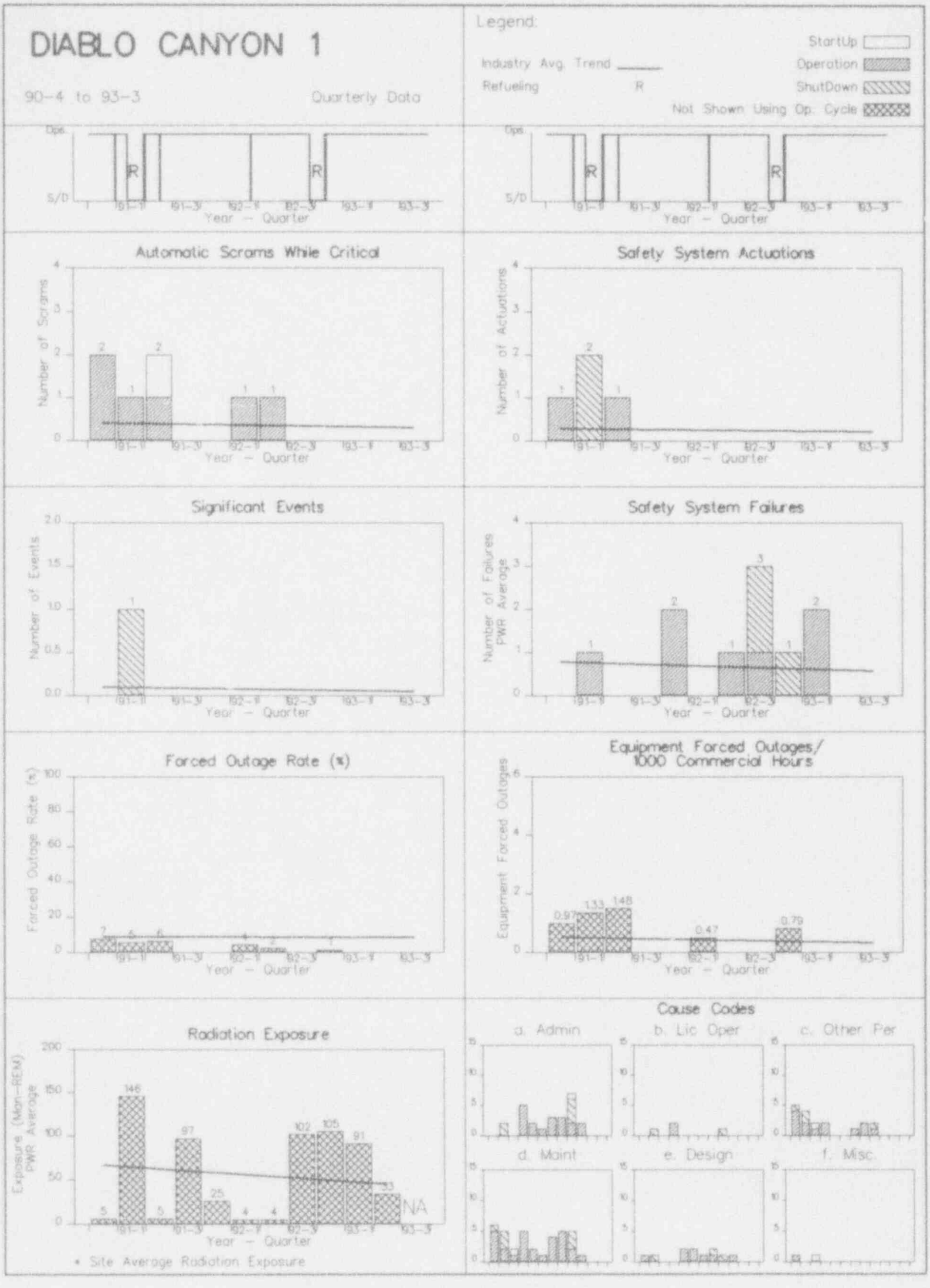
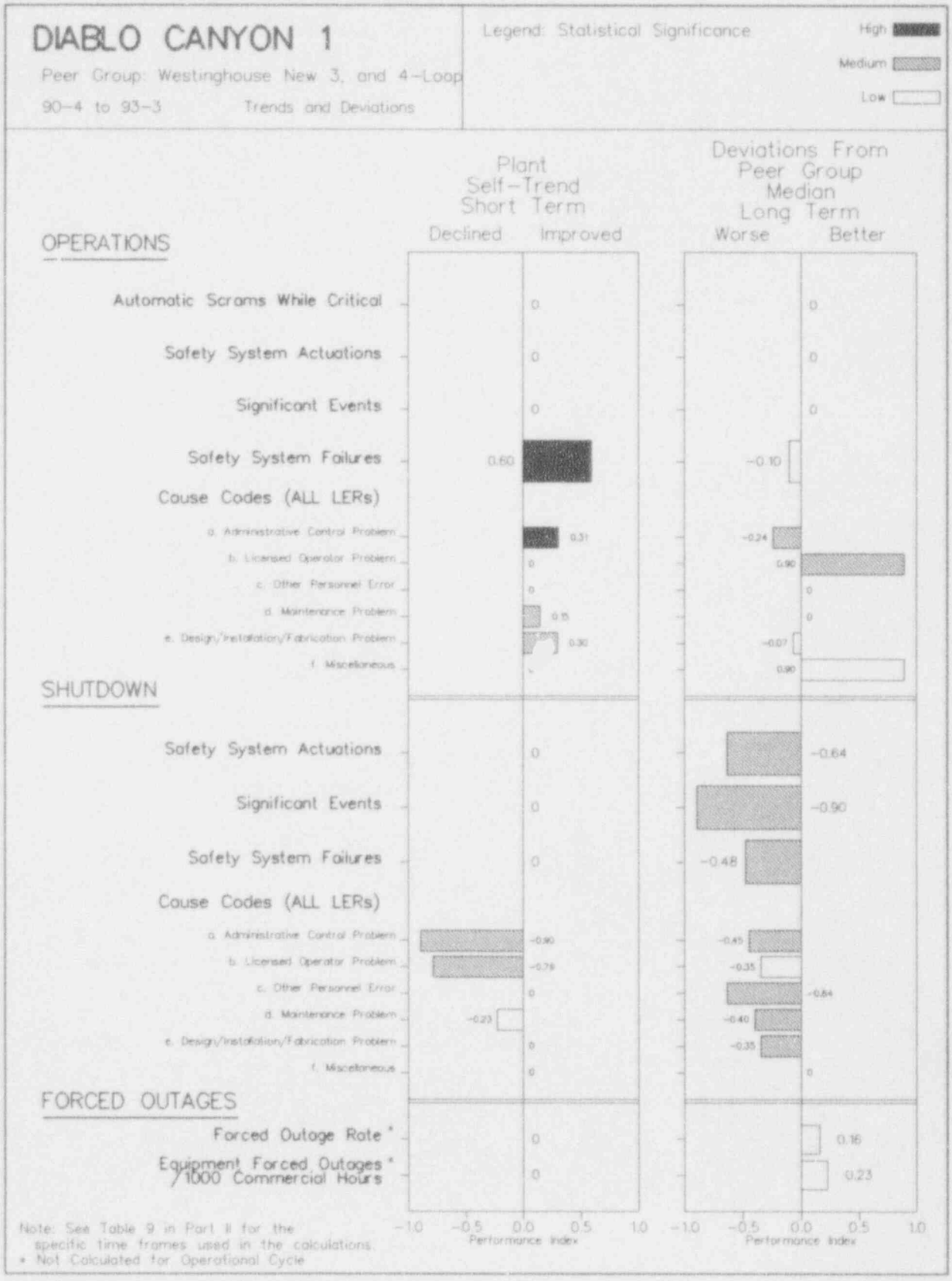

DIABLO CANYON 1
90-4 to 93-3
Quarterly Data
Legend:
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Industry Avg. Trend
Refueling
R
Ope.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures
PWR Average
Forced Outage Rate (%)
Equipment Forced Outages/
1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM)
PWR Average
NA
* Site Average Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.28b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.29a

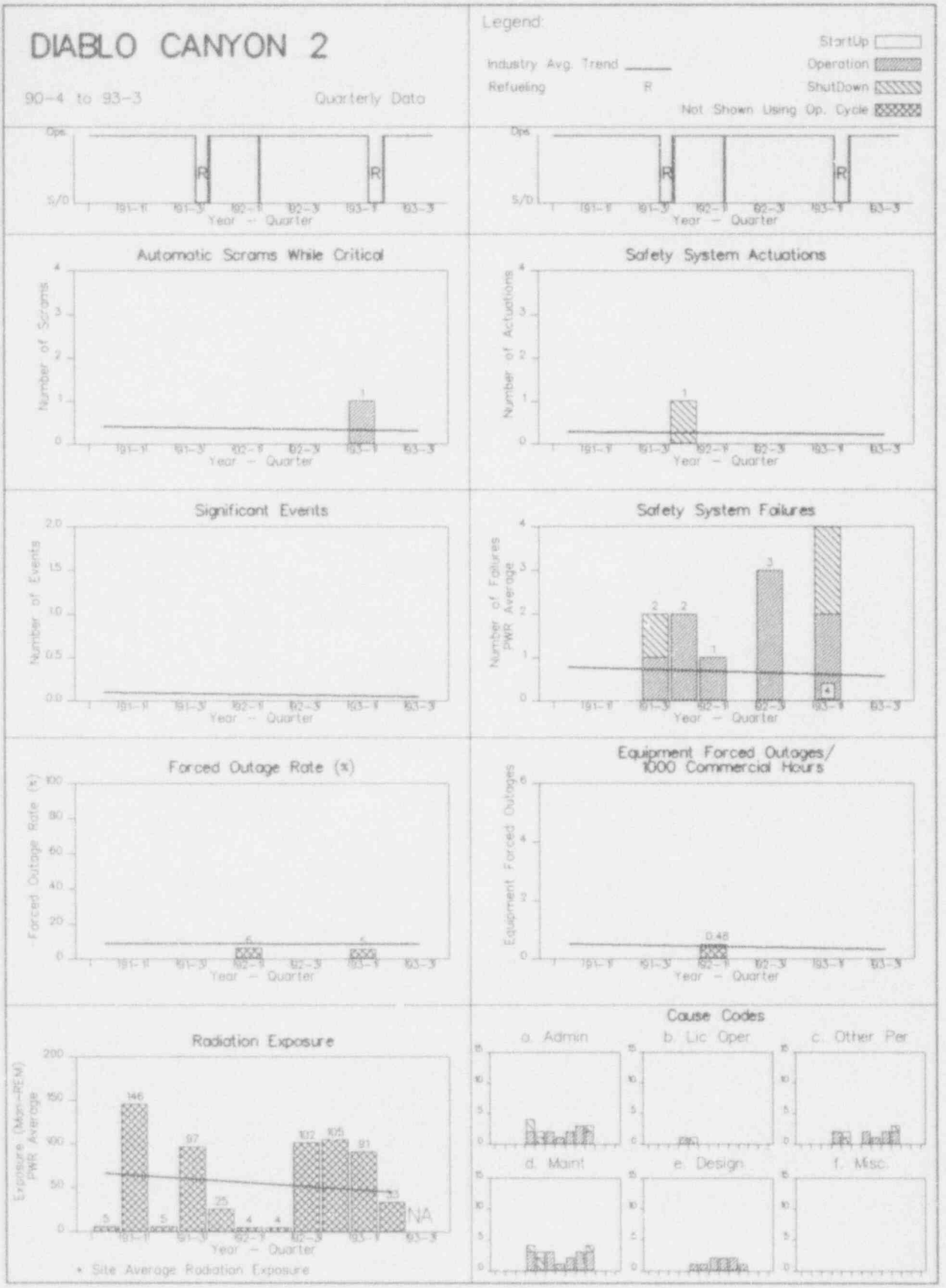

DIABLO CANYON 2
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Ops
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM) PWR Average
NA
* Site Average Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.29b

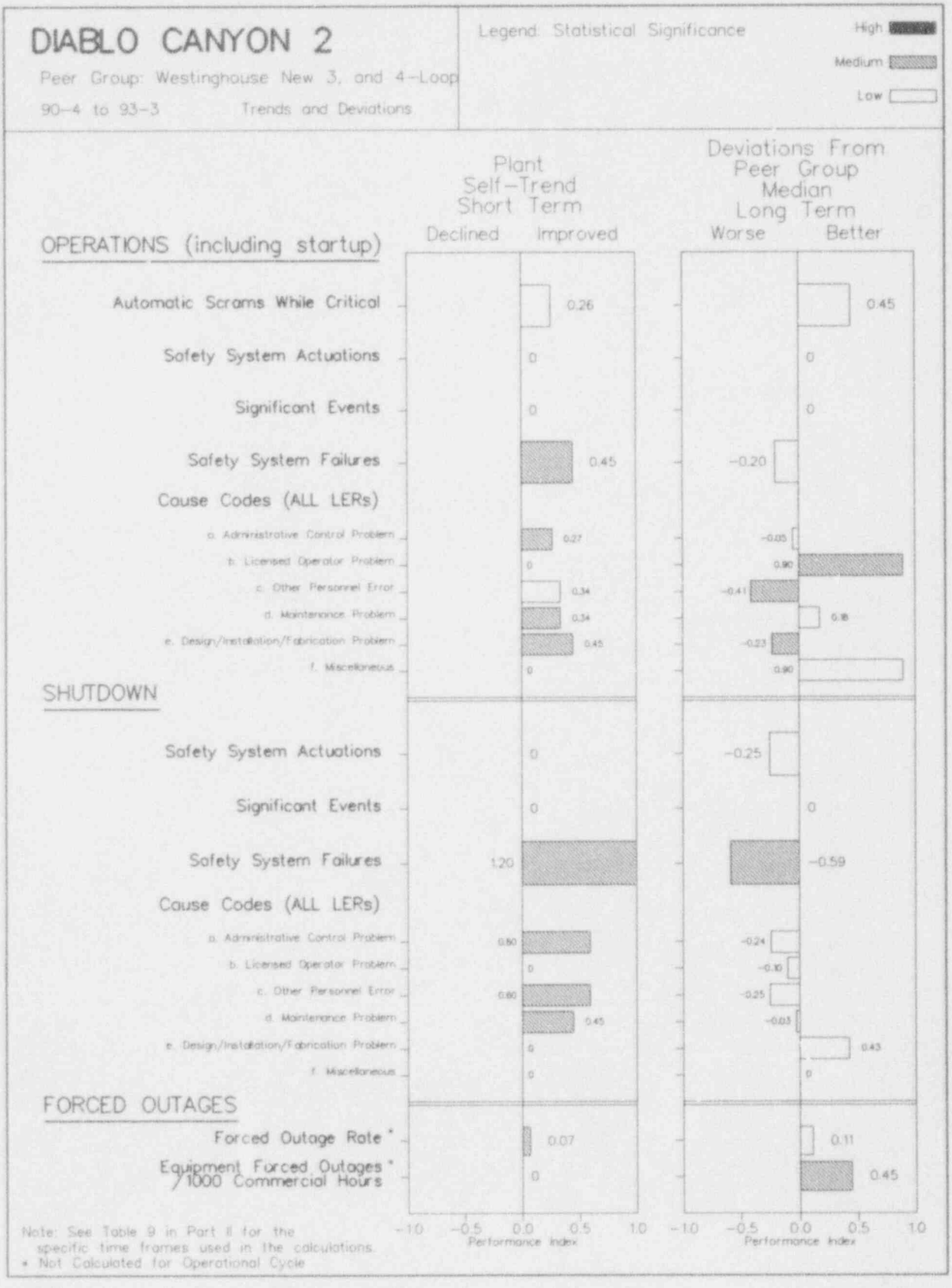

DIABLO CANYON 2
Peer Group: Westinghouse New 3, and 4-Loop
90-4 to 93-3 Trends and Deviations
Legend: Statistical Significance
High
Medium
Low
Plant Self-Trend Short Term
Declined Improved
Deviations From Peer Group Median Long Term
Worse Better
OPERATIONS (including startup)
Automatic Scrams While Critical
0.26
0.45
Safety System Actuations
0
0
Significant Events
0
0
Safety System Failures
0.45
-0.20
Cause Codes (ALL LERs)
a. Administrative Control Problem
0.27
-0.05
b. Licensed Operator Problem
0
0.90
c. Other Personnel Error
0.34
-0.41
d. Maintenance Problem
0.34
0.18
e. Design/Installation/Fabrication Problem
0.45
-0.23
f. Miscellaneous
0
0.90
SHUTDOWN
Safety System Actuations
0
-0.25
Significant Events
0
0
Safety System Failures
1.20
-0.59
Cause Codes (ALL LERs)
a. Administrative Control Problem
0.80
-0.24
b. Licensed Operator Problem
0
-0.10
c. Other Personnel Error
0.80
-0.25
d. Maintenance Problem
0.45
-0.03
e. Design/Installation/Fabrication Problem
0
0.43
f. Miscellaneous
0
0
FORCED OUTAGES
Forced Outage Rate *
0.07
0.11
Equipment Forced Outages * /1000 Commercial Hours
0
0.45
-1.0 -0.5 0.0 0.5 1.0
Performance Index
-1.0 -0.5 0.0 0.5 1.0
Performance Index
Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.30a

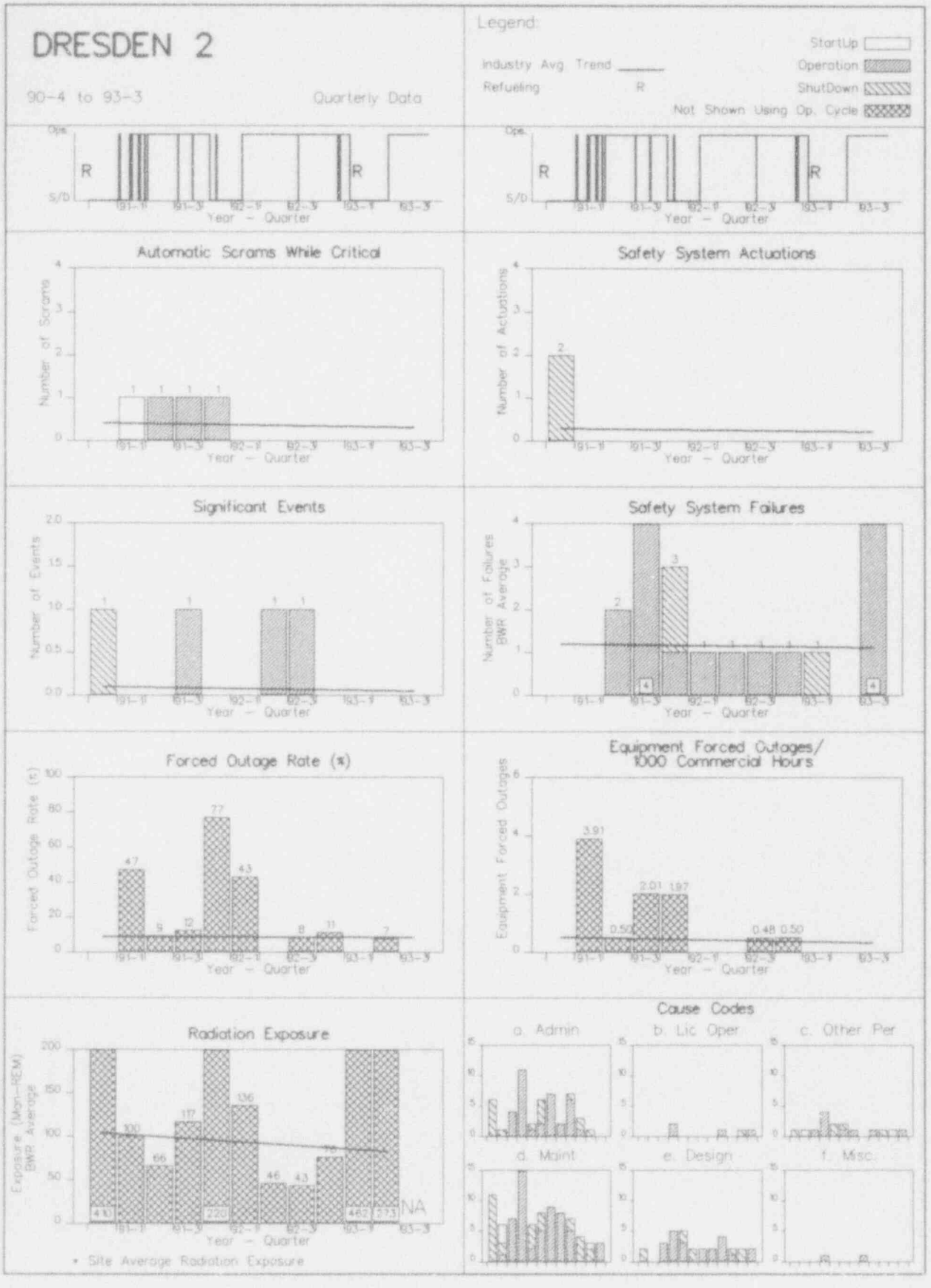

DRESDEN 2
90-4 to 93-3
Quarterly Data
Legend:
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Industry Avg. Trend
Refueling
R
Ops.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures
BWR Average
Forced Outage Rate (%)
Forced Outage Rate (t)
Equipment Forced Outages/
1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM)
BWR Average
NA
* Site Average Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.30b

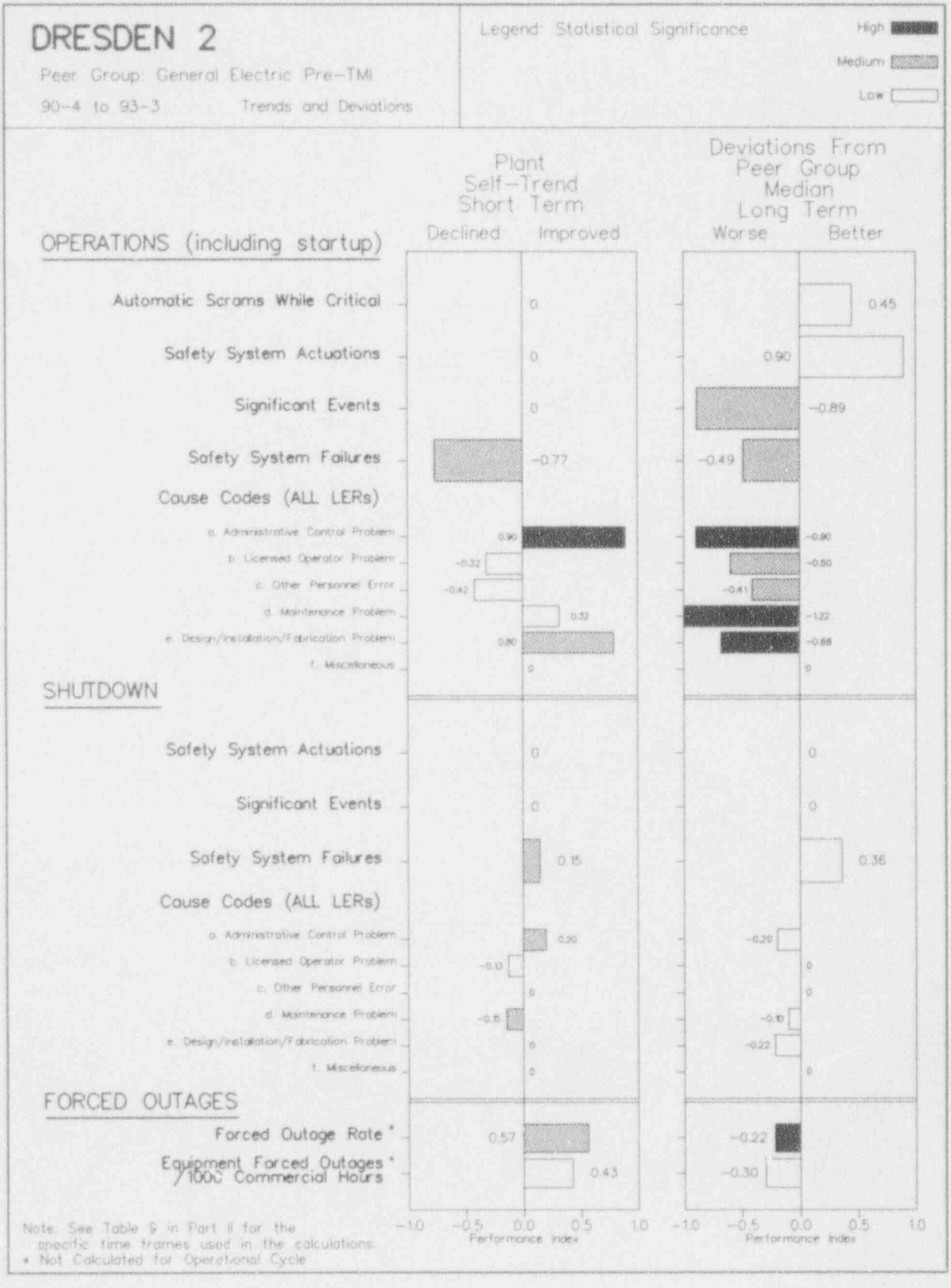

DRESDEN 2
Peer Group: General Electric Pre-TMI
90-4 to 93-3 Trends and Deviations
Legend: Statistical Significance
High
Medium
Low
Plant Self-Trend Short Term
Declined
Improved
Deviations From Peer Group Median Long Term
Worse
Better
OPERATIONS (including startup)
Automatic Scrams While Critical
0
0.45
Safety System Actuations
0
0.90
Significant Events
0
-0.89
Safety System Failures
-0.77
-0.49
Cause Codes (ALL LERs)
a. Administrative Control Problem
0.90
-0.90
b. Licensed Operator Problem
-0.32
-0.50
c. Other Personnel Error
-0.42
-0.41
d. Maintenance Problem
0.32
-1.22
e. Design/Installation/Fabrication Problem
0.80
-0.88
f. Miscellaneous
0
0
SHUTDOWN
Safety System Actuations
0
0
Significant Events
0
0
Safety System Failures
0.15
0.36
Cause Codes (ALL LERs)
a. Administrative Control Problem
0.20
-0.20
b. Licensed Operator Problem
-0.10
0
c. Other Personnel Error
0
0
d. Maintenance Problem
-0.15
-0.10
e. Design/Installation/Fabrication Problem
0
-0.22
f. Miscellaneous
0
0
FORCED OUTAGES
Forced Outage Rate *
0.57
-0.22
Equipment Forced Outages * /100C Commercial Hours
0.43
-0.30
-1.0
-0.5
0.0
0.5
1.0
Performance Index
Note: See Table 6 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.31a

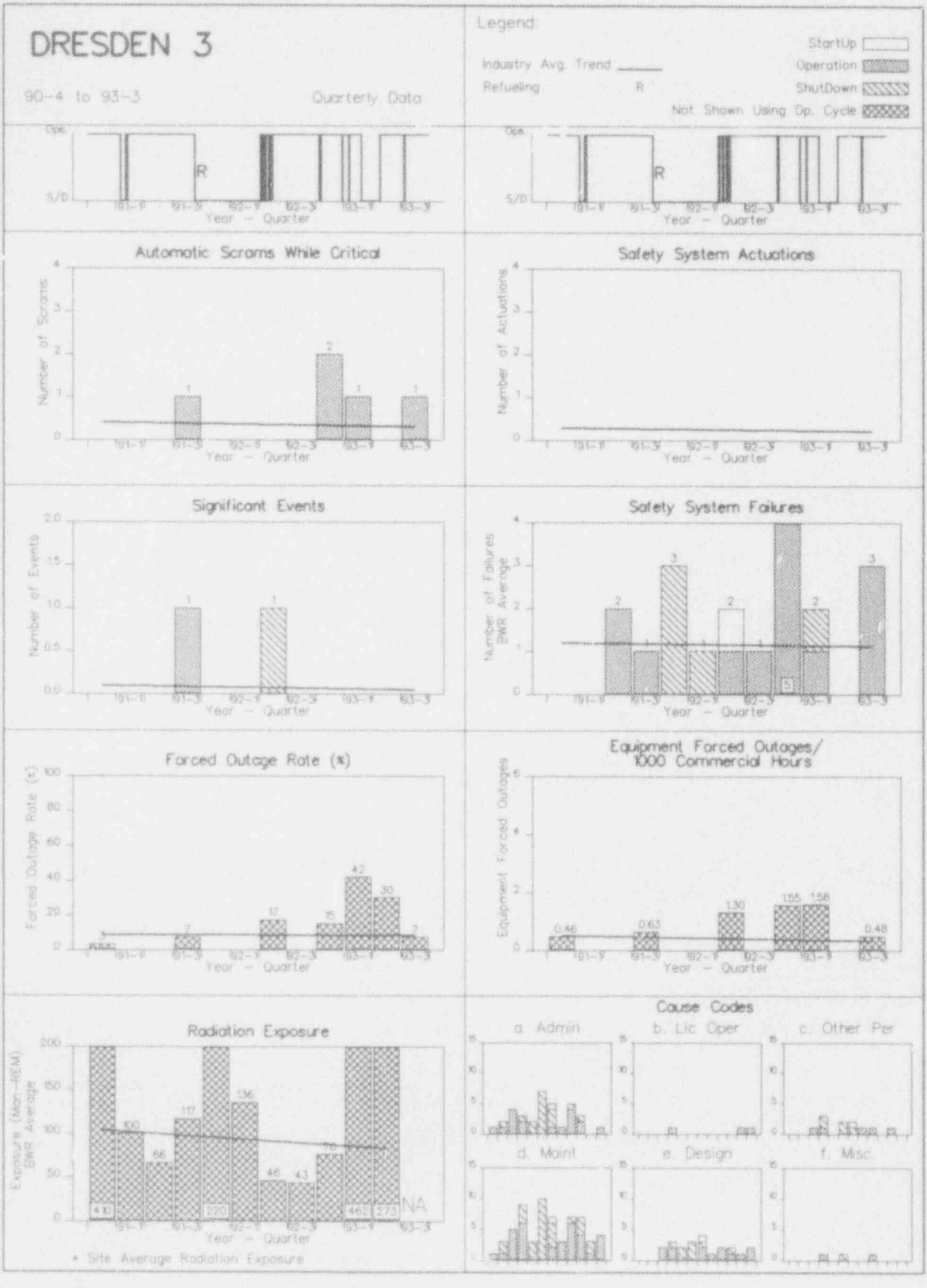

DRESDEN 3
90-4 to 93-3
Quarterly Data
Legend:
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Industry Avg. Trend
Refueling
R
Opn
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures BWR Average
Forced Outage Rate (%)
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM) BWR Average
NA
* Site Average Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.3b

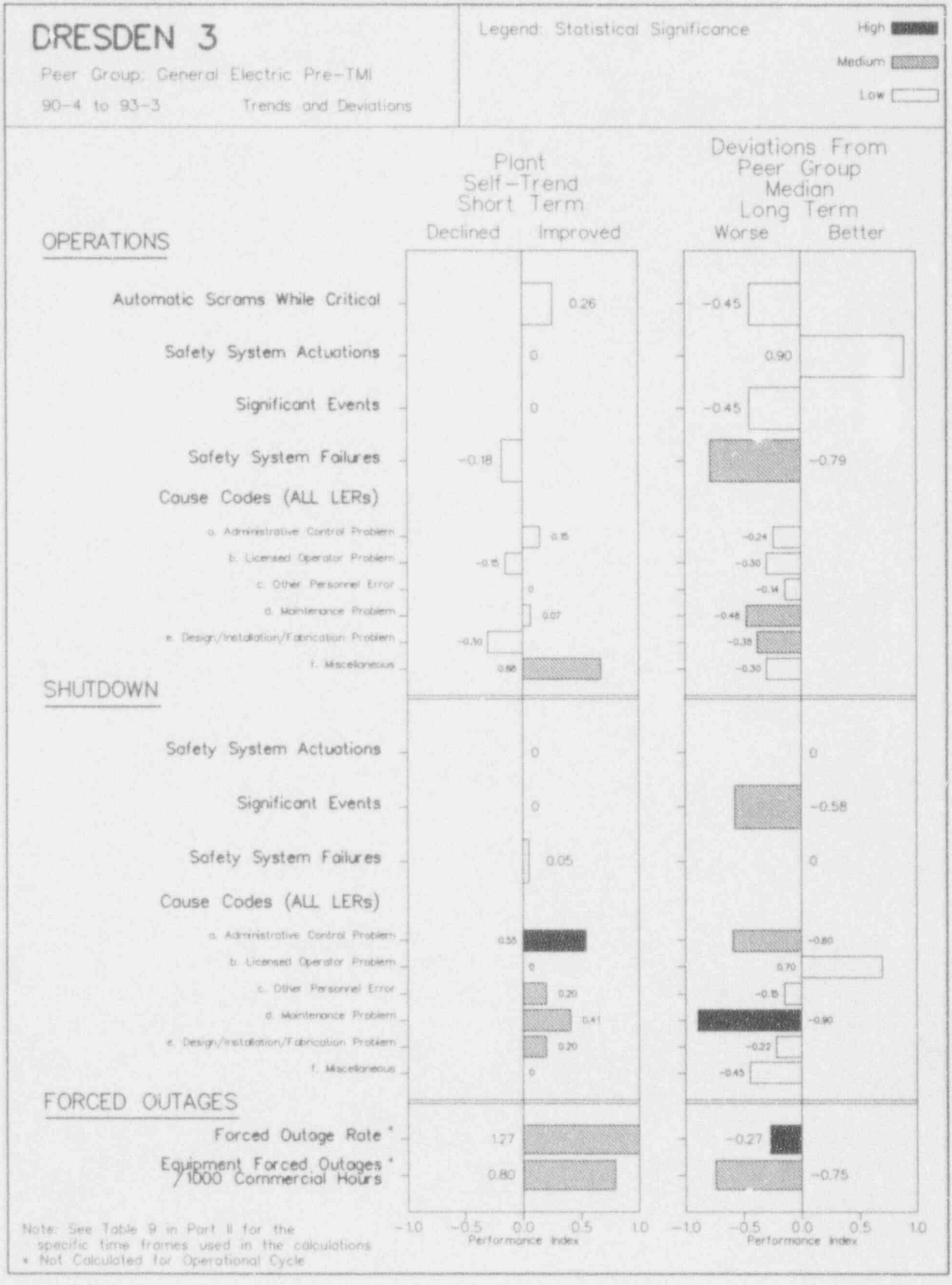

DRESDEN 3
Peer Group: General Electric Pre-TMI
90-4 to 93-3 Trends and Deviations
Legend: Statistical Significance
High
Medium
Low
Plant Self-Trend Short Term
Declined
Improved
Deviations From Peer Group Median Long Term
Worse
Better
OPERATIONS
Automatic Scrams While Critical
0.26
-0.45
Safety System Actuations
0
0.90
Significant Events
0
-0.45
Safety System Failures
-0.18
-0.79
Cause Codes (ALL LERs)
a. Administrative Control Problem
0.15
-0.24
b. Licensed Operator Problem
-0.15
-0.30
c. Other Personnel Error
0
-0.14
d. Maintenance Problem
0.07
-0.48
e. Design/Installation/Fabrication Problem
-0.10
-0.35
f. Miscellaneous
0.66
-0.30
SHUTDOWN
Safety System Actuations
0
0
Significant Events
0
-0.58
Safety System Failures
0.05
0
Cause Codes (ALL LERs)
a. Administrative Control Problem
0.55
-0.80
b. Licensed Operator Problem
0
0.70
c. Other Personnel Error
0.20
-0.15
d. Maintenance Problem
0.41
-0.90
e. Design/Installation/Fabrication Problem
0.20
-0.22
f. Miscellaneous
0
-0.45
FORCED OUTAGES
Forced Outage Rate *
1.27
-0.27
Equipment Forced Outages * /1000 Commercial Hours
0.80
-0.75
-1.0 -0.5 0.0 0.5 1.0
Performance Index
-1.0 -0.5 0.0 0.5 1.0
Performance Index
Note: See Table 9 in Part II for the specific time frames used in the calculations
* Not Calculated for Operational Cycle

FIGURE 7.32a

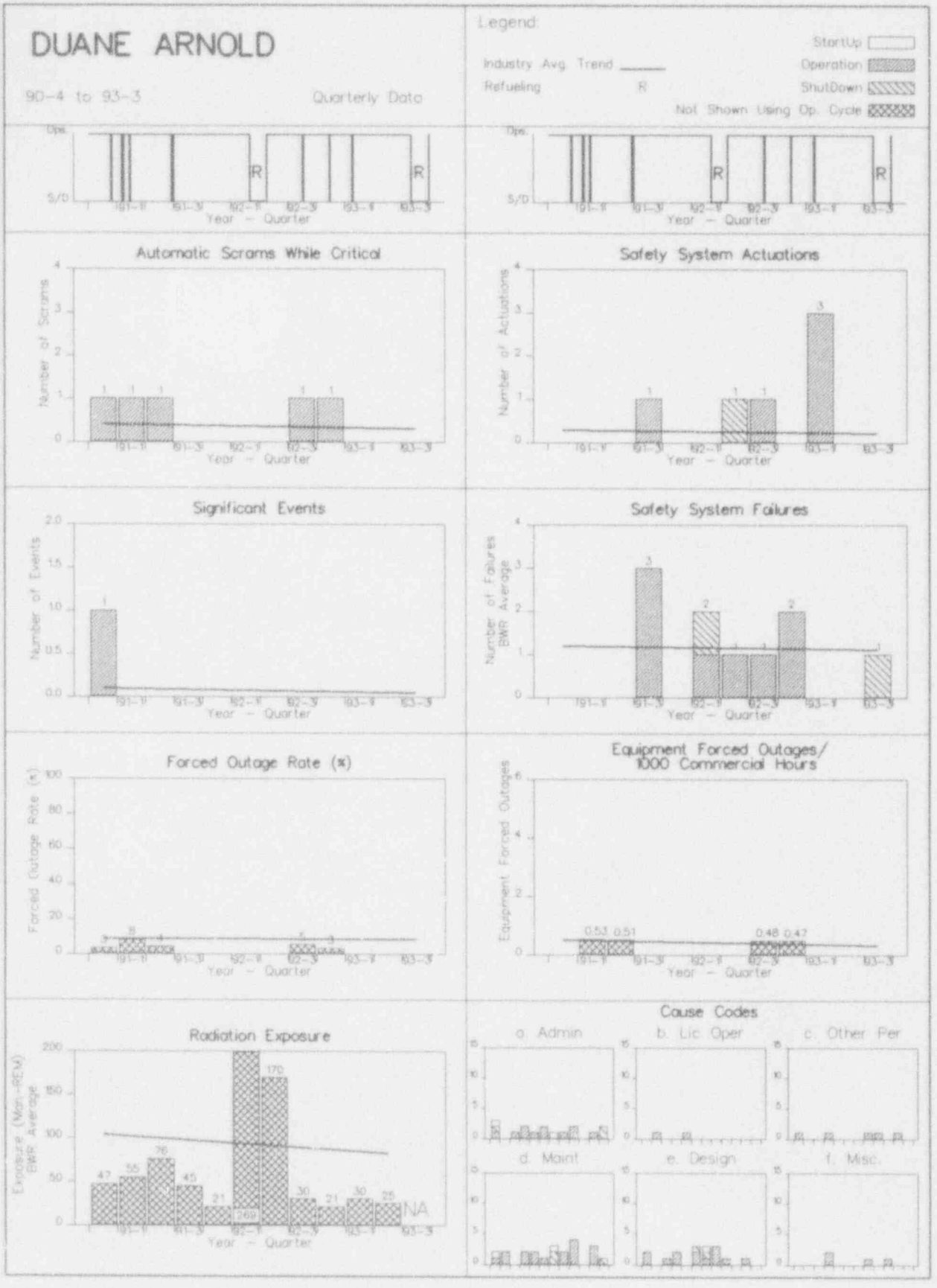

DUANE ARNOLD
90-4 to 93-3
Quarterly Data
Legend:
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Industry Avg. Trend
Refueling
R
Dps.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures
BWR Average
Forced Outage Rate (%)
Forced Outage Rate (%)
Equipment Forced Outages/
1000 Commercial Hours
Equipment Forced Outages
0.53 0.51
0.48 0.47
Radiation Exposure
Exposure (Man-REM)
BWR Average
47
55
76
45
21
269
170
30
21
30
25
NA
Cause Codes
a. Admin
b. Lic. Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.32b

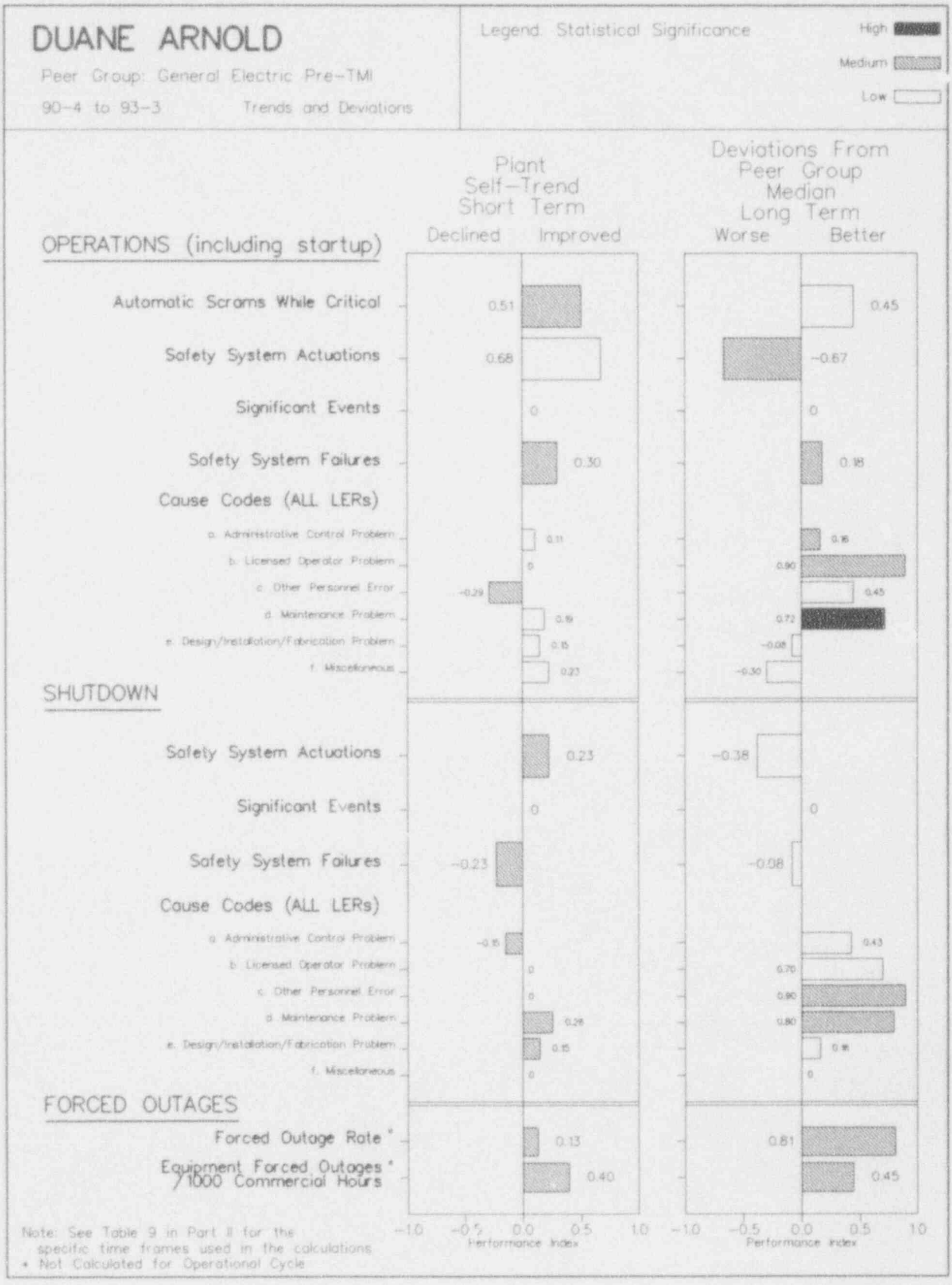

DUANE ARNOLD
Peer Group: General Electric Pre-TMI
90-4 to 93-3 Trends and Deviations
Legend: Statistical Significance
High
Medium
Low
Plant Self-Trend Short Term
Declined
Improved
Deviations From Peer Group Median Long Term
Worse
Better
OPERATIONS (including startup)
Automatic Scrams While Critical
0.51
0.45
Safety System Actuations
0.68
-0.67
Significant Events
0
0
Safety System Failures
0.30
0.18
Cause Codes (ALL LERs)
a. Administrative Control Problem
0.11
0.16
b. Licensed Operator Problem
0
0.90
c. Other Personnel Error
-0.29
0.45
d. Maintenance Problem
0.19
0.72
e. Design/Installation/Fabrication Problem
0.15
-0.08
f. Miscellaneous
0.27
-0.30
SHUTDOWN
Safety System Actuations
0.23
-0.38
Significant Events
0
0
Safety System Failures
-0.23
-0.08
Cause Codes (ALL LERs)
a. Administrative Control Problem
-0.15
0.43
b. Licensed Operator Problem
0
0.70
c. Other Personnel Error
0
0.90
d. Maintenance Problem
0.28
0.80
e. Design/Installation/Fabrication Problem
0.15
0.16
f. Miscellaneous
0
0
FORCED OUTAGES
Forced Outage Rate *
0.13
0.81
Equipment Forced Outages * /1000 Commercial Hours
0.40
0.45
-1.0
-0.5
0.0
0.5
1.0
Performance Index
Note: See Table 9 in Part II for the specific time frames used in the calculations
* Not Calculated for Operational Cycle

FIGURE 7.33a

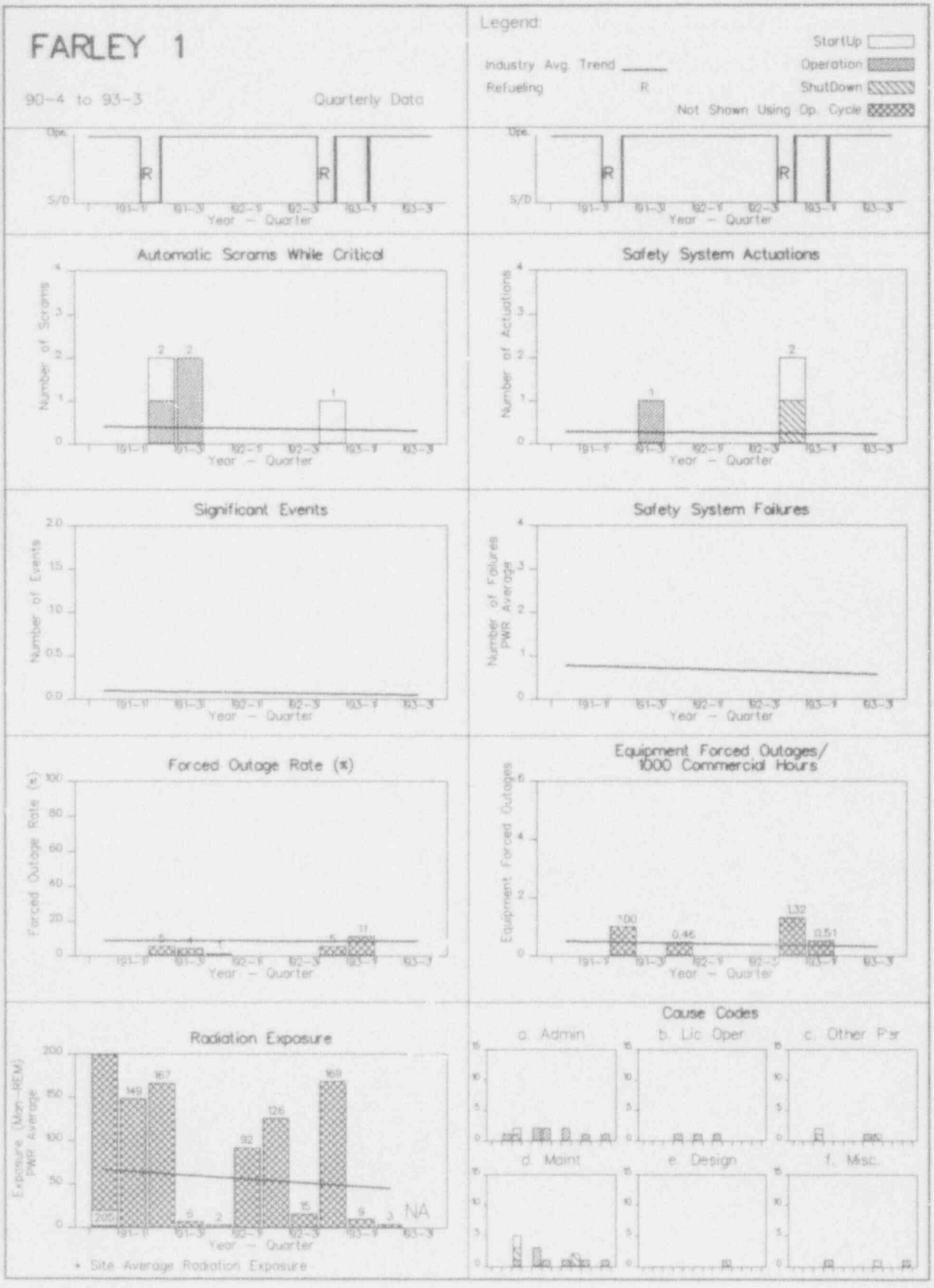
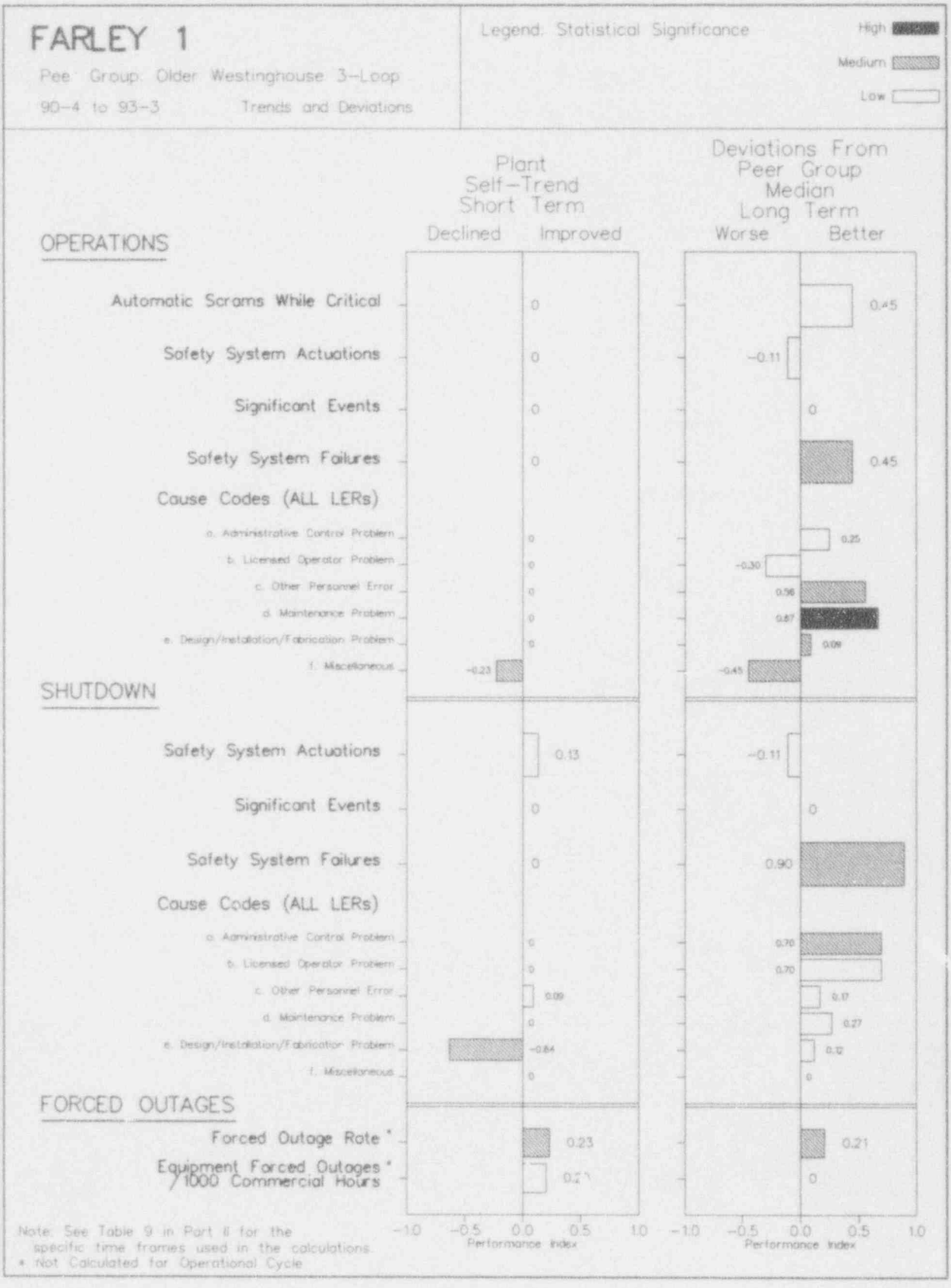

FARLEY 1
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Opn.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
1.00
0.46
1.32
0.51
Radiation Exposure
Exposure (Man-REM) PWR Average
149
167
92
126
169
NA
* Site Average Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.33b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.34a

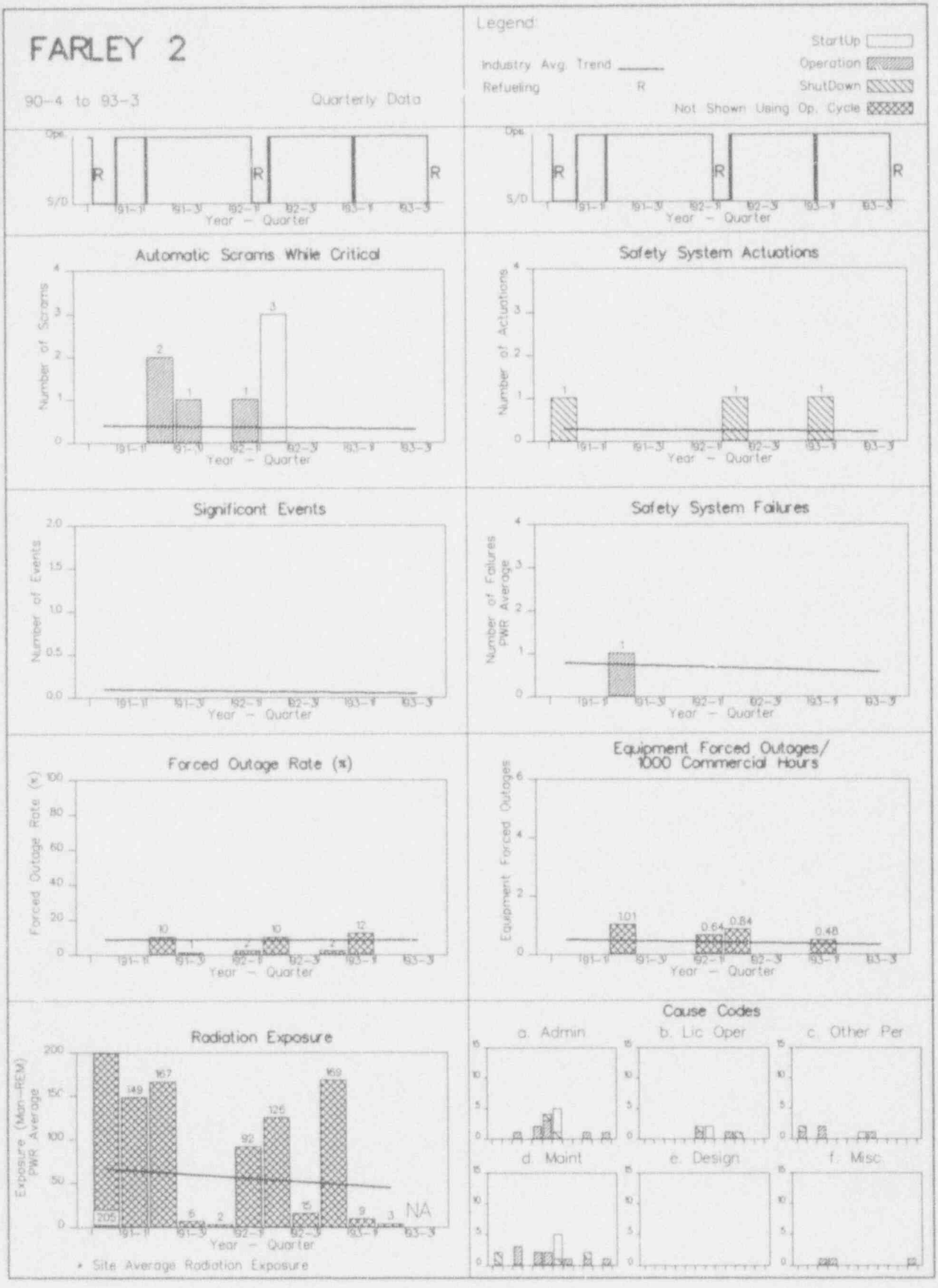
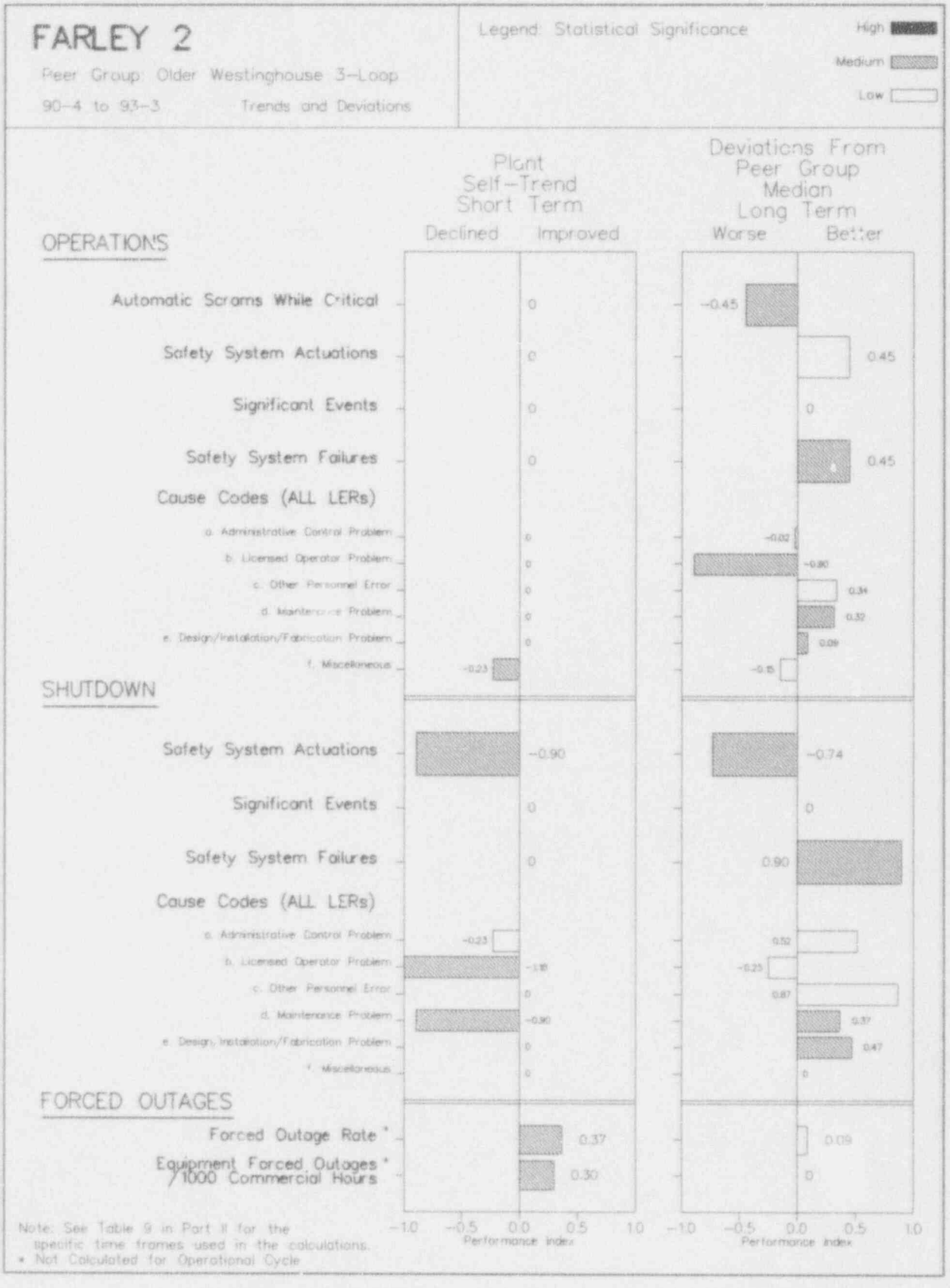

FARLEY 2
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Ops
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM) PWR Average
NA
* Site Average Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc

FIGURE 7.34b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.35a

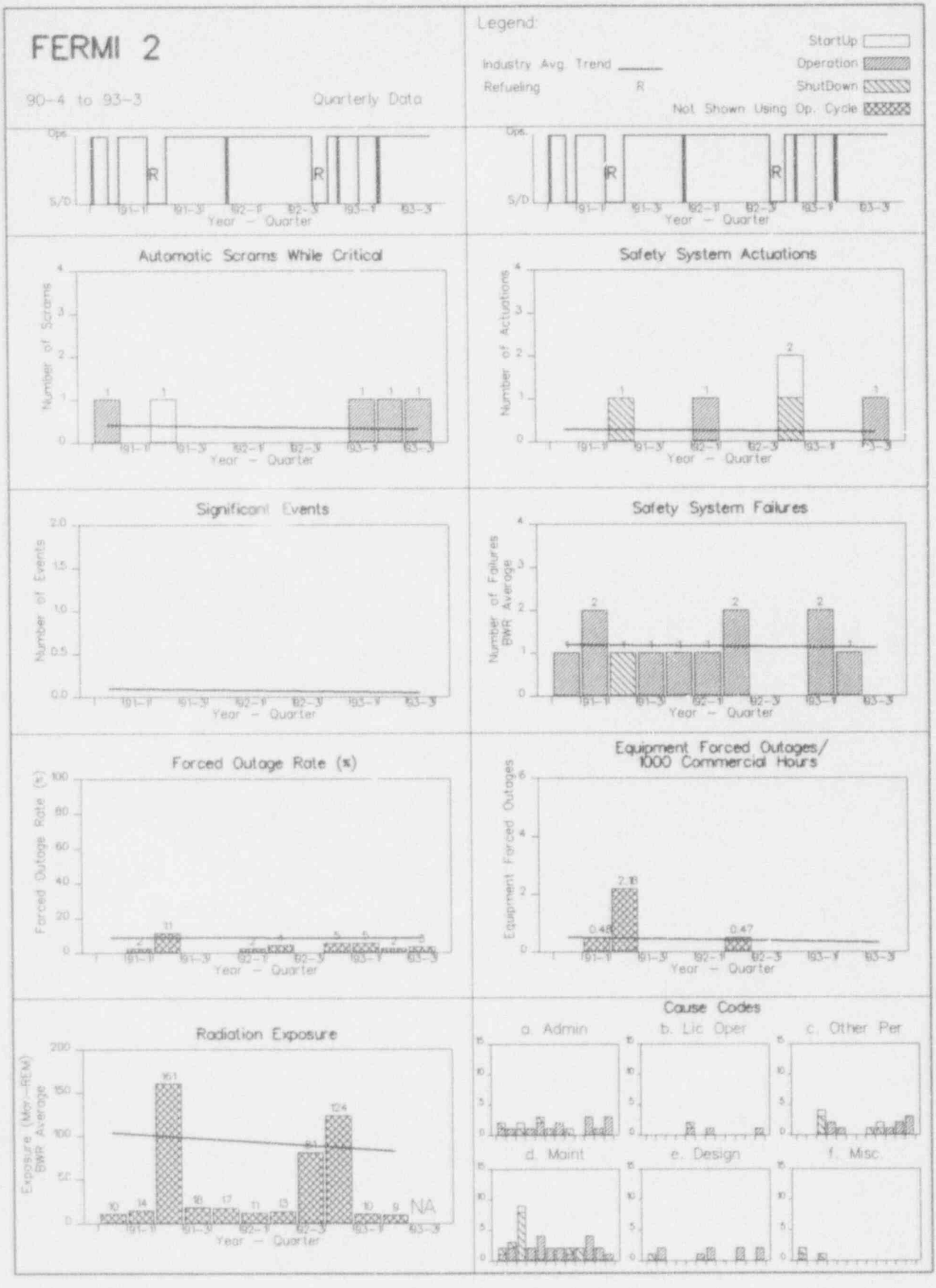

FERMI 2
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Ops.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures BWR Average
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Mrr-REM) BWR Average
NA
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc

FIGURE 7.35b

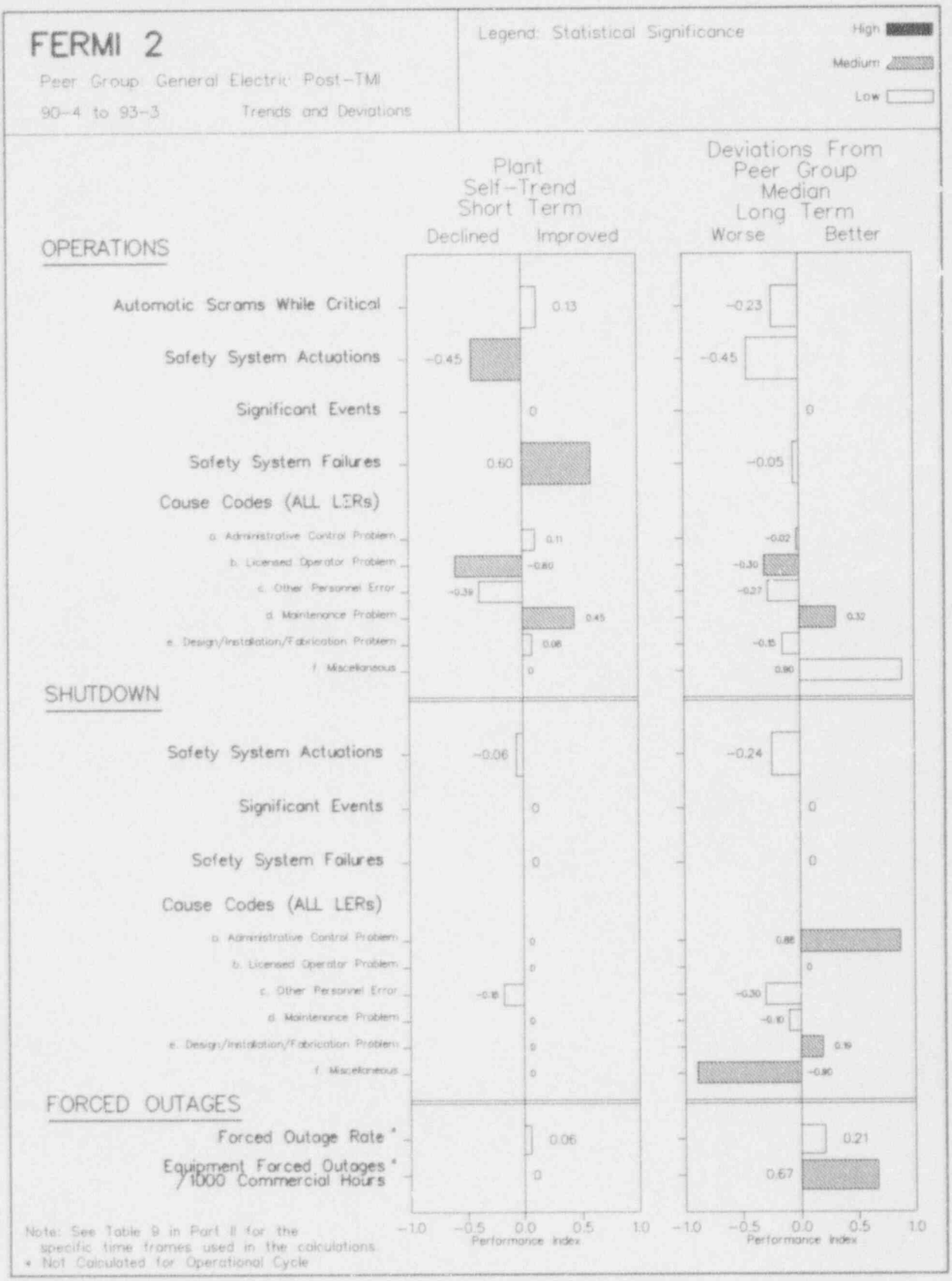

FERMI 2
Peer Group: General Electric: Post-TMI
90-4 to 93-3 Trends and Deviations
Legend: Statistical Significance
High
Medium
Low
Plant Self-Trend Short Term
Declined
Improved
Deviations From Peer Group Median Long Term
Worse
Better
OPERATIONS
Automatic Scrams While Critical
0.13
-0.23
Safety System Actuations
-0.45
-0.45
Significant Events
0
0
Safety System Failures
0.60
-0.05
Cause Codes (ALL LERs)
a. Administrative Control Problem
0.11
-0.02
b. Licensed Operator Problem
-0.80
-0.30
c. Other Personnel Error
-0.39
-0.27
d. Maintenance Problem
0.45
0.32
e. Design/Installation/Fabrication Problem
0.08
-0.15
f. Miscellaneous
0
0.80
SHUTDOWN
Safety System Actuations
-0.06
-0.24
Significant Events
0
0
Safety System Failures
0
0
Cause Codes (ALL LERs)
a. Administrative Control Problem
0
0.88
b. Licensed Operator Problem
0
0
c. Other Personnel Error
-0.18
-0.30
d. Maintenance Problem
0
-0.10
e. Design/Installation/Fabrication Problem
0
0.19
f. Miscellaneous
0
-0.90
FORCED OUTAGES
Forced Outage Rate *
0.06
0.21
Equipment Forced Outages * /1000 Commercial Hours
0
0.67
-1.0 -0.5 0.0 0.5 1.0
Performance Index
-1.0 -0.5 0.0 0.5 1.0
Performance Index
Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.36J

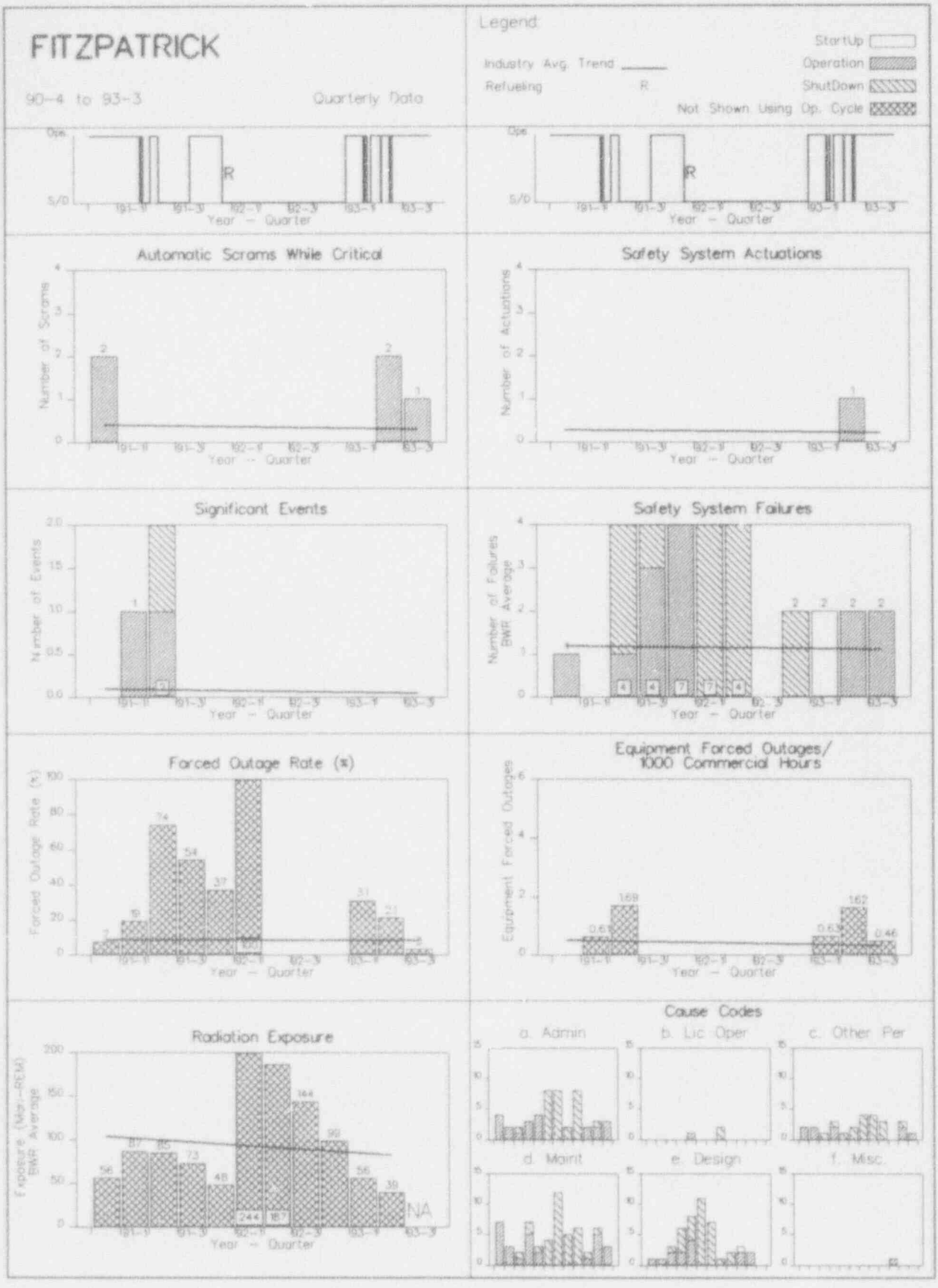
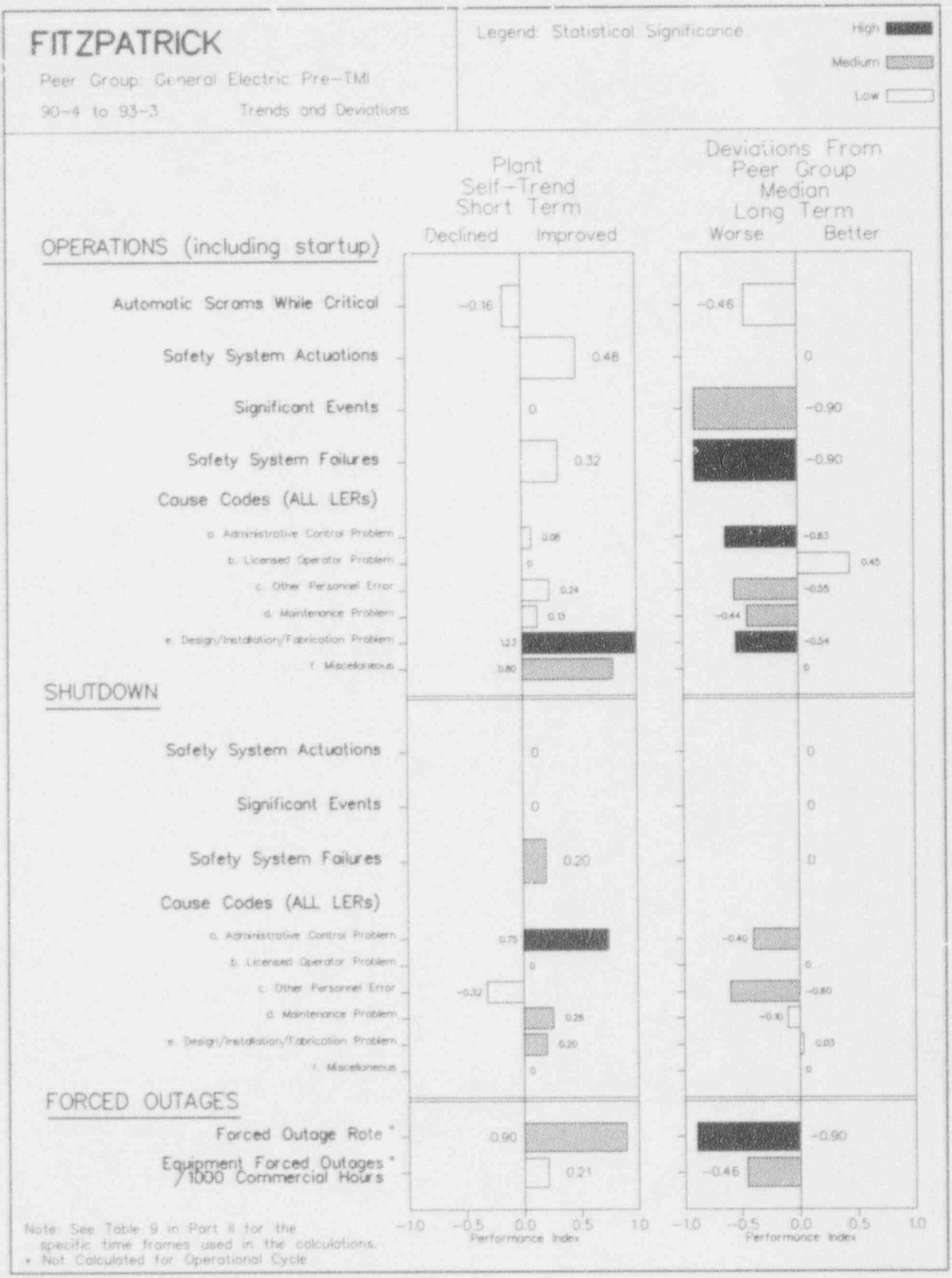

FITZPATRICK
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Ope
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures
BWR Average
Forced Outage Rate (%)
Forced Outage Rate (%)
Equipment Forced Outages/
1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM)
BWR Average
NA
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.36b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.37a

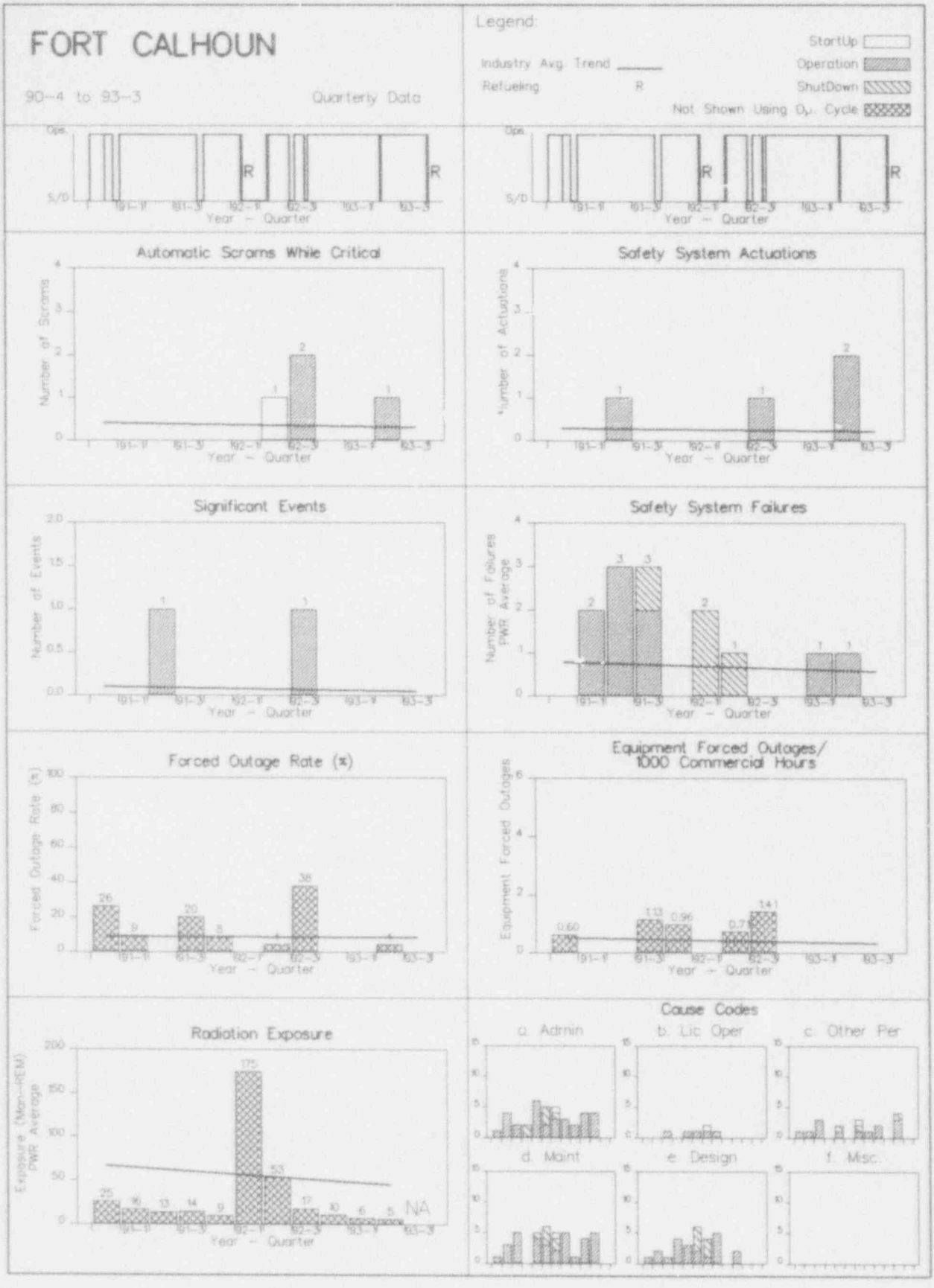
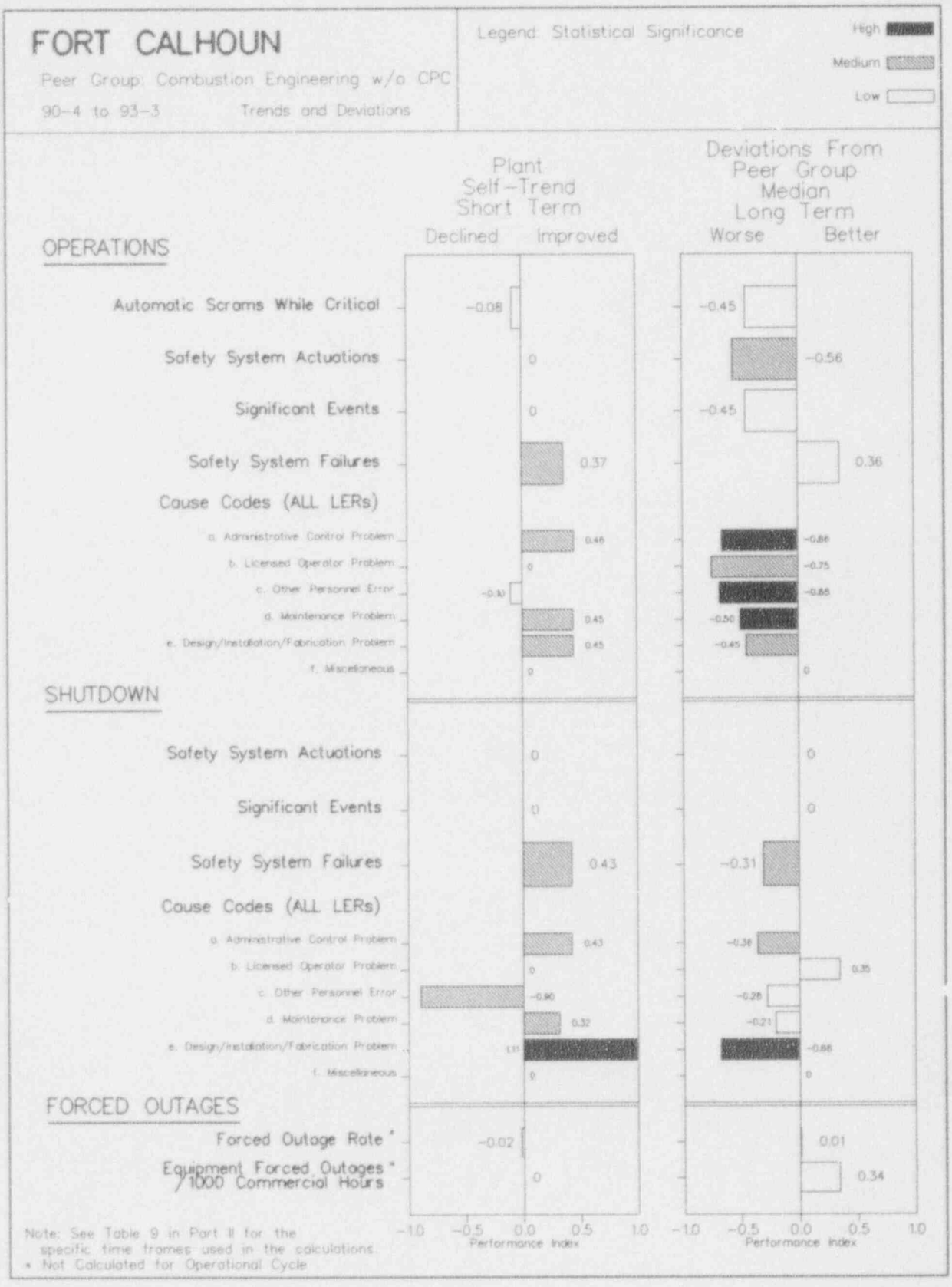

FORT CALHOUN
90--4 to 93--3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Oμ. Cycle
Ops.
S/D
Year -- Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures
PWR Average
Forced Outage Rate (%)
Equipment Forced Outages/
1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man--REM)
PWR Average
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.
NA

FIGURE 7.37b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.38a

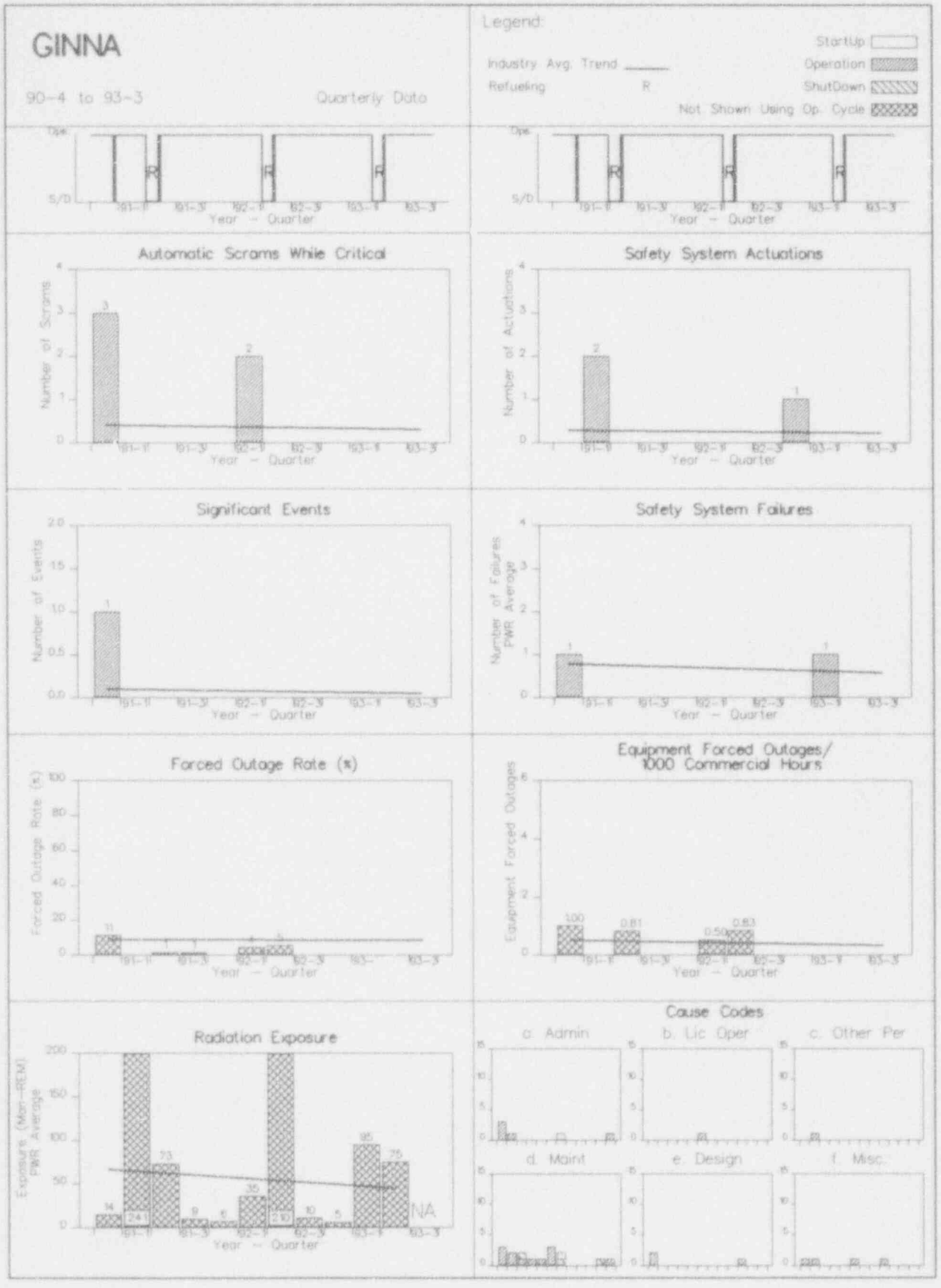
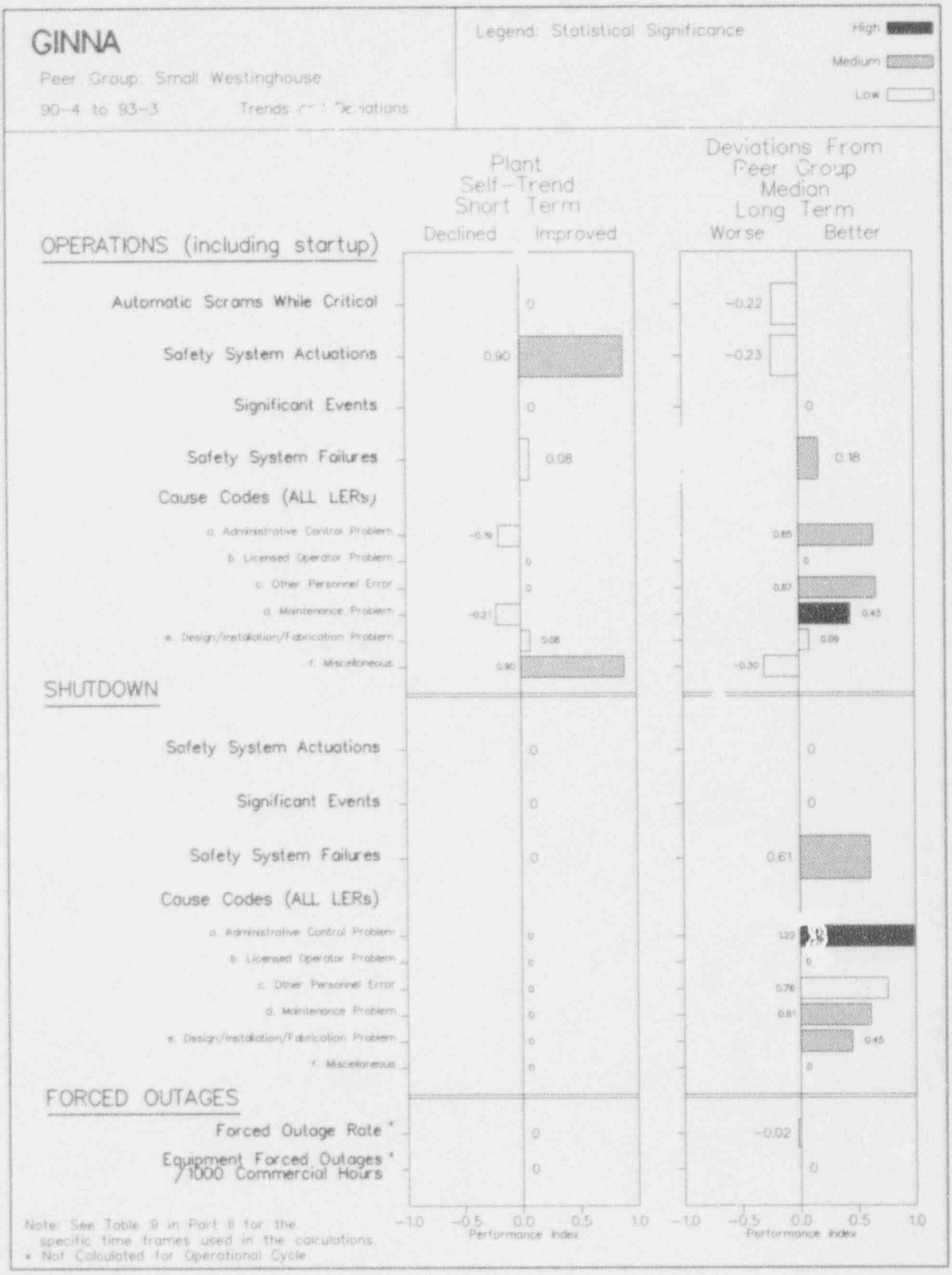

GINNA
90-4 to 93-3
Quarterly Data
Legend:
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Industry Avg. Trend
Refueling
R
Dpe
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM) PWR Average
NA
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.38b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.39a

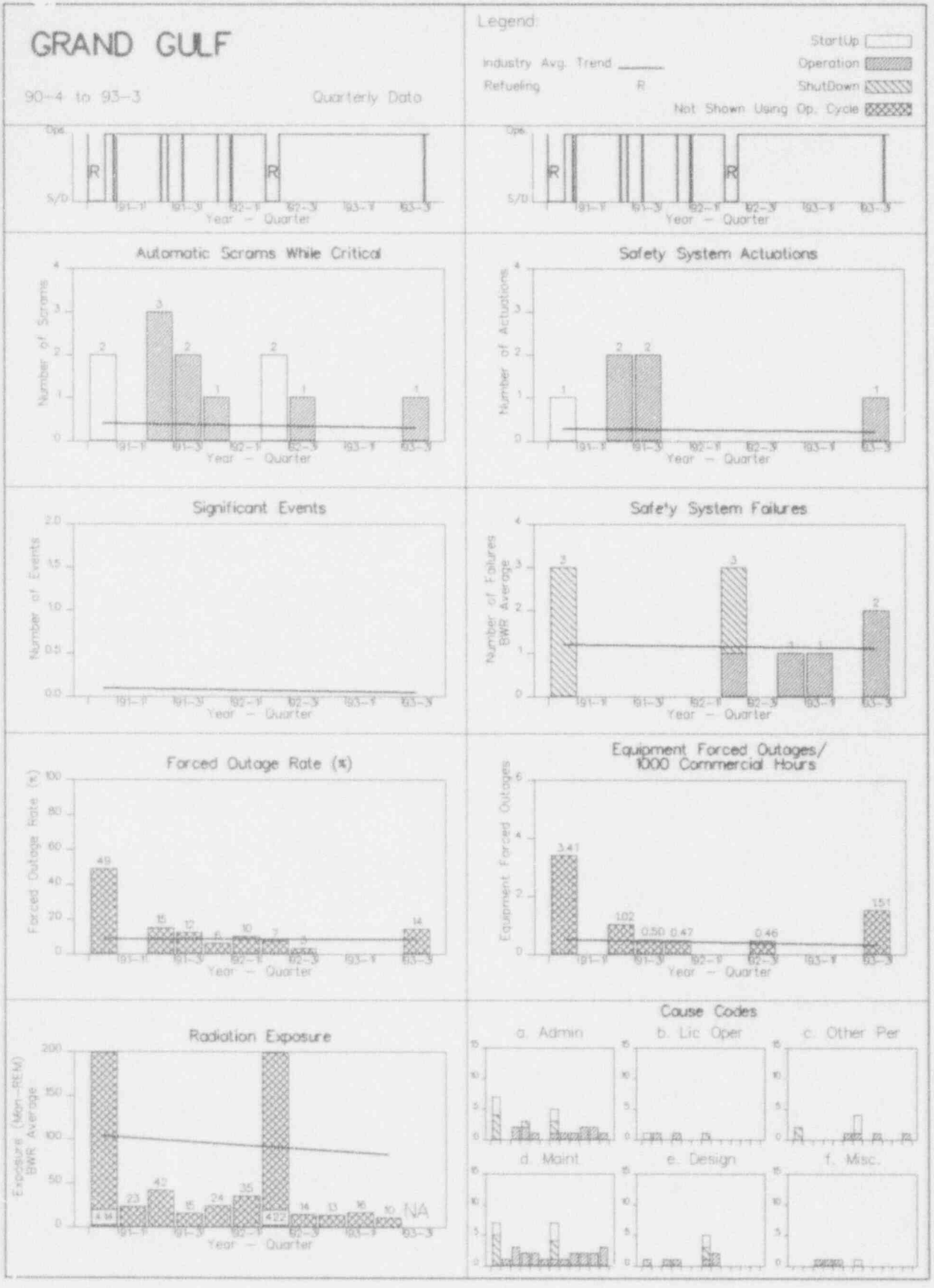
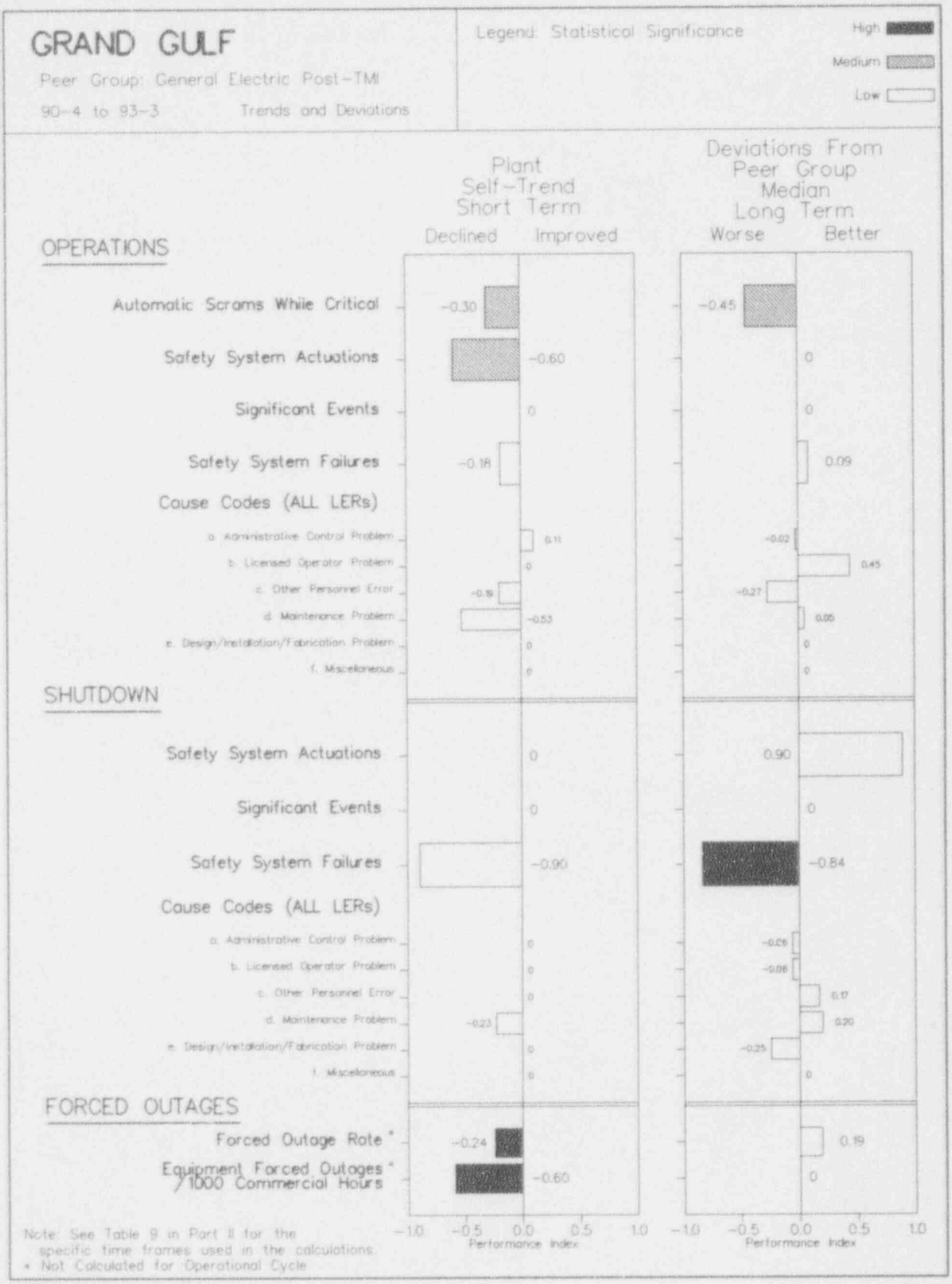

GRAND GULF
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Ope.
S/D
R
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures BWR Average
Forced Outage Rate (%)
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM) BWR Average
NA
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.39b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.40a

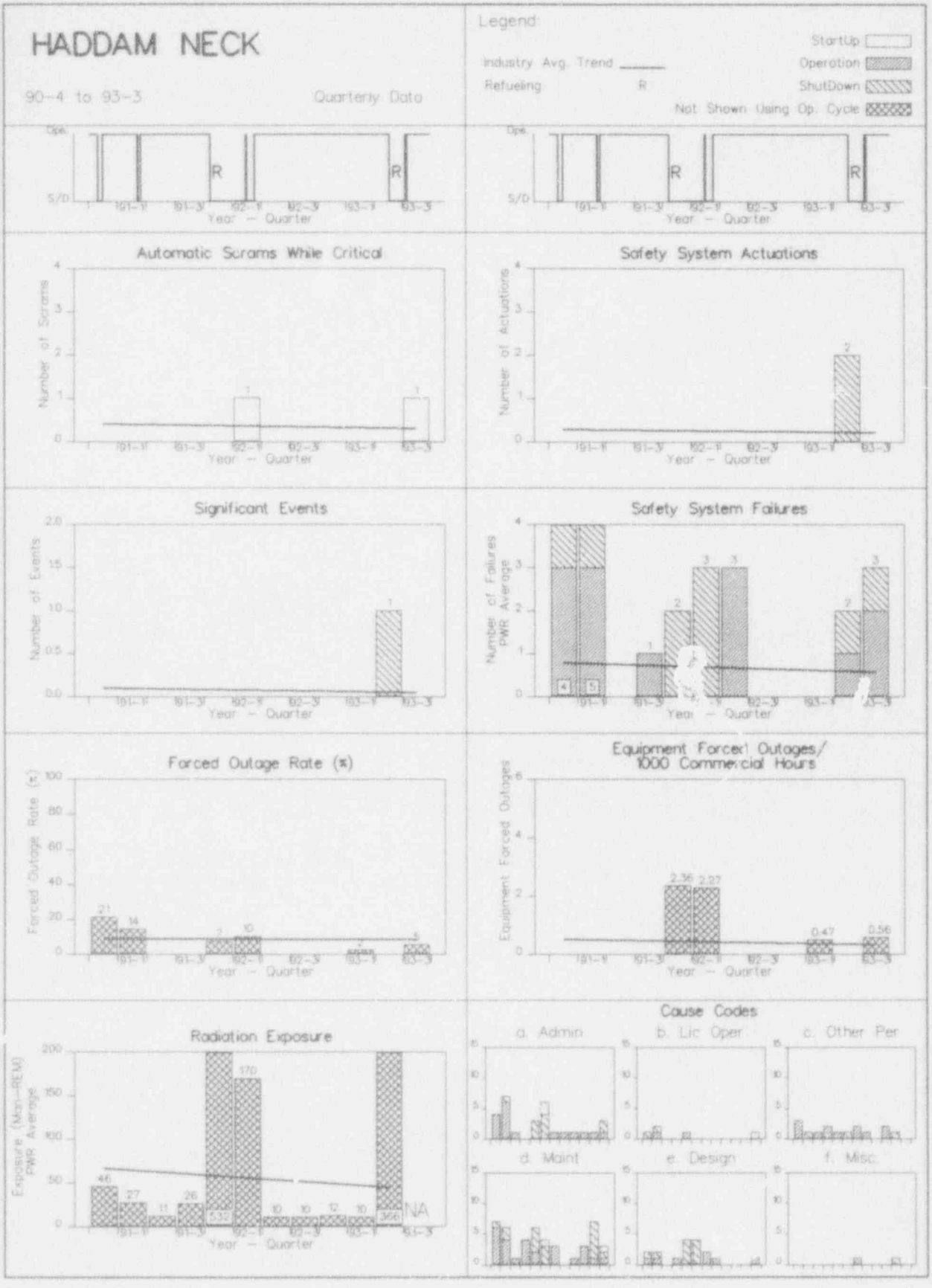
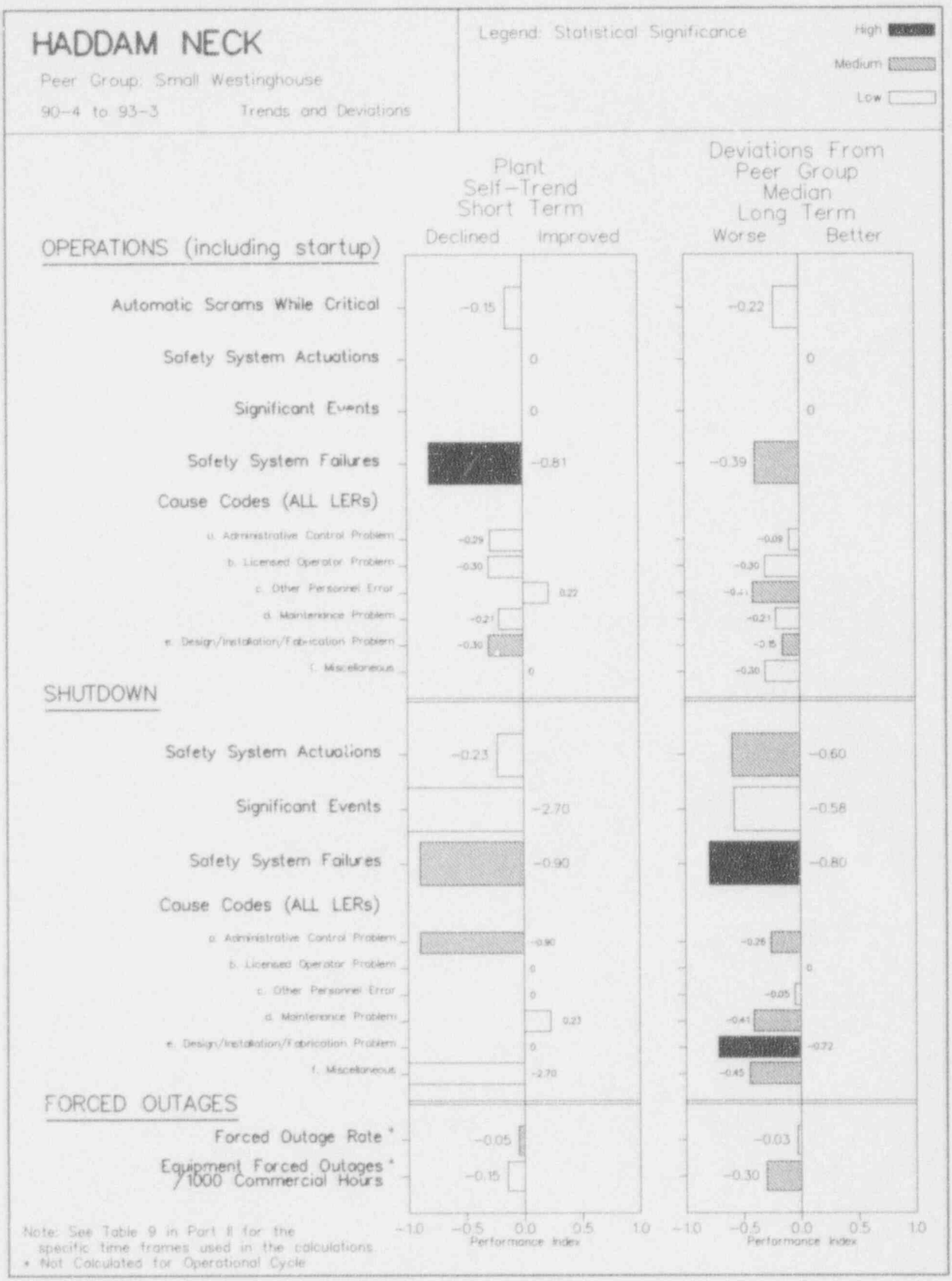

HADDAM NECK
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Ops.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM) PWR Average
NA
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.40b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.41a

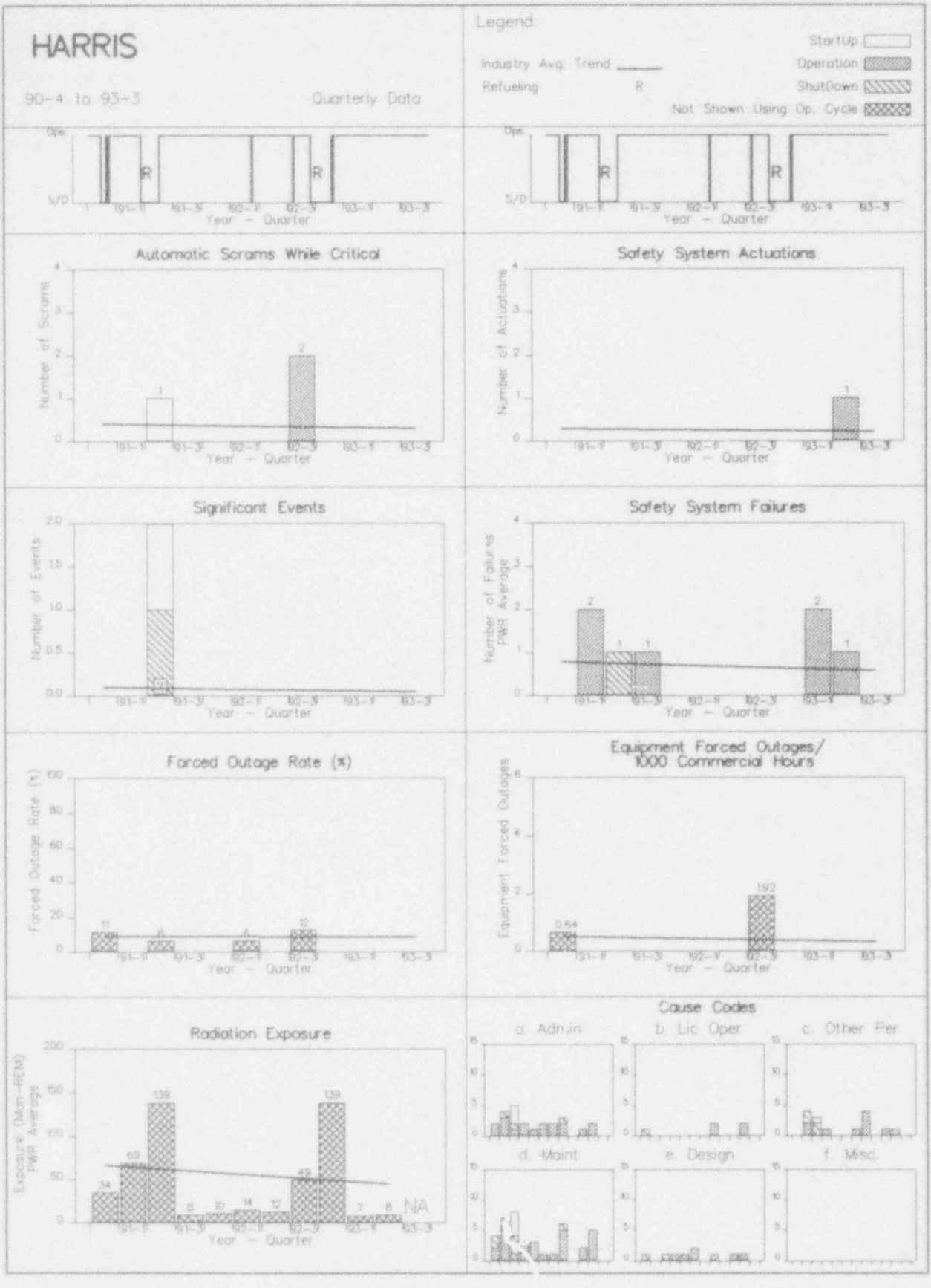
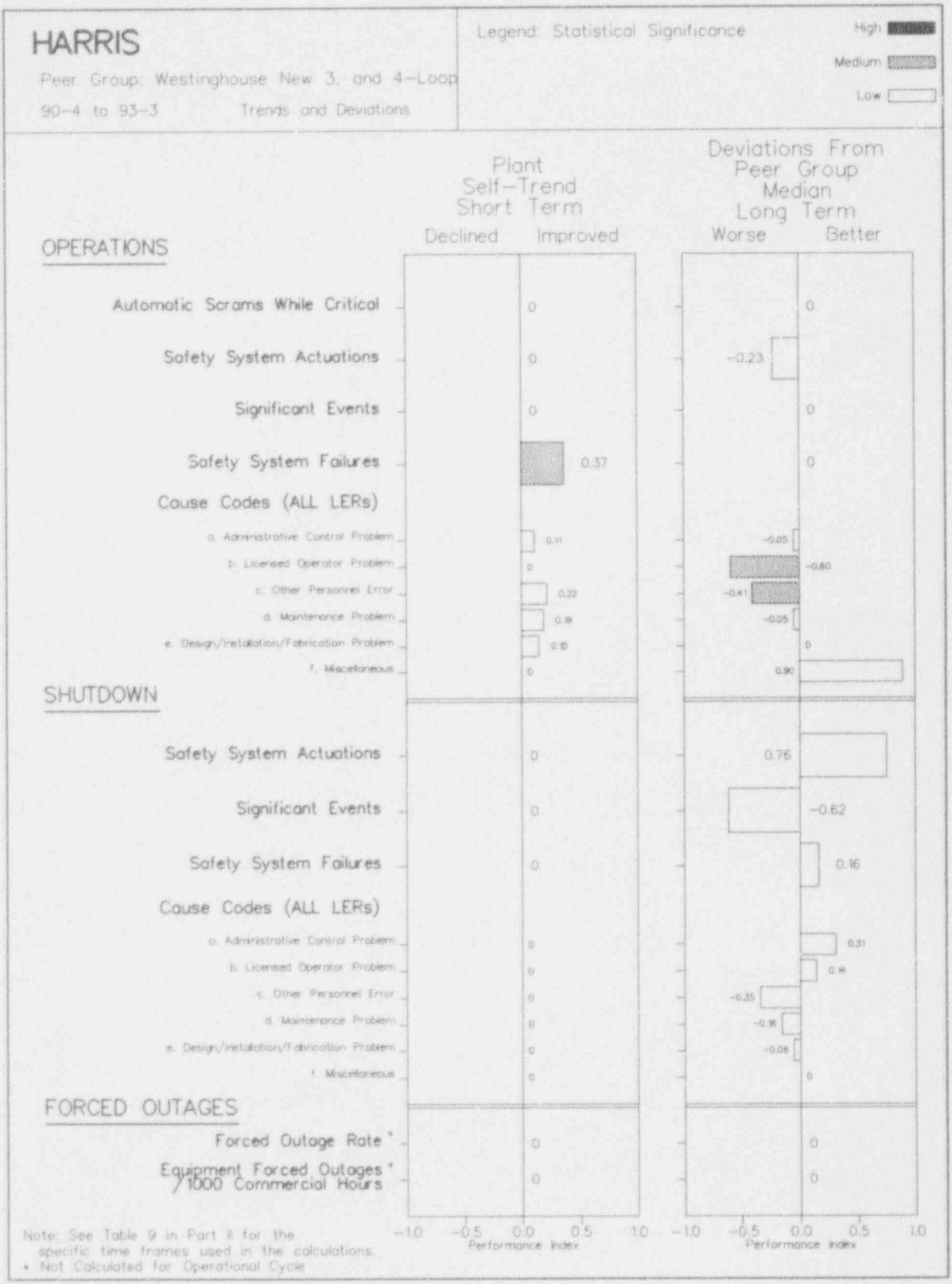

HARRIS
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Ope
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM) PWR Average
NA
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.4 1b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.42a

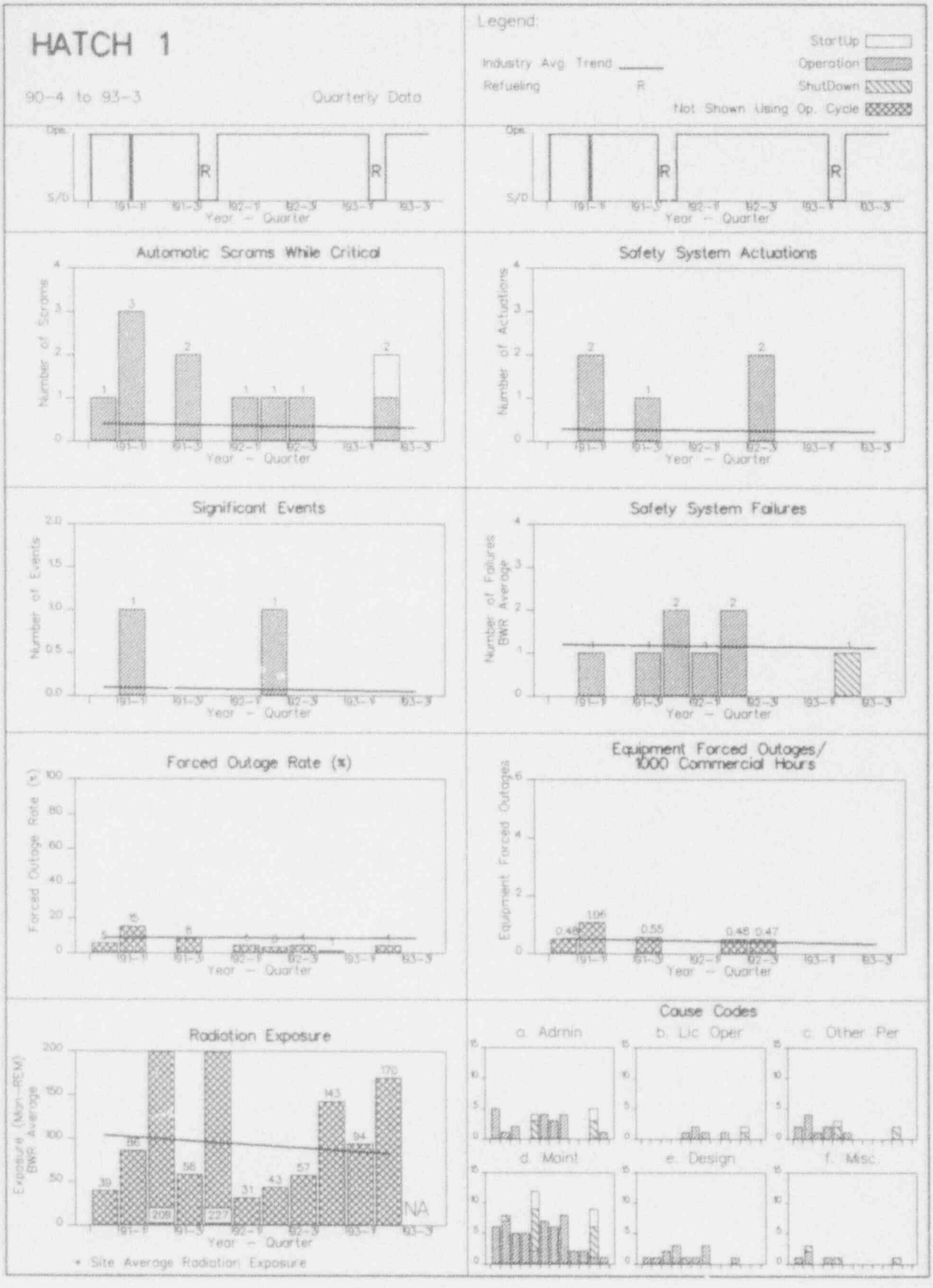
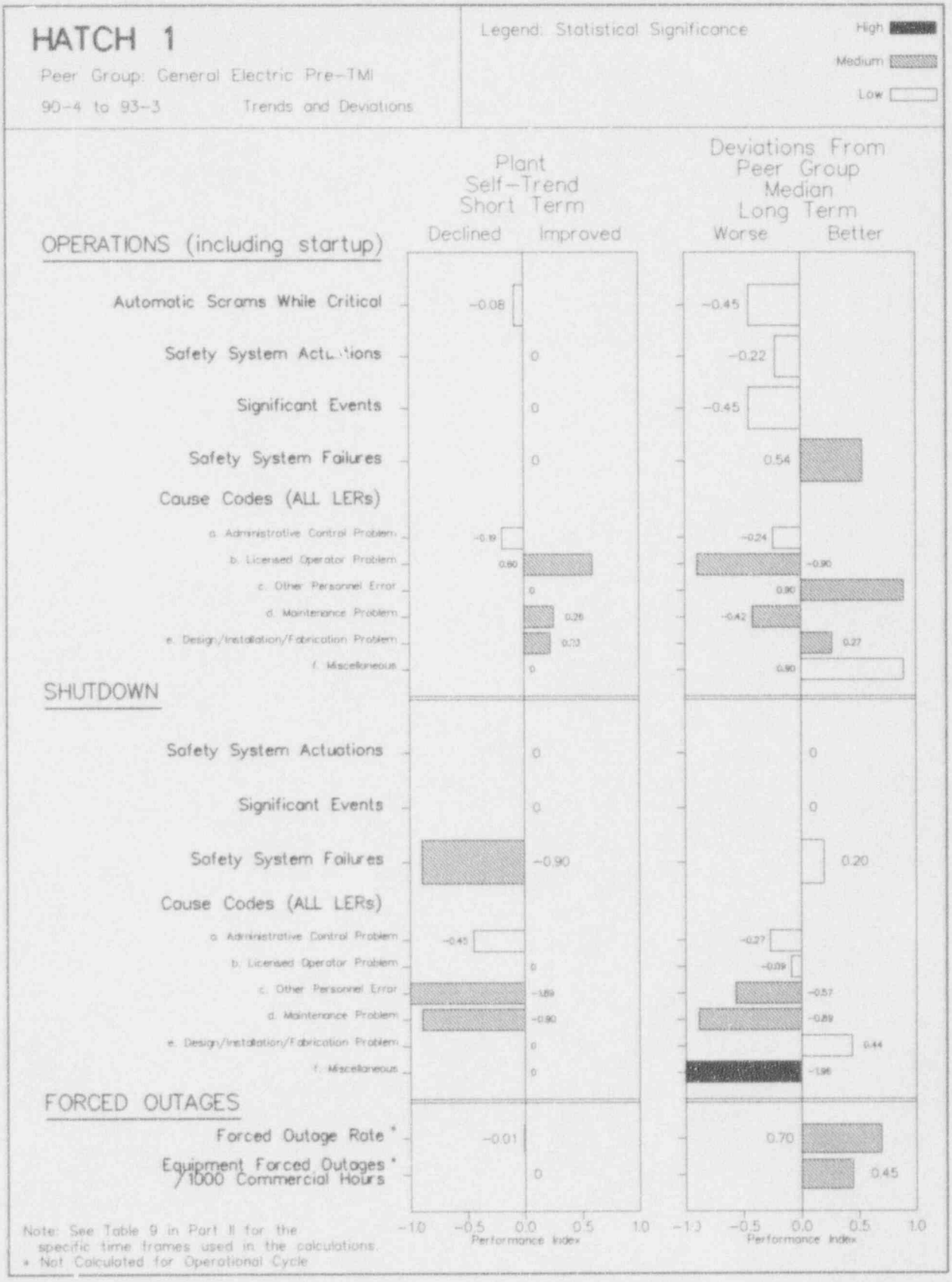

HATCH 1
90-4 to 93-3
Quarterly Data
Legend:
StartUp
Industry Avg. Trend
Operation
Refueling
R
ShutDown
Not Shown Using Op. Cycle
Ops.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures
BWR Average
Forced Outage Rate (%)
Equipment Forced Outages/
1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM)
BWR Average
Site Average Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.42b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.43a

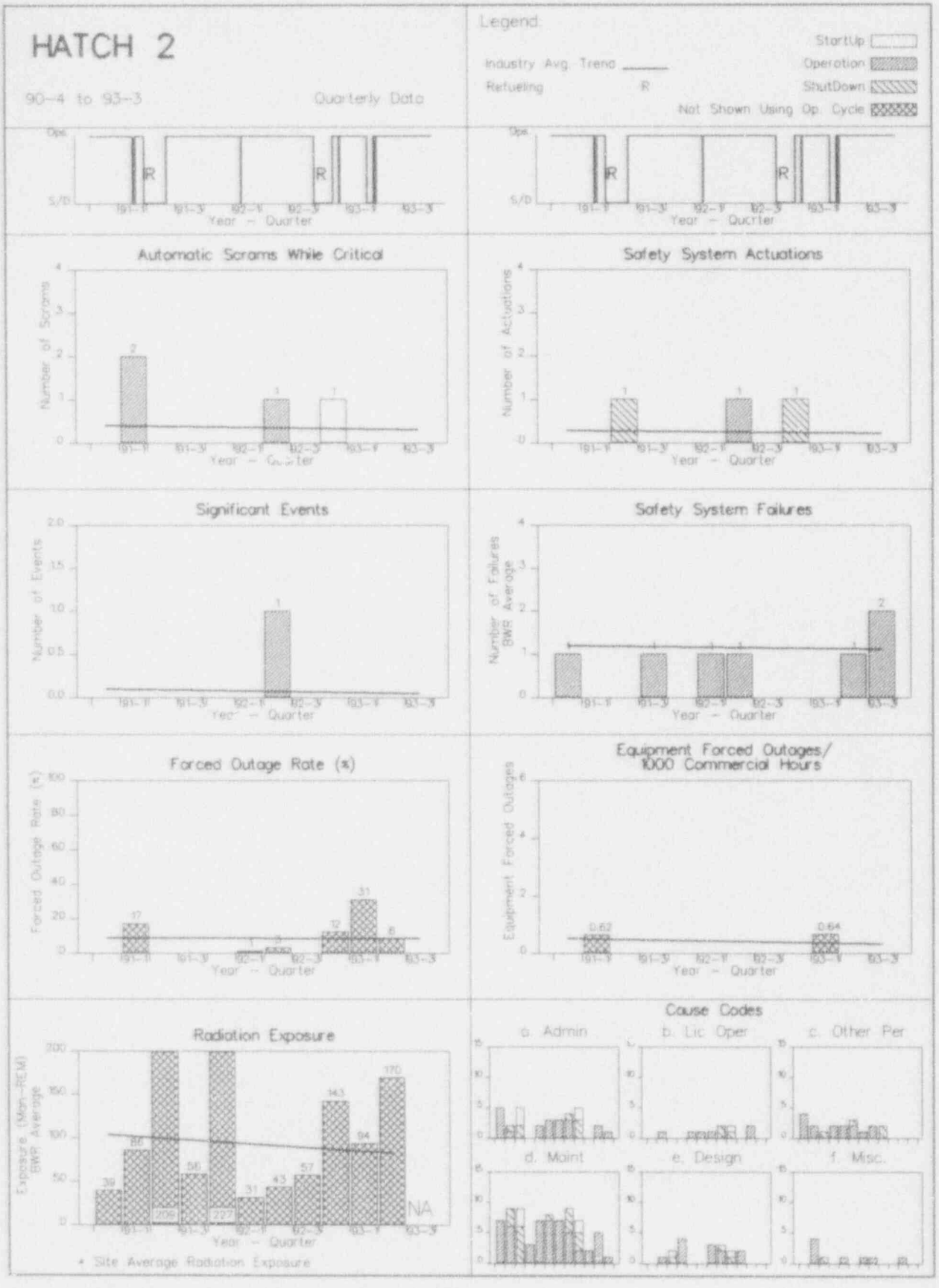

HATCH 2
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Ops
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures
BWR Average
Forced Outage Rate (%)
Equipment Forced Outages/
1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM)
BWR Average
Site Average Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.43b

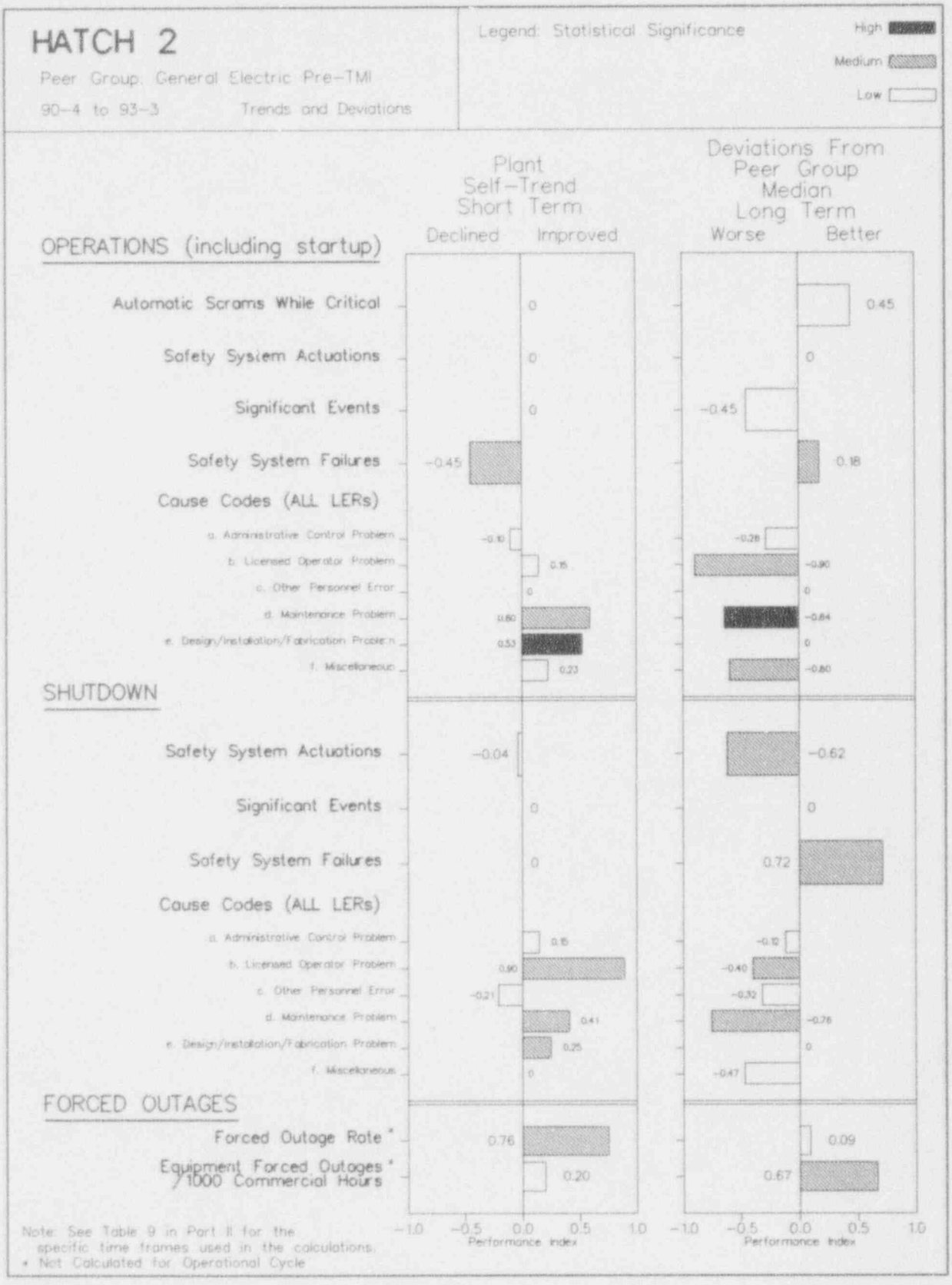

HATCH 2
Peer Group: General Electric Pre-TMI
90-4 to 93-3 Trends and Deviations
Legend: Statistical Significance
High
Medium
Low
Plant Self-Trend Short Term
Declined
Improved
Deviations From Peer Group Median Long Term
Worse
Better
OPERATIONS (including startup)
Automatic Scrams While Critical
0
0.45
Safety System Actuations
0
0
Significant Events
0
-0.45
Safety System Failures
-0.45
0.18
Cause Codes (ALL LERs)
a. Administrative Control Problem
-0.10
-0.28
b. Licensed Operator Problem
0.15
-0.90
c. Other Personnel Error
0
0
d. Maintenance Problem
0.80
-0.84
e. Design/Installation/Fabrication Problem
0.53
0
f. Miscellaneous
0.23
-0.80
SHUTDOWN
Safety System Actuations
-0.04
-0.62
Significant Events
0
0
Safety System Failures
0
0.72
Cause Codes (ALL LERs)
a. Administrative Control Problem
0.15
-0.10
b. Licensed Operator Problem
0.90
-0.40
c. Other Personnel Error
-0.21
-0.32
d. Maintenance Problem
0.41
-0.78
e. Design/Installation/Fabrication Problem
0.25
0
f. Miscellaneous
0
-0.47
FORCED OUTAGES
Forced Outage Rate *
0.76
0.09
Equipment Forced Outages * /1000 Commercial Hours
0.20
0.67
-1.0
-0.5
0.0
0.5
1.0
Performance Index
Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.44a

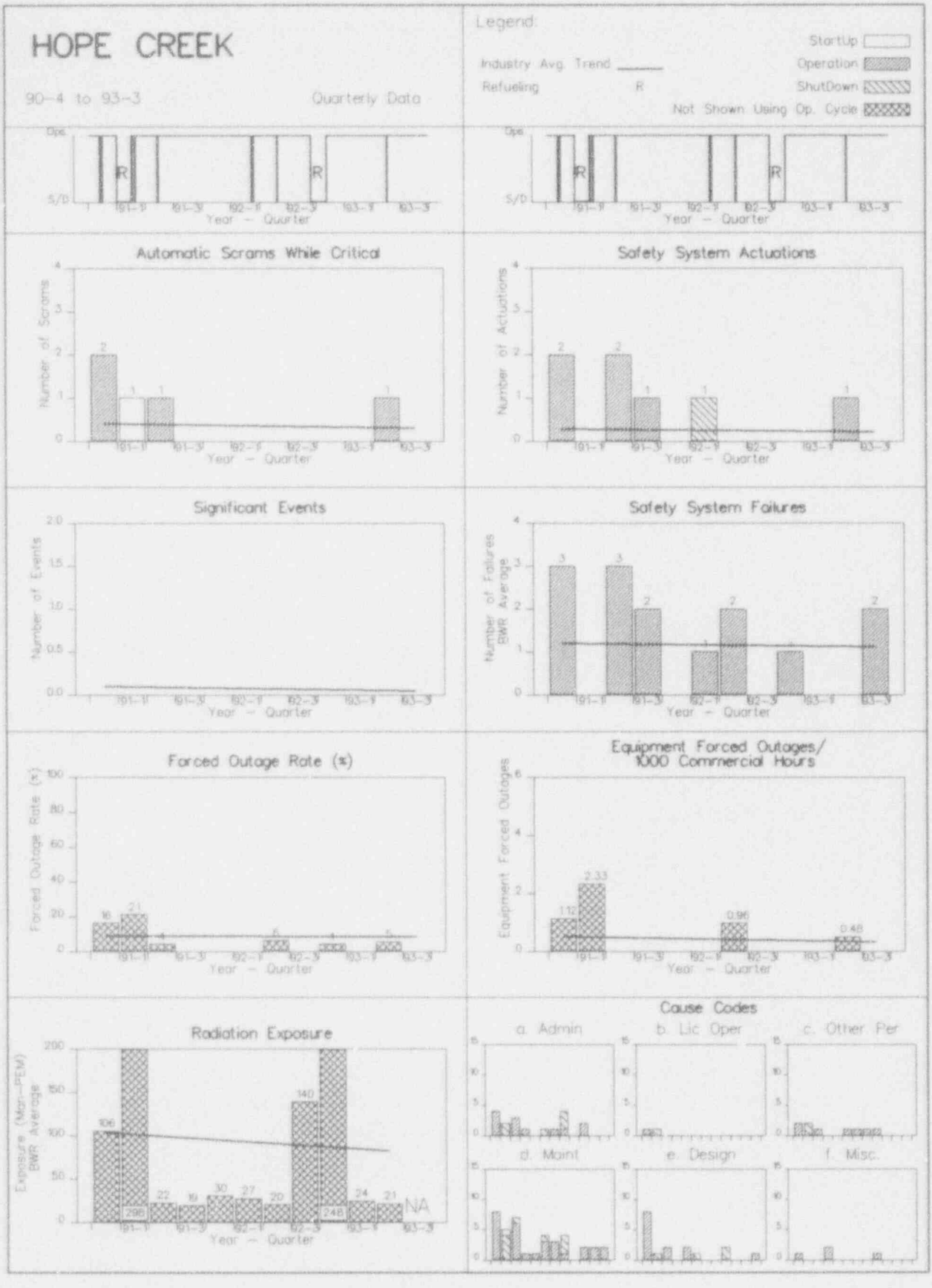
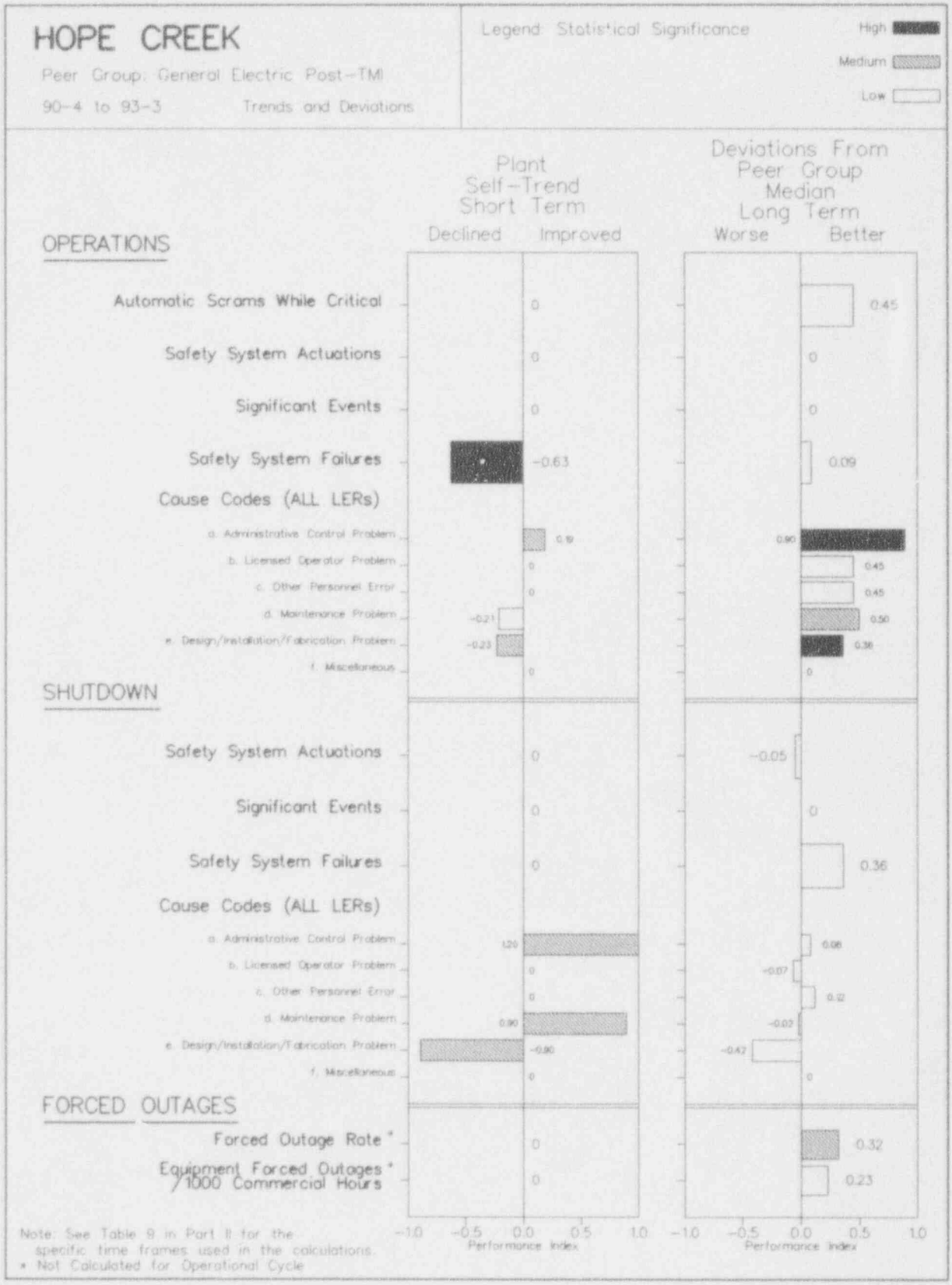

HOPE CREEK
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Ope
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures
BWR Average
Forced Outage Rate (%)
Equipment Forced Outages/
1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-rem)
BWR Average
NA
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.44b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.45a

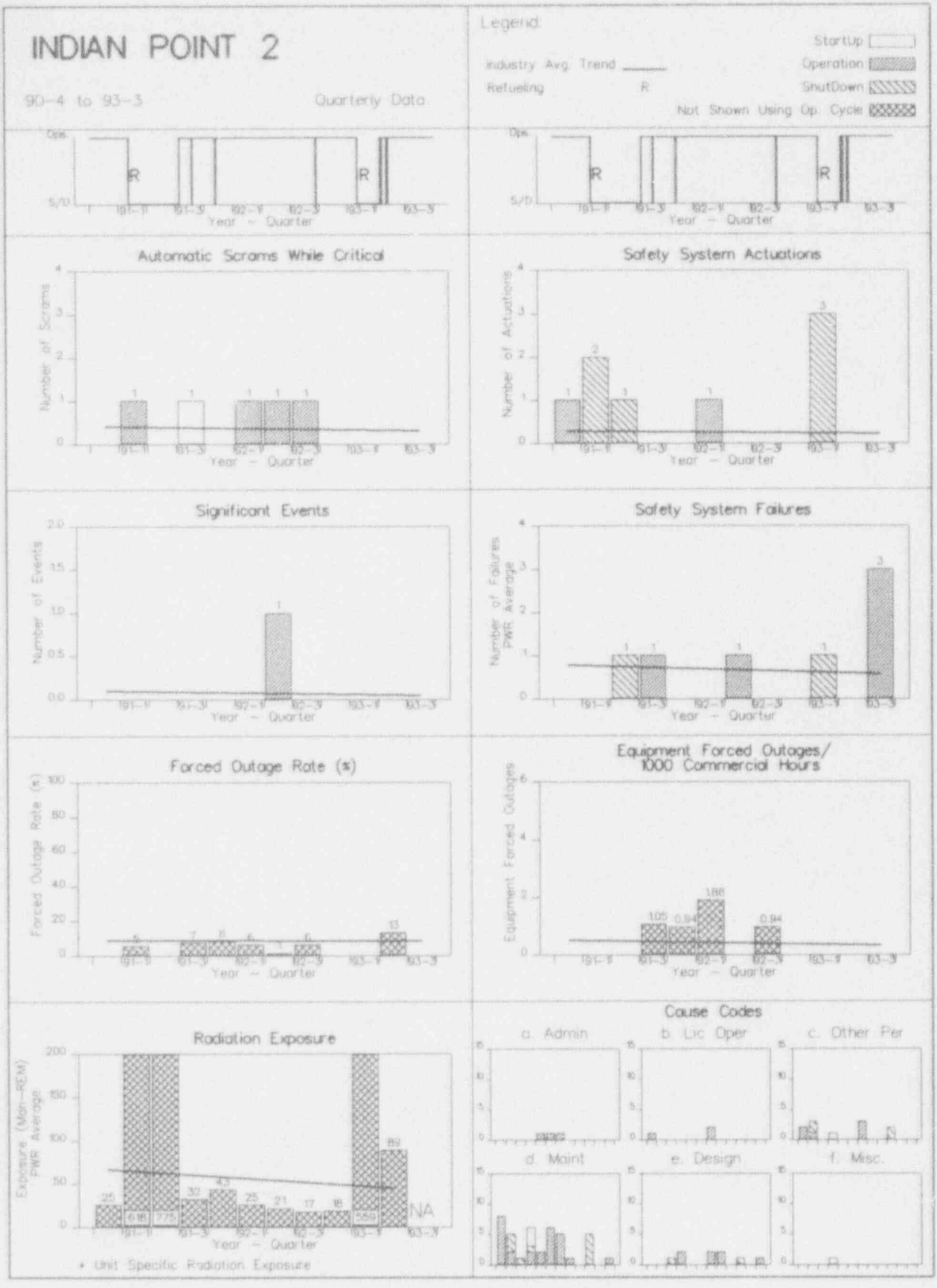
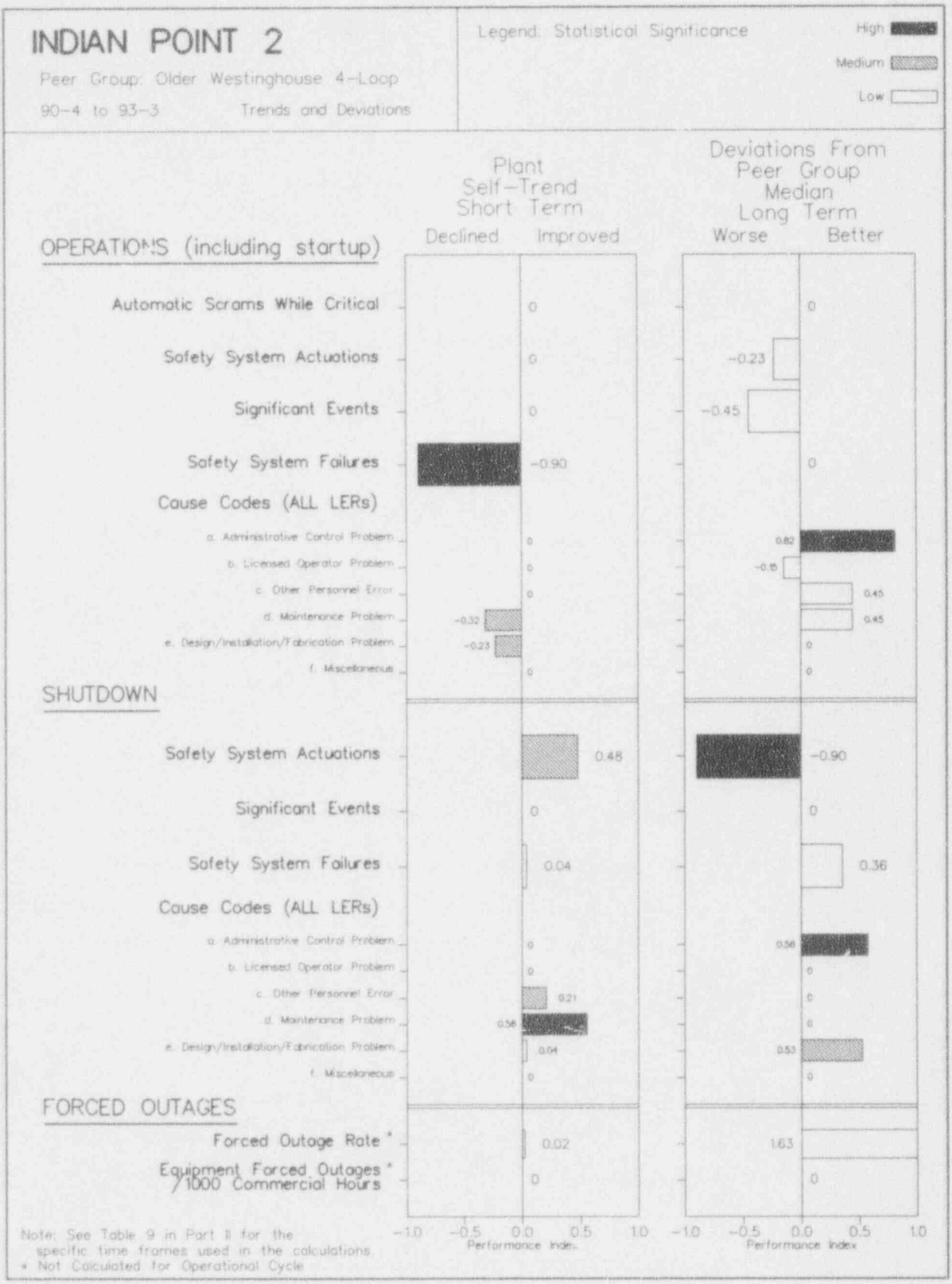

INDIAN POINT 2
90-4 to 93-3
Quarterly Data
Legend:
Startup
Operation
ShutDown
Not Shown Using Op. Cycle
Industry Avg. Trend
Refueling
R
Ops
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM) PWR Average
NA
* Unit Specific Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.45b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.46a

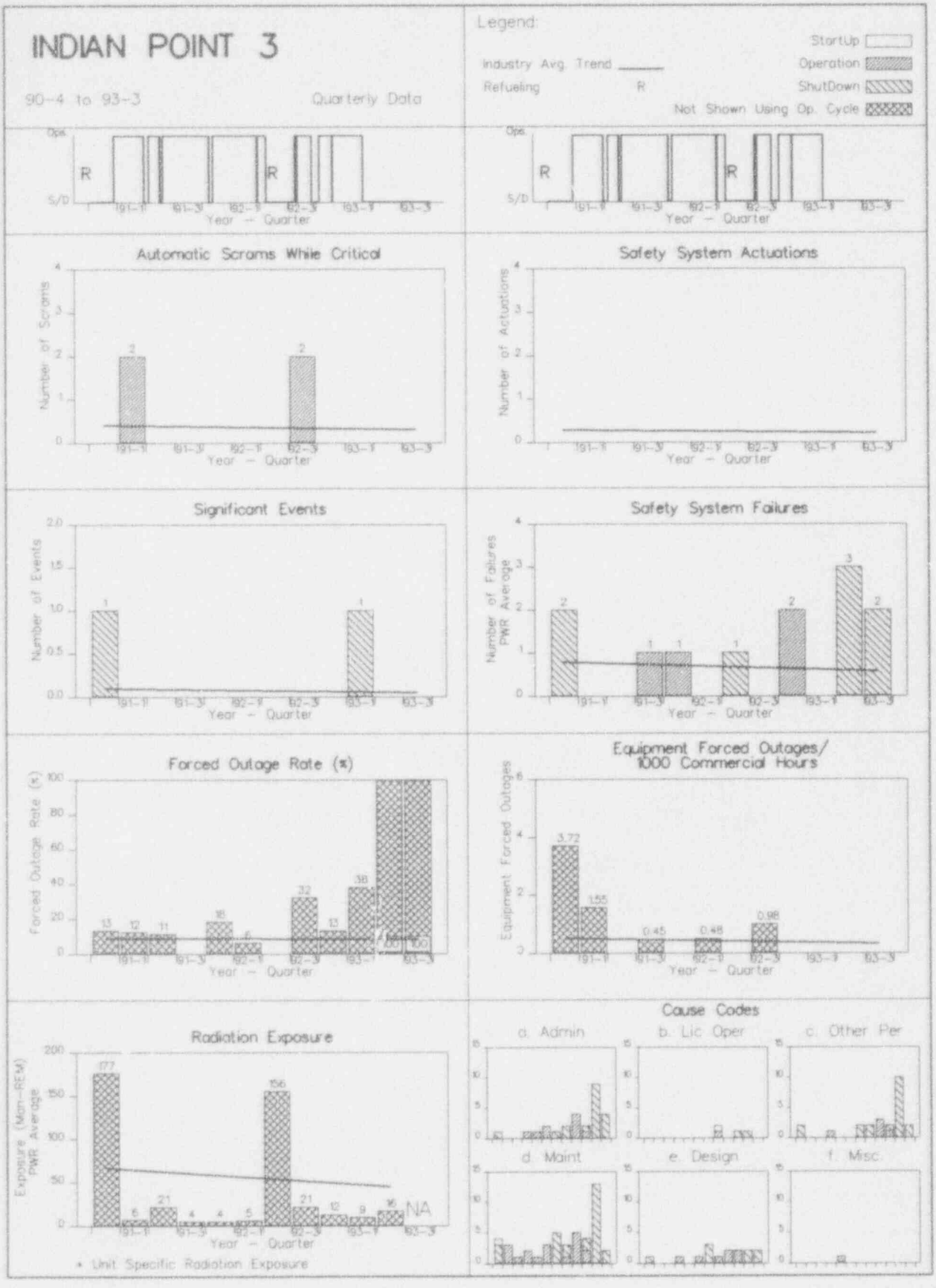
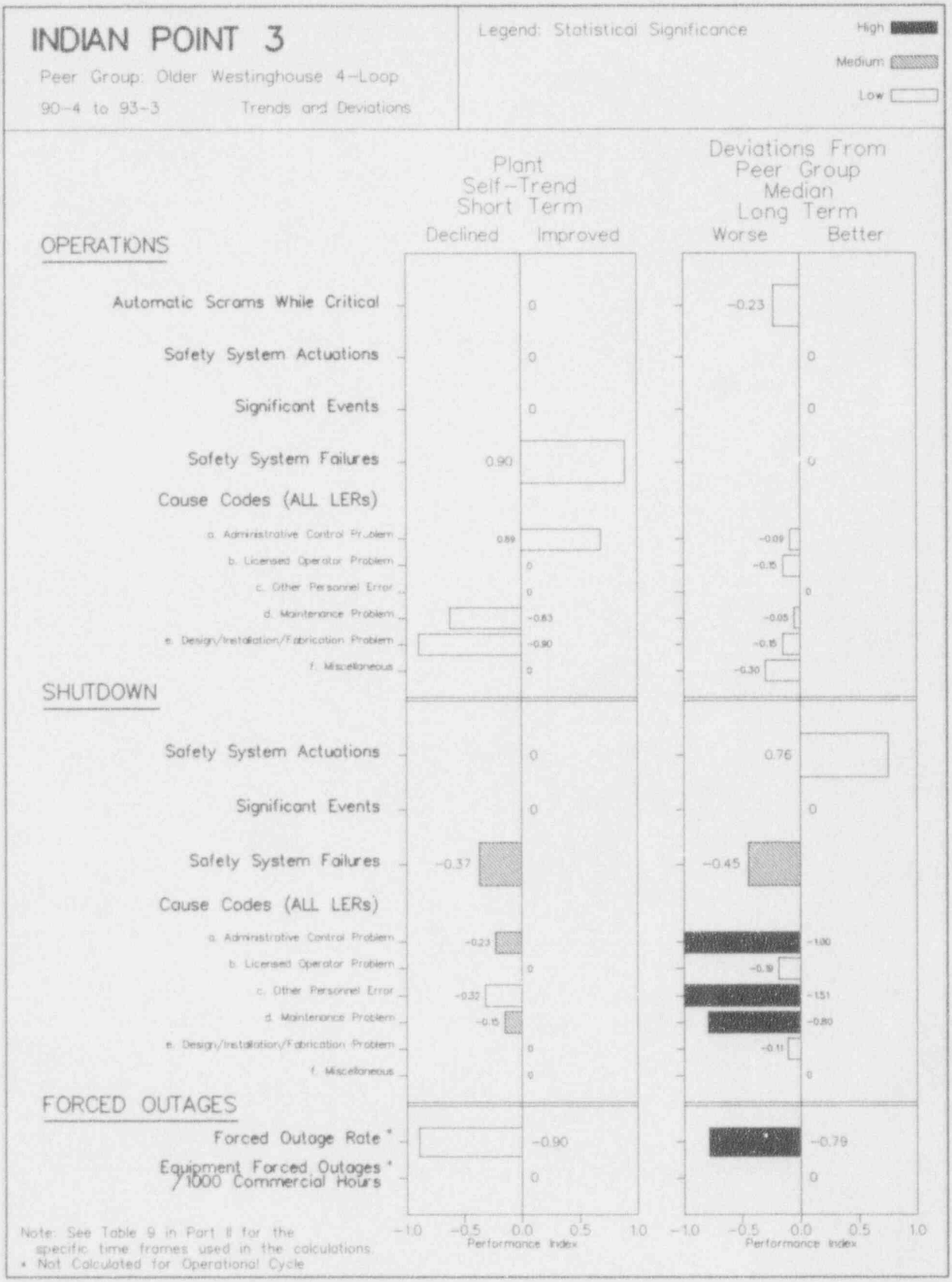

INDIAN POINT 3
90-4 to 93-3
Quarterly Data
Legend:
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Industry Avg. Trend
Refueling
R
Ops.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM) PWR Average
NA
* Unit Specific Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.46b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.47a

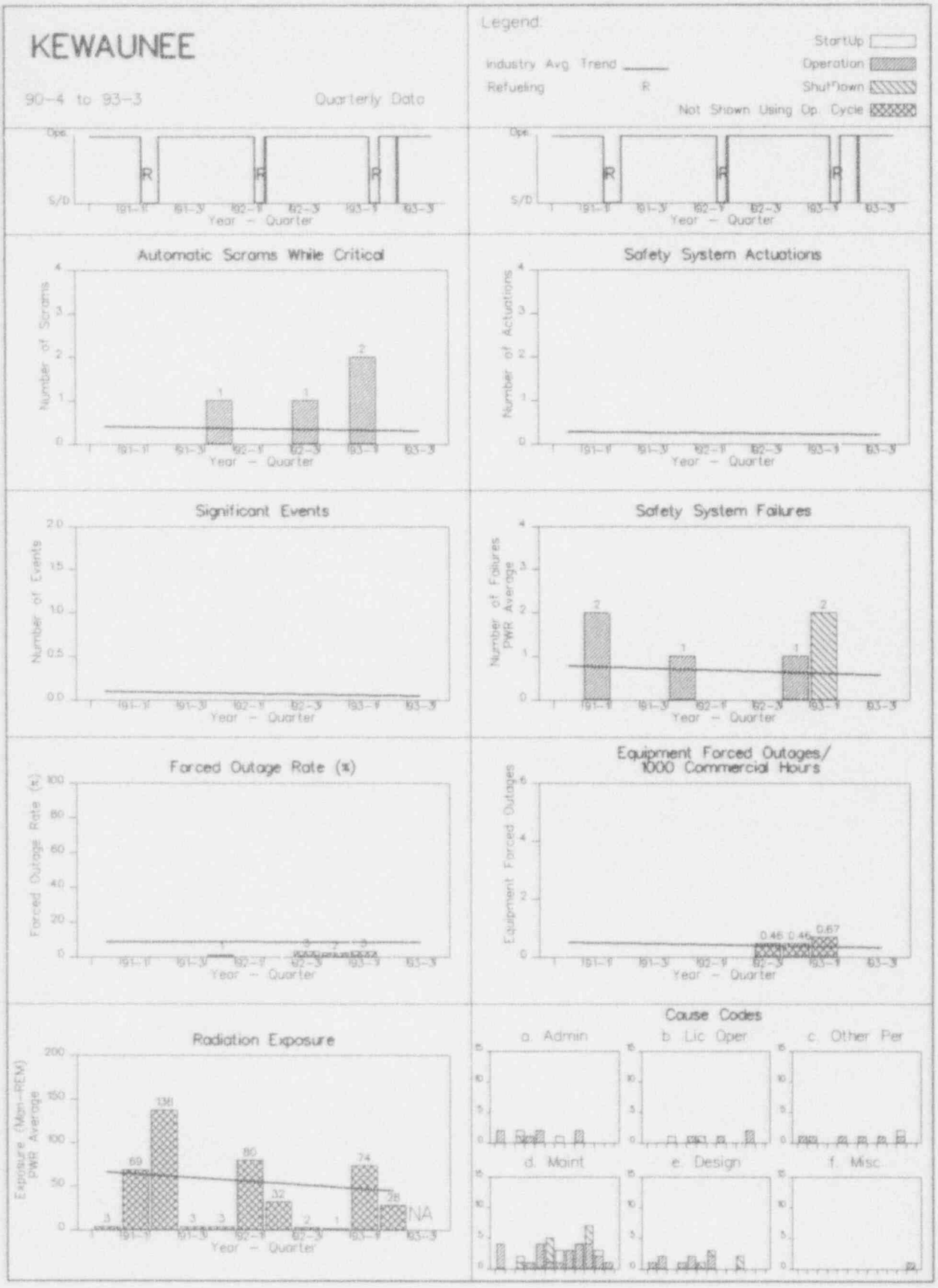
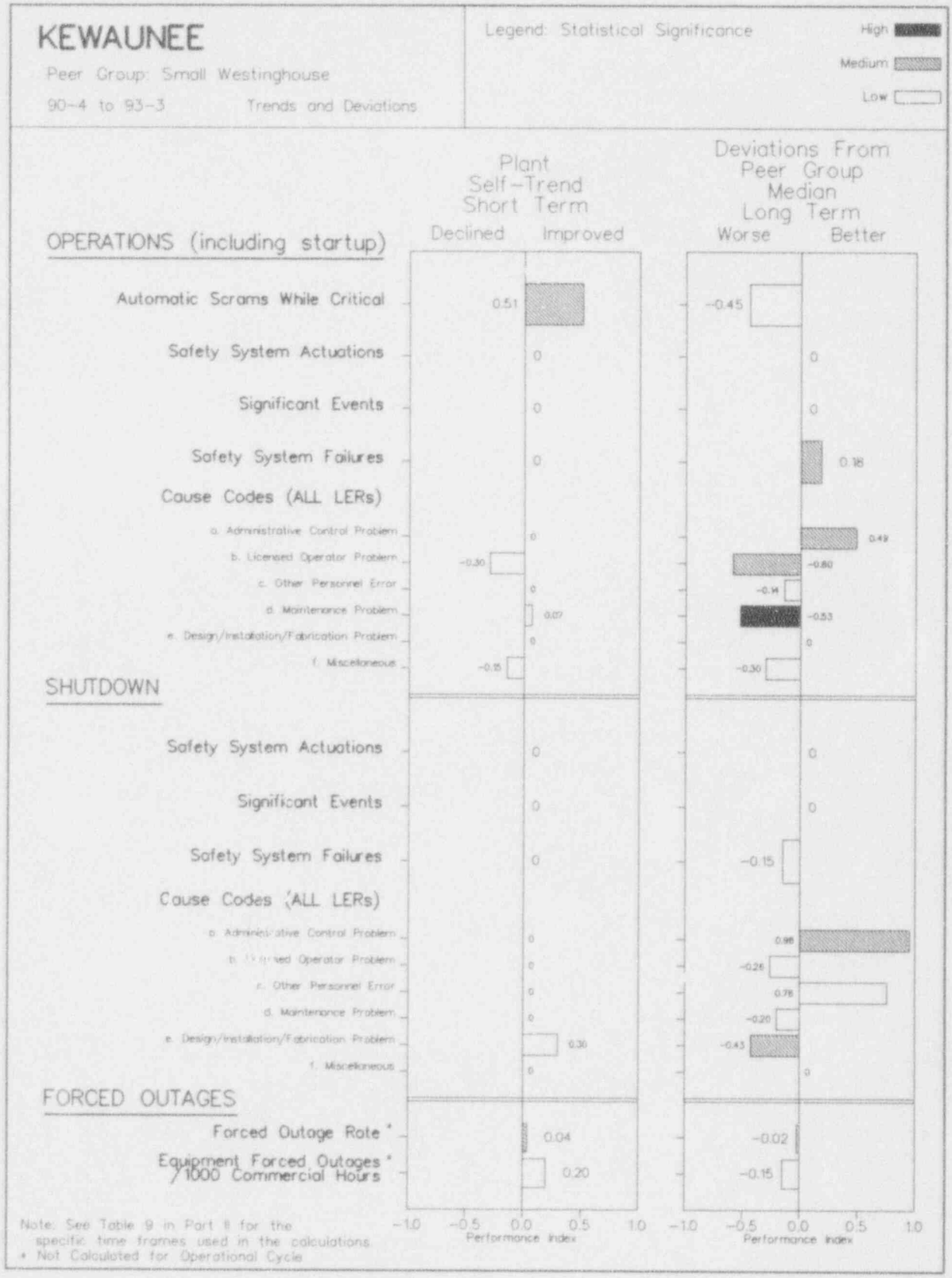

KEWAUNEE
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling
R
StartUp
Operation
Shutdown
Not Shown Using Op. Cycle
Ope.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
0.46
0.46
0.67
Radiation Exposure
Exposure (Man-REM) PWR Average
69
131
80
32
74
28
NA
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc

FIGURE 7.47b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.48a

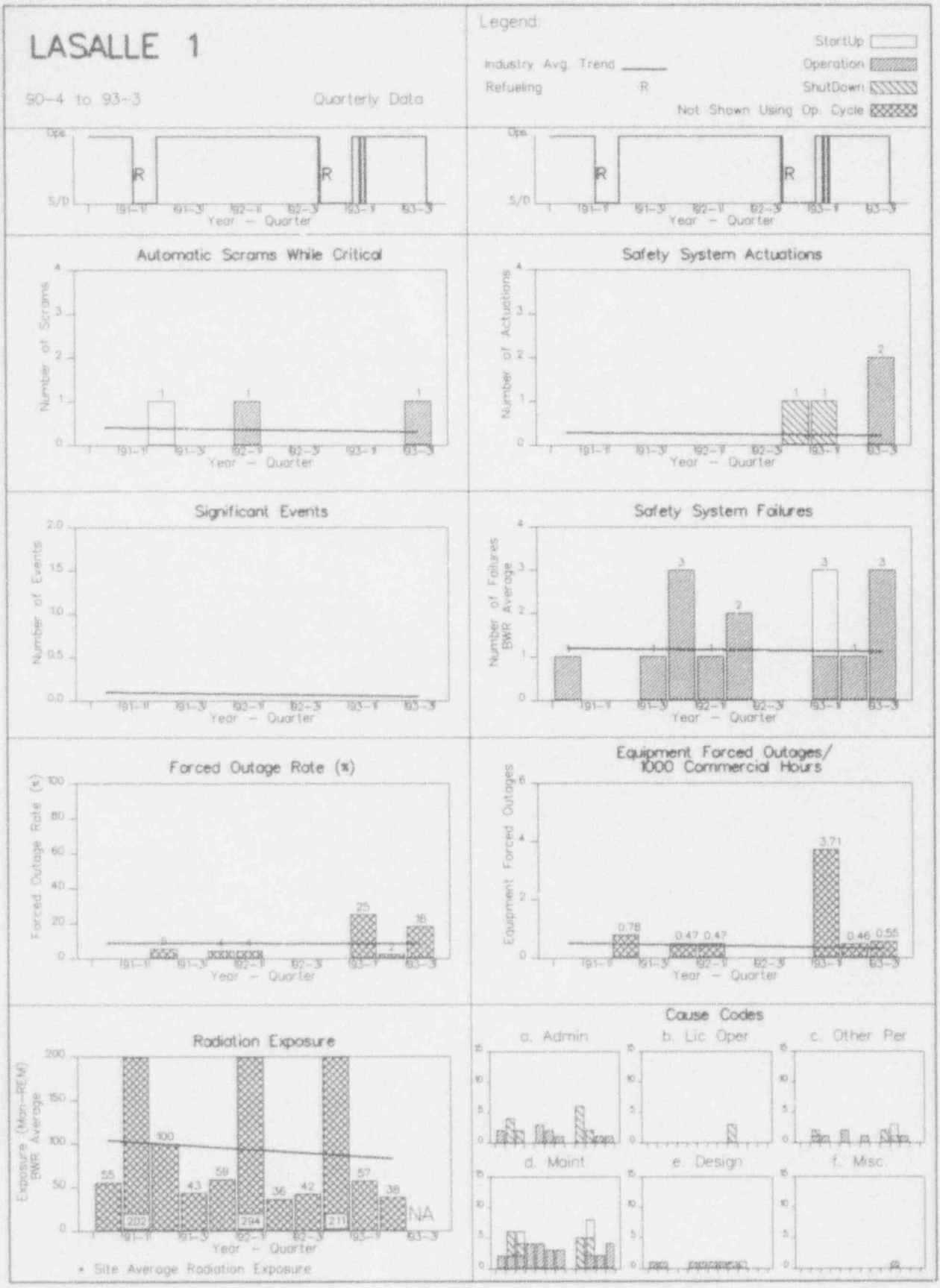

LASALLE 1
90-4 to 93-3
Quarterly Data
Legend:
StartUp
Industry Avg. Trend
Operation
Refueling
R
ShutDown
Not Shown Using Op. Cycle
Ops.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures
BWR Average
Forced Outage Rate (%)
Equipment Forced Outages/
1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM)
BWR Average
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.
NA
* Site Average Radiation Exposure

FIGURE 7.48b

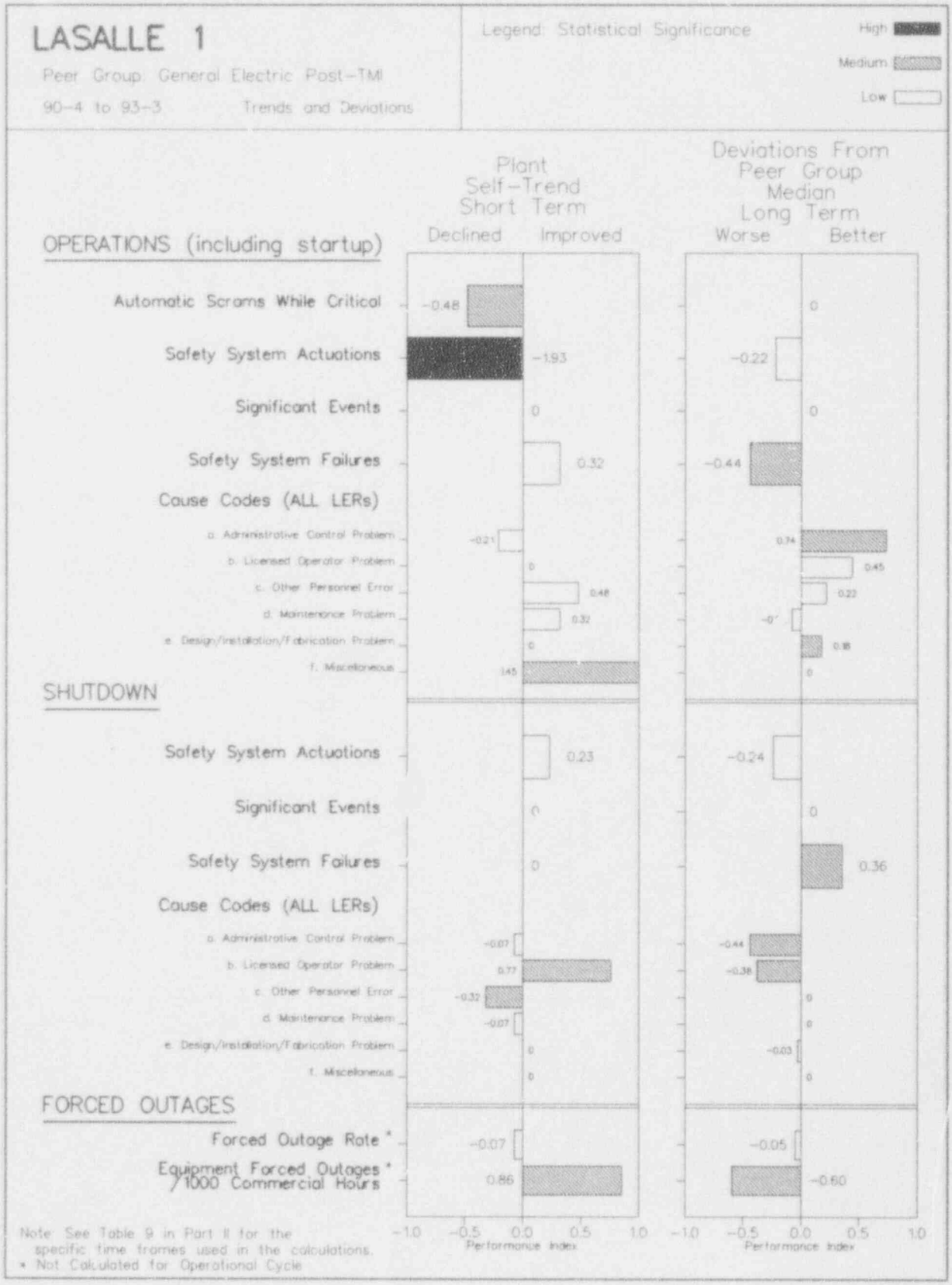

LASALLE 1
Peer Group: General Electric Post-TMI
90-4 to 93-3 Trends and Deviations
Legend: Statistical Significance
High
Medium
Low
Plant Self-Trend Short Term
Deviations From Peer Group Median Long Term
Declined
Improved
Worse
Better
OPERATIONS (including startup)
Automatic Scrams While Critical
-0.48
0
Safety System Actuations
-1.93
-0.22
Significant Events
0
0
Safety System Failures
0.32
-0.44
Cause Codes (ALL LERs)
a. Administrative Control Problem
-0.21
0.74
b. Licensed Operator Problem
0
0.45
c. Other Personnel Error
0.48
0.22
d. Maintenance Problem
0.32
-0.
e. Design/Installation/Fabrication Problem
0
0.18
f. Miscellaneous
1.45
0
SHUTDOWN
Safety System Actuations
0.23
-0.24
Significant Events
0
0
Safety System Failures
0
0.36
Cause Codes (ALL LERs)
a. Administrative Control Problem
-0.07
-0.44
b. Licensed Operator Problem
0.77
-0.38
c. Other Personnel Error
-0.32
0
d. Maintenance Problem
-0.07
0
e. Design/Installation/Fabrication Problem
0
-0.03
f. Miscellaneous
0
0
FORCED OUTAGES
Forced Outage Rate *
-0.07
-0.05
Equipment Forced Outages * /1000 Commercial Hours
0.86
-0.60
-1.0
-0.5
0.0
0.5
1.0
Performance Index
Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.49a

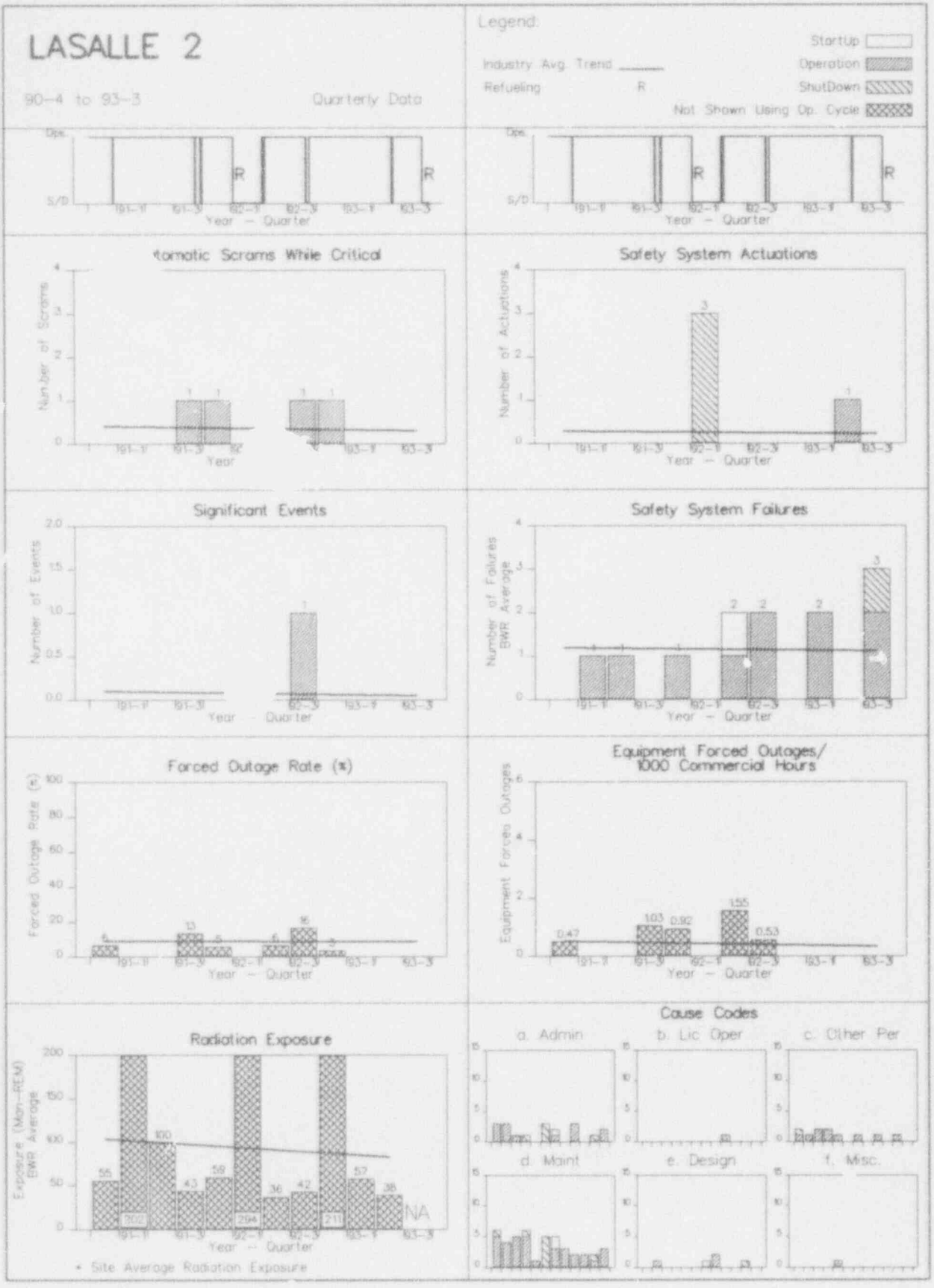

LASALLE 2
90-4 to 93-3
Quarterly Data
Legend:
StartUp
Industry Avg. Trend
Operation
Refueling
R
ShutDown
Not Shown Using Op. Cycle
Ops.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures
BWR Average
Forced Outage Rate (%)
Equipment Forced Outages/
1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM)
BWR Average
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.
NA
* Site Average Radiation Exposure

FIGURE 7.49b

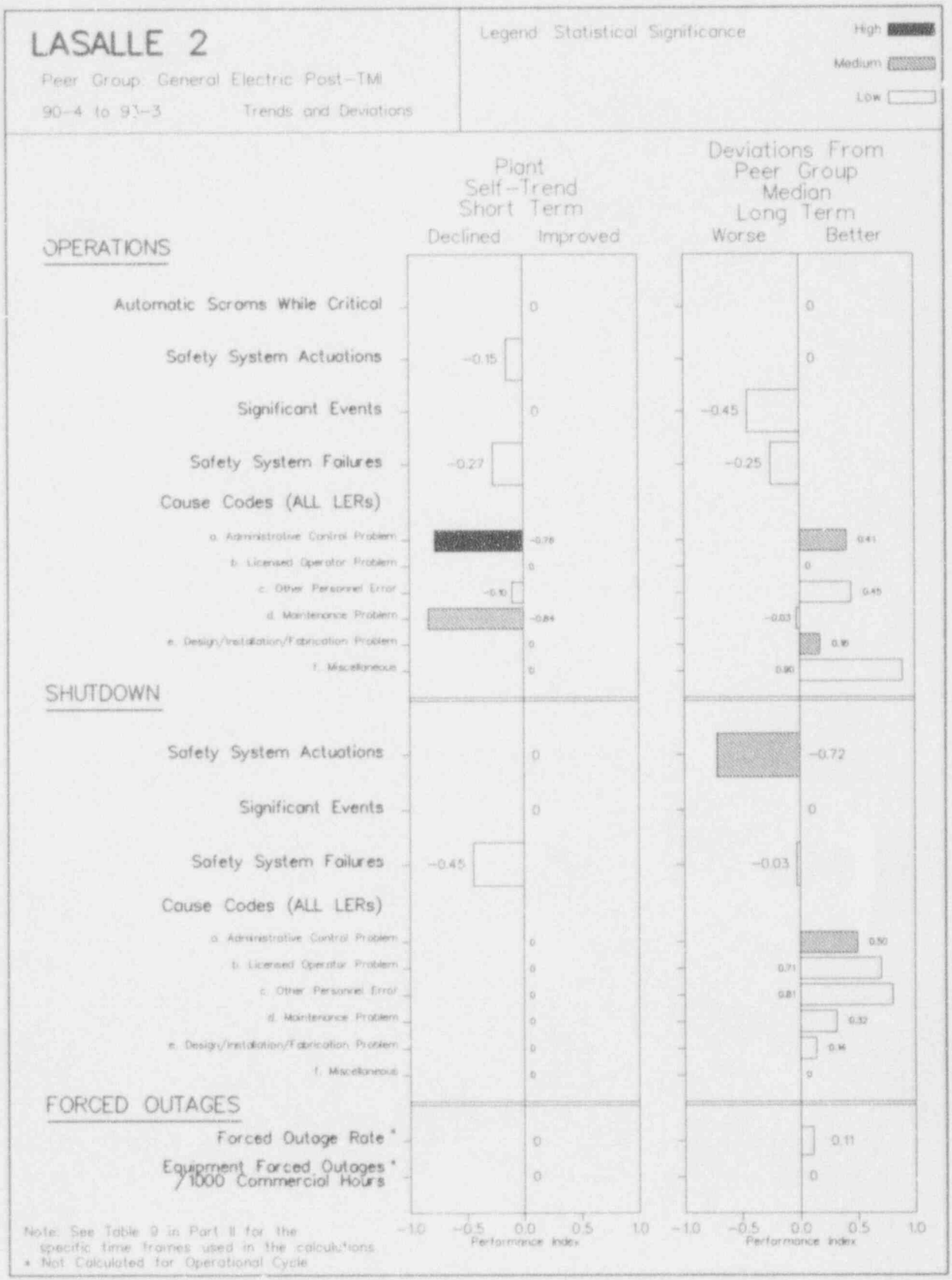

LASALLE 2
Peer Group: General Electric Post-TMI
90-4 to 93-3 Trends and Deviations
Legend: Statistical Significance
High
Medium
Low
Plant Self-Trend Short Term
Declined
Improved
Deviations From Peer Group Median Long Term
Worse
Better
OPERATIONS
Automatic Scrams While Critical
Safety System Actuations
Significant Events
Safety System Failures
Cause Codes (ALL LERs)
a. Administrative Control Problem
b. Licensed Operator Problem
c. Other Personnel Error
d. Maintenance Problem
e. Design/Installation/Fabrication Problem
f. Miscellaneous
SHUTDOWN
Safety System Actuations
Significant Events
Safety System Failures
Cause Codes (ALL LERs)
a. Administrative Control Problem
b. Licensed Operator Problem
c. Other Personnel Error
d. Maintenance Problem
e. Design/Installation/Fabrication Problem
f. Miscellaneous
FORCED OUTAGES
Forced Outage Rate *
Equipment Forced Outages * /1000 Commercial Hours
-0.15
-0.27
-0.78
-0.10
-0.84
-0.45
-0.45
-0.25
0.41
0.45
-0.03
0.90
0.90
-0.72
-0.03
0.50
0.71
0.81
0.32
0.14
0.11
-1.0
-0.5
0.0
0.5
1.0
Performance Index
Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.50a

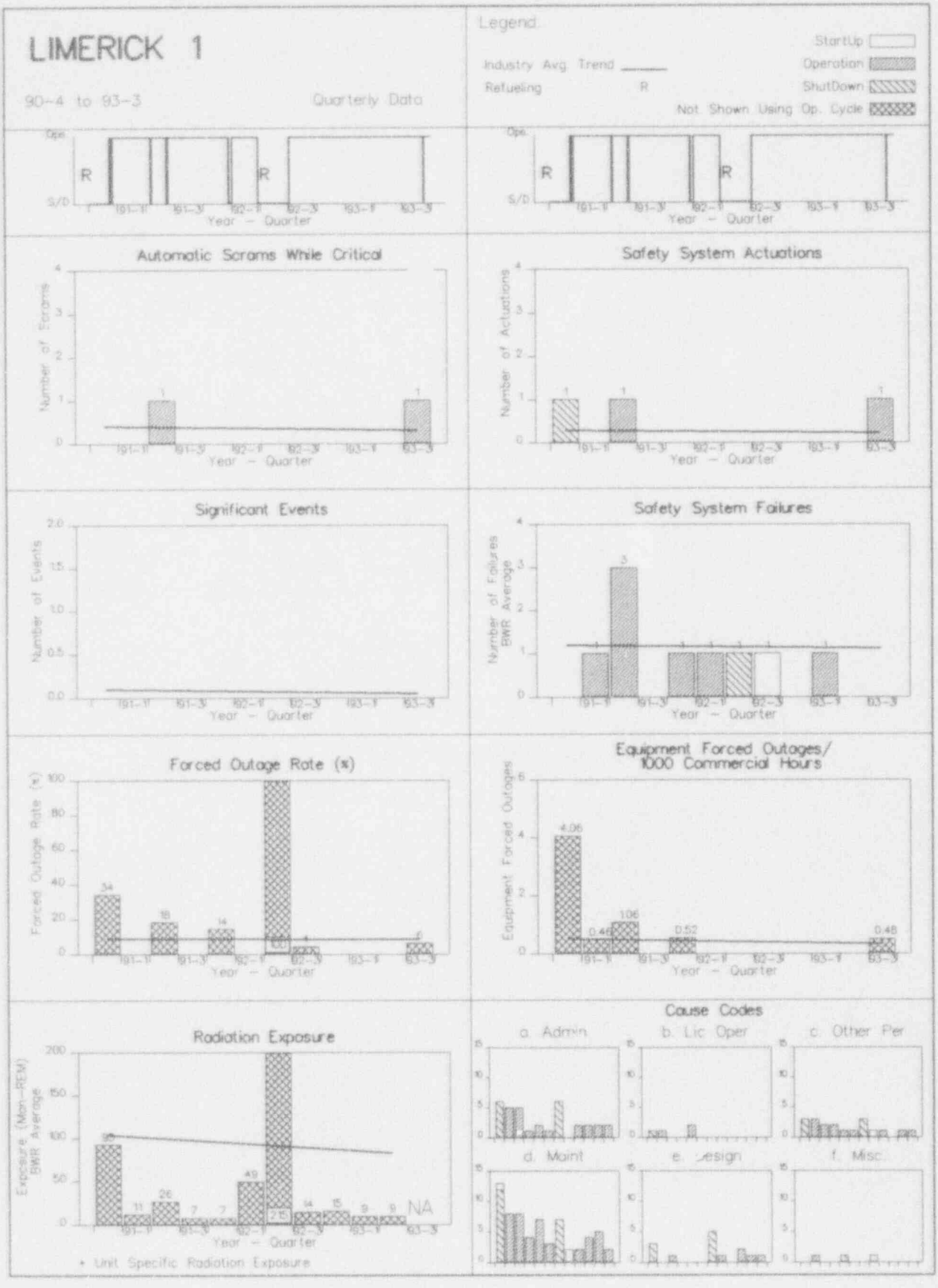
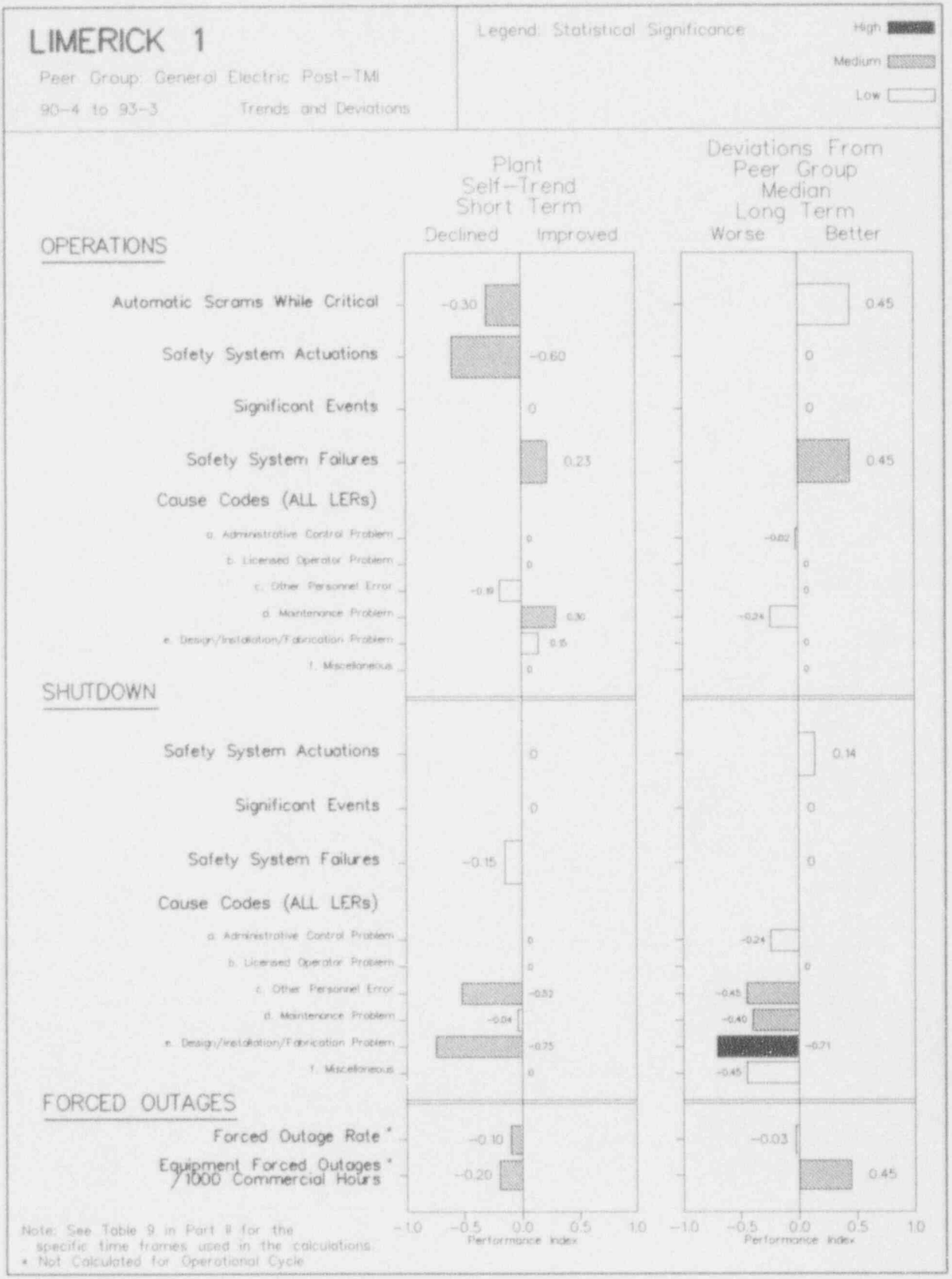

LIMERICK 1
90-4 to 93-3
Quarterly Data
Legend
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Ops.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures
BWR Average
Forced Outage Rate (%)
Equipment Forced Outages/
1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM)
BWR Average
NA
* Unit Specific Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc

FIGURE 7.50b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.51a

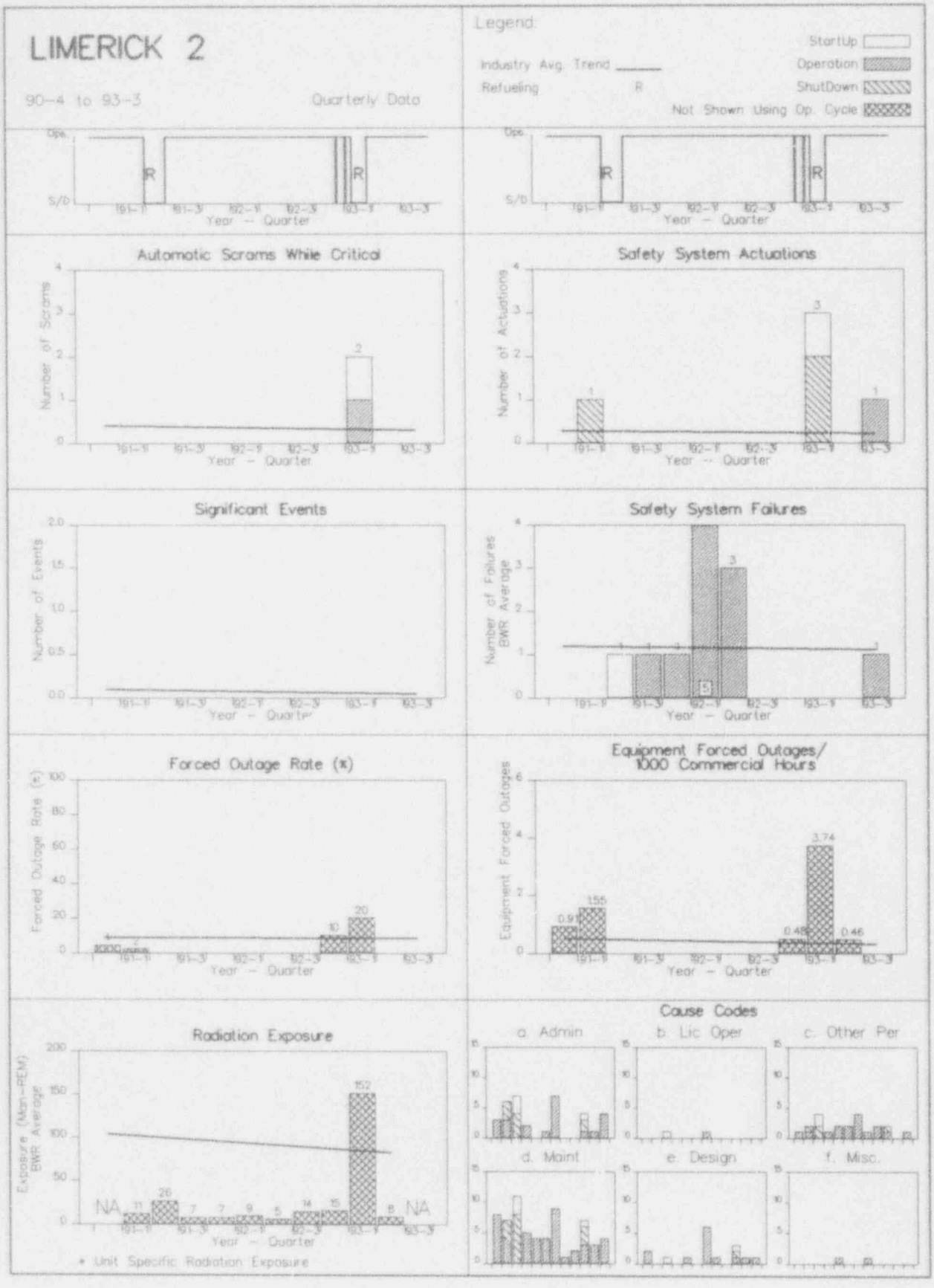
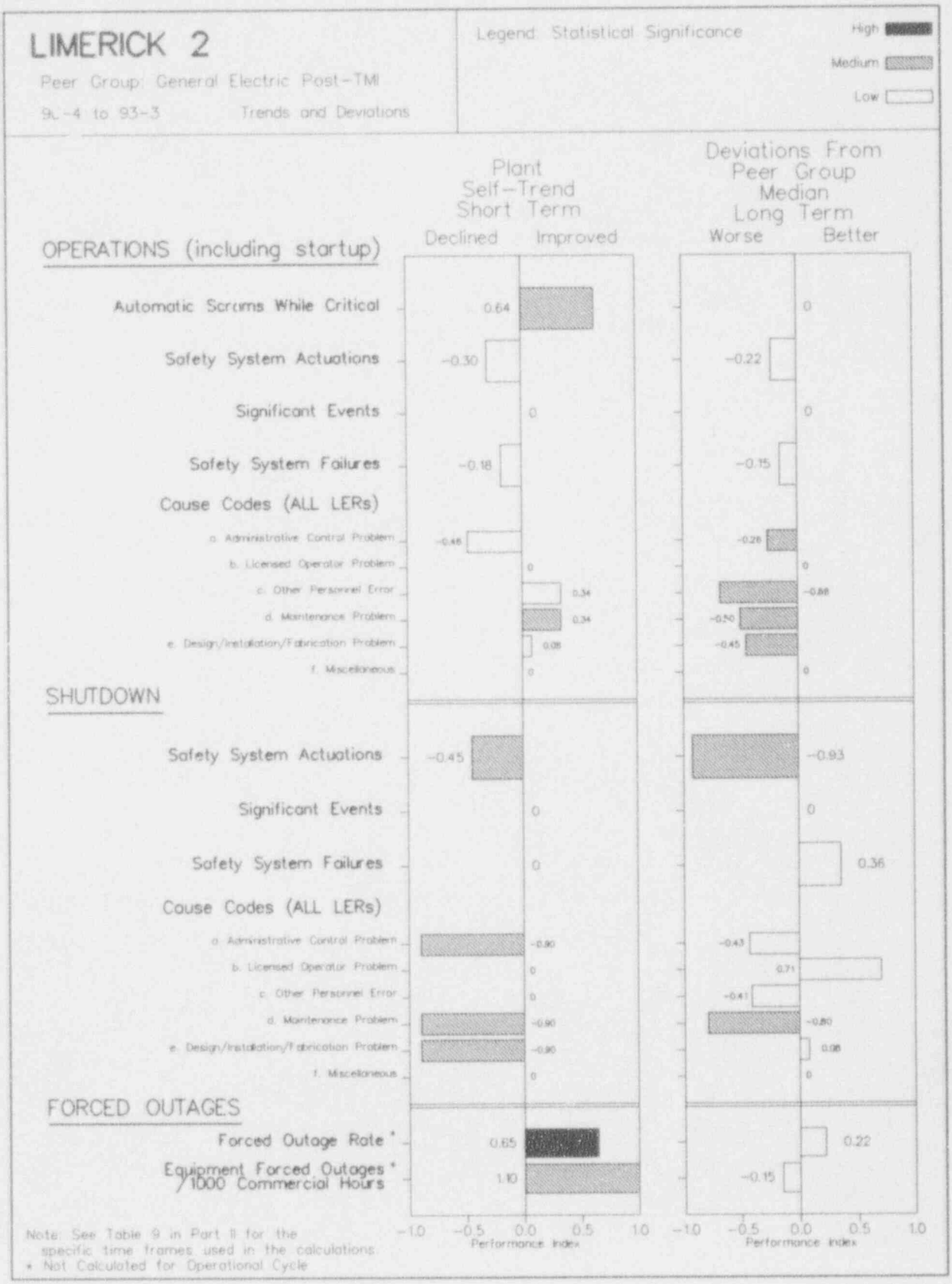

LIMERICK 2
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Opn.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures
BWR Average
Forced Outage Rate (%)
Equipment Forced Outages/
1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM)
BWR Average
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.
* Unit Specific Radiation Exposure

FIGURE 7.51b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.52a

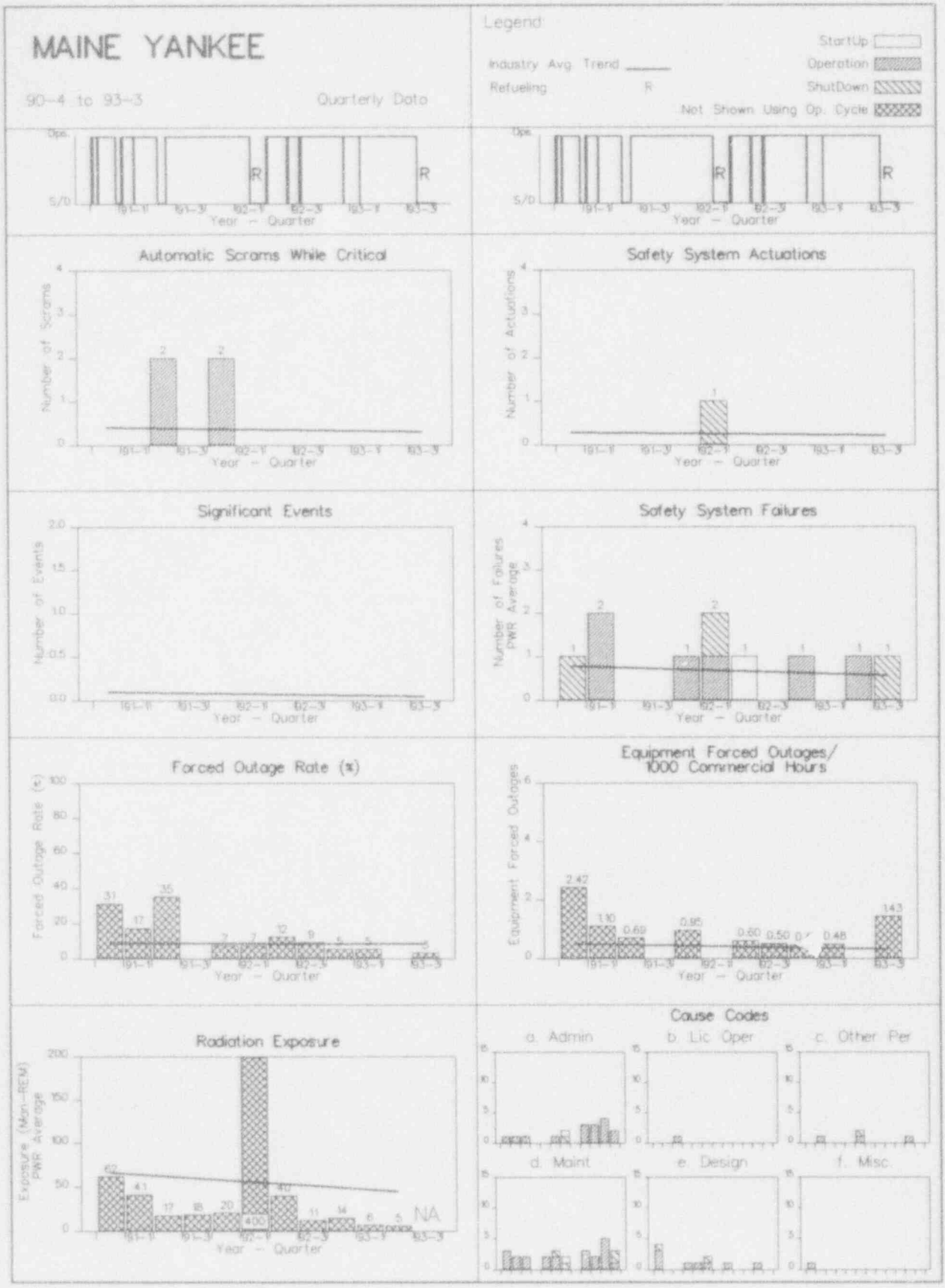
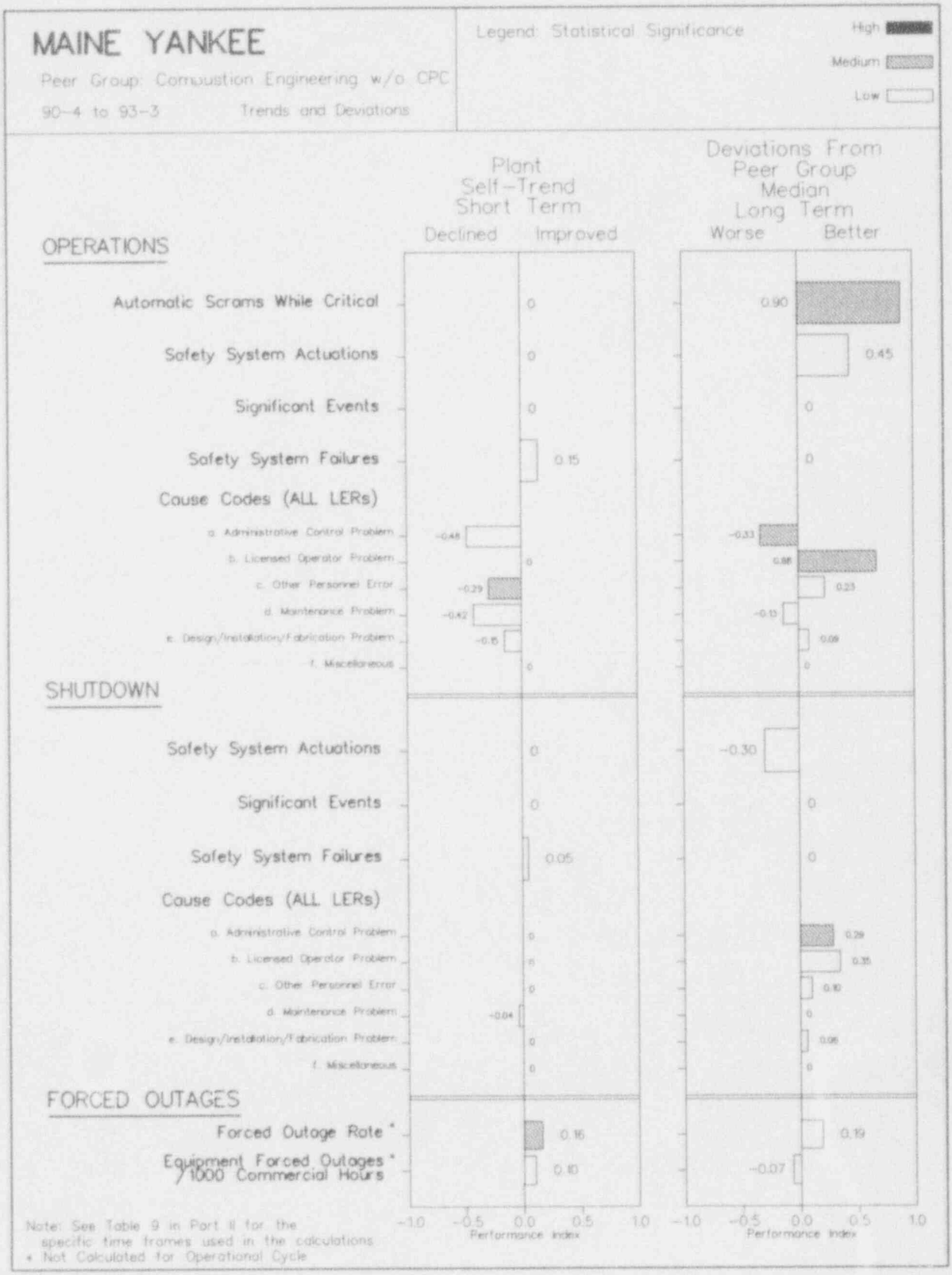

MAINE YANKEE
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Ops.
S/D
R
Year – Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM) PWR Average
NA
Cause Codes
a. Admin
b. Lic. Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.52b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.53a

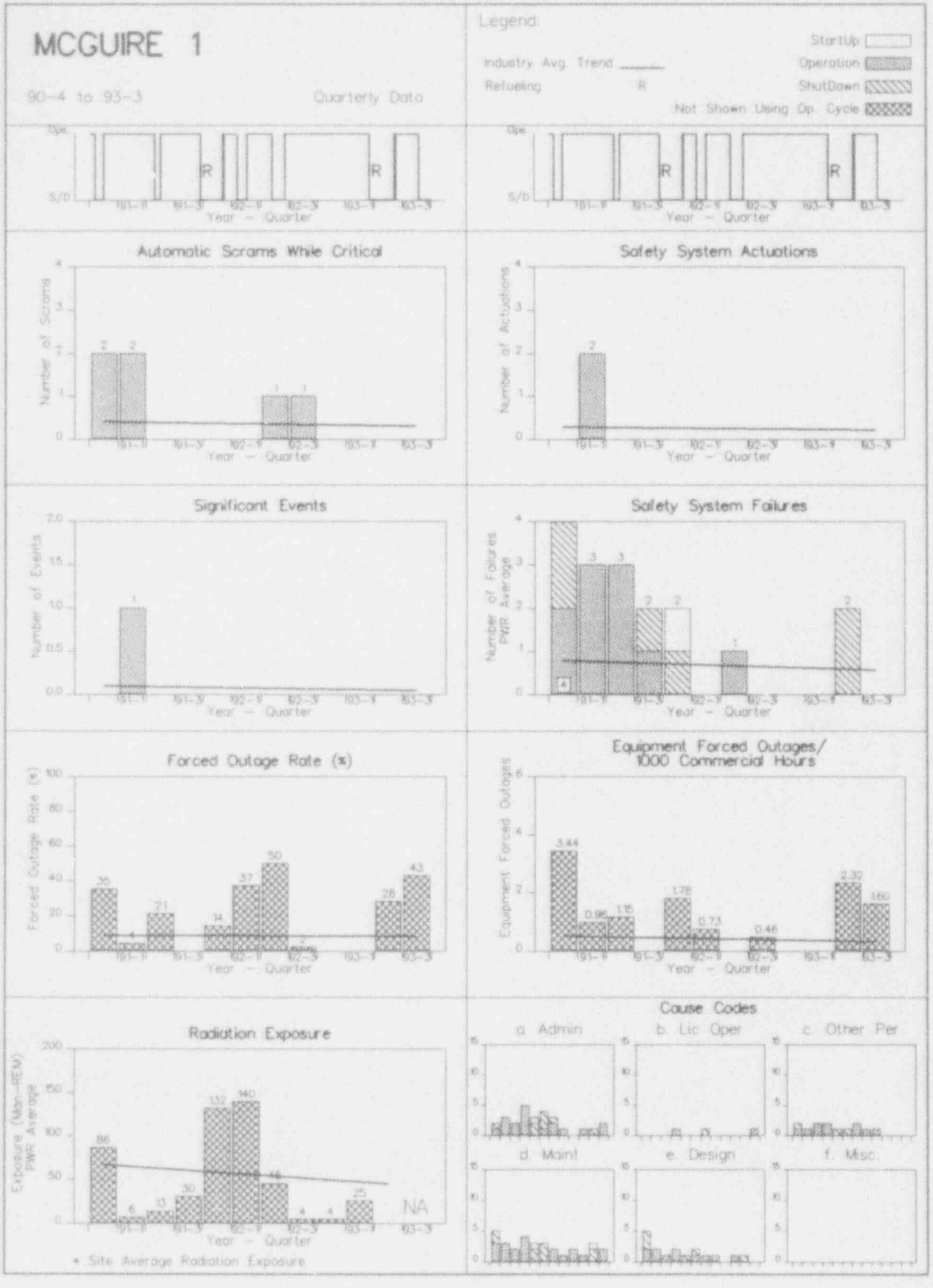

MCGUIRE 1
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Ope
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM) PWR Average
NA
* Site Average Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.53b

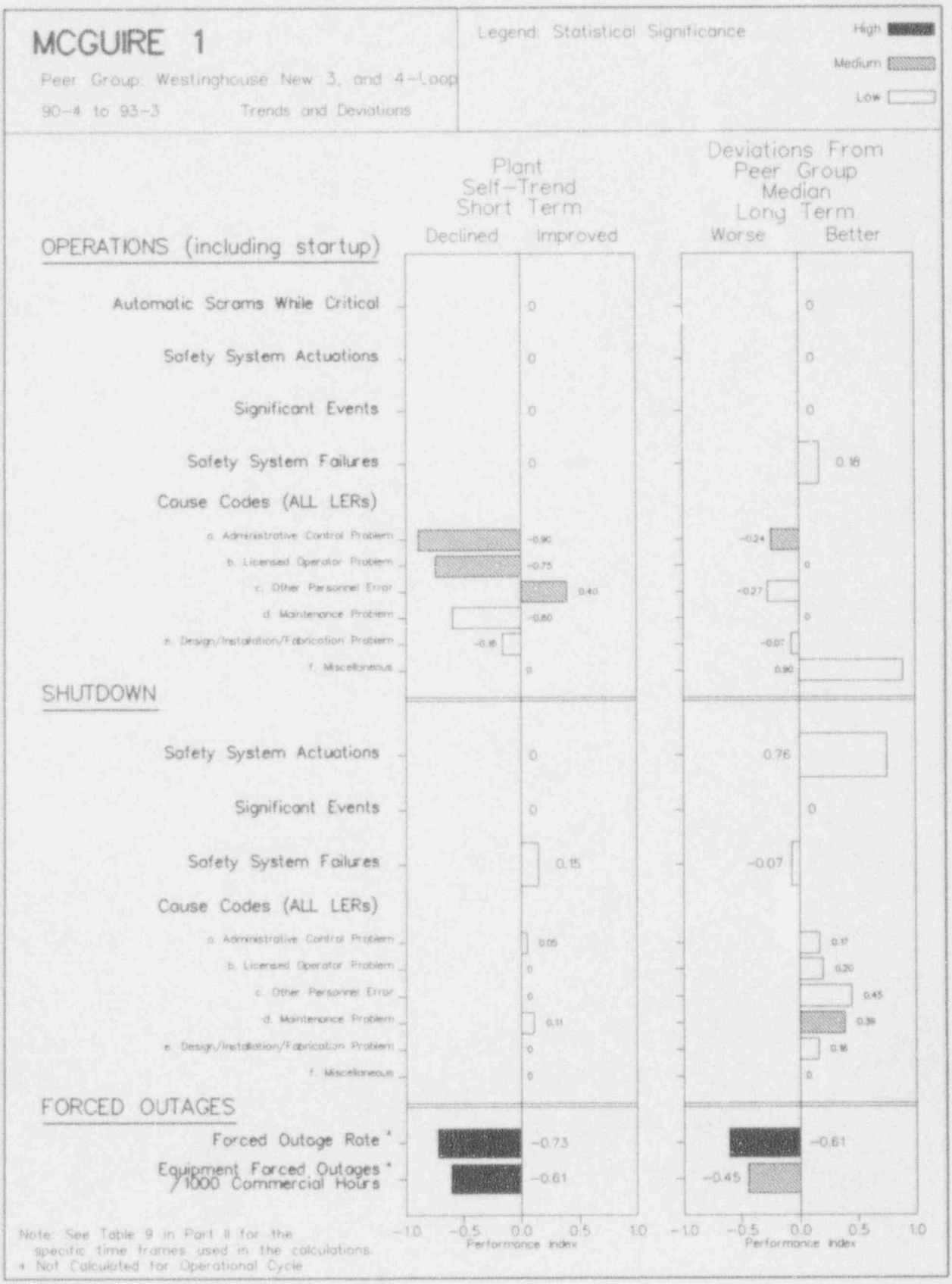

MCGUIRE 1
Peer Group: Westinghouse New 3, and 4-Loop
90-4 to 93-3 Trends and Deviations
Legend: Statistical Significance
High
Medium
Low
Plant Self-Trend Short Term
Declined
Improved
Deviations From Peer Group Median Long Term
Worse
Better
OPERATIONS (including startup)
Automatic Scrams While Critical
Safety System Actuations
Significant Events
Safety System Failures
Cause Codes (ALL LERs)
a. Administrative Control Problem
b. Licensed Operator Problem
c. Other Personnel Error
d. Maintenance Problem
e. Design/Installation/Fabrication Problem
f. Miscellaneous
SHUTDOWN
Safety System Actuations
Significant Events
Safety System Failures
Cause Codes (ALL LERs)
a. Administrative Control Problem
b. Licensed Operator Problem
c. Other Personnel Error
d. Maintenance Problem
e. Design/Installation/Fabrication Problem
f. Miscellaneous
FORCED OUTAGES
Forced Outage Rate *
Equipment Forced Outages * /1000 Commercial Hours
-0.73
-0.61
-0.61
-0.45
-1.0 -0.5 0.0 0.5 1.0
Performance Index
Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.54a

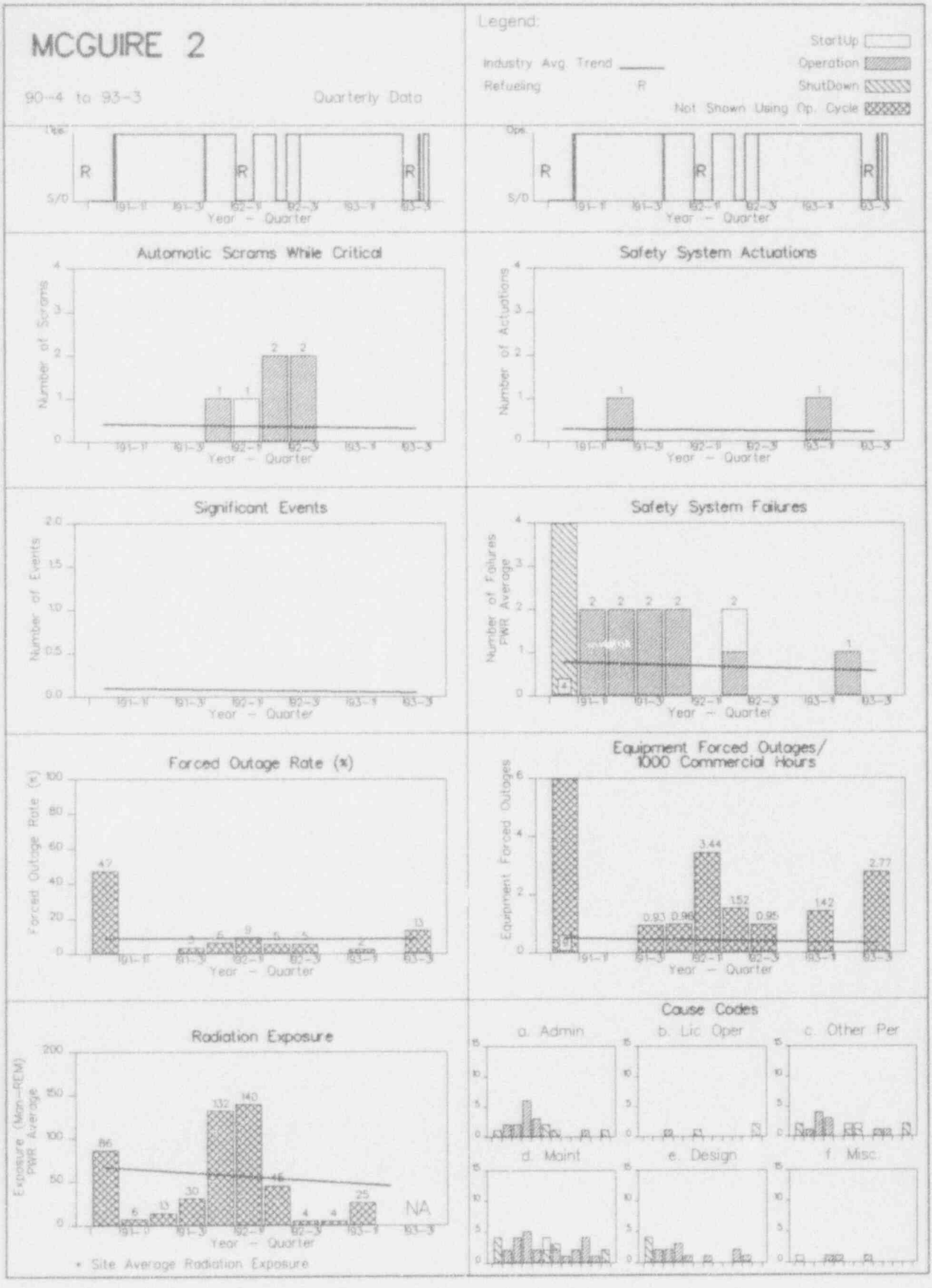
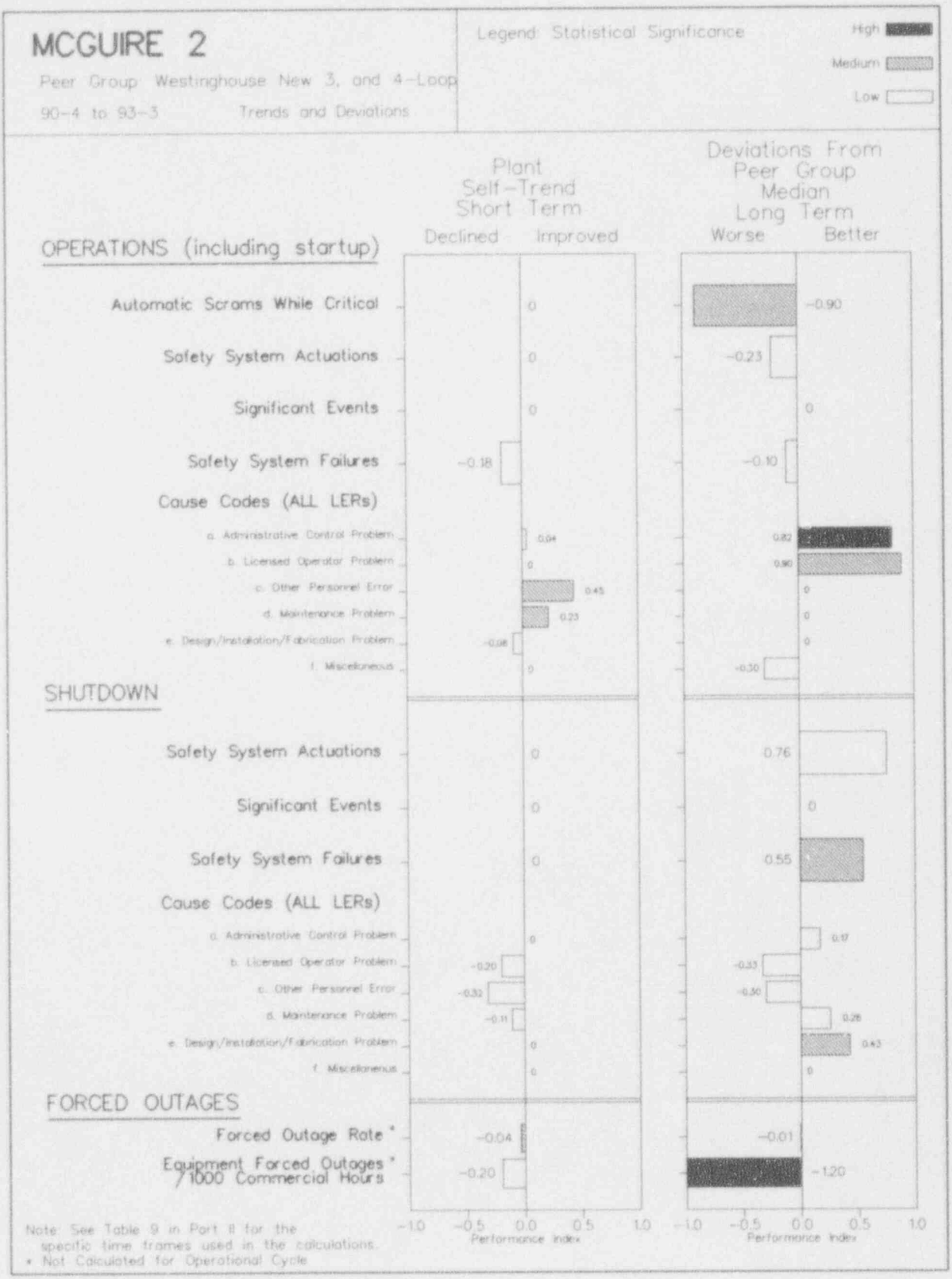

MCGUIRE 2
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM) PWR Average
* Site Average Radiation Exposure
Cause Codes
a. Admin
b. Lic. Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.54b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.55a

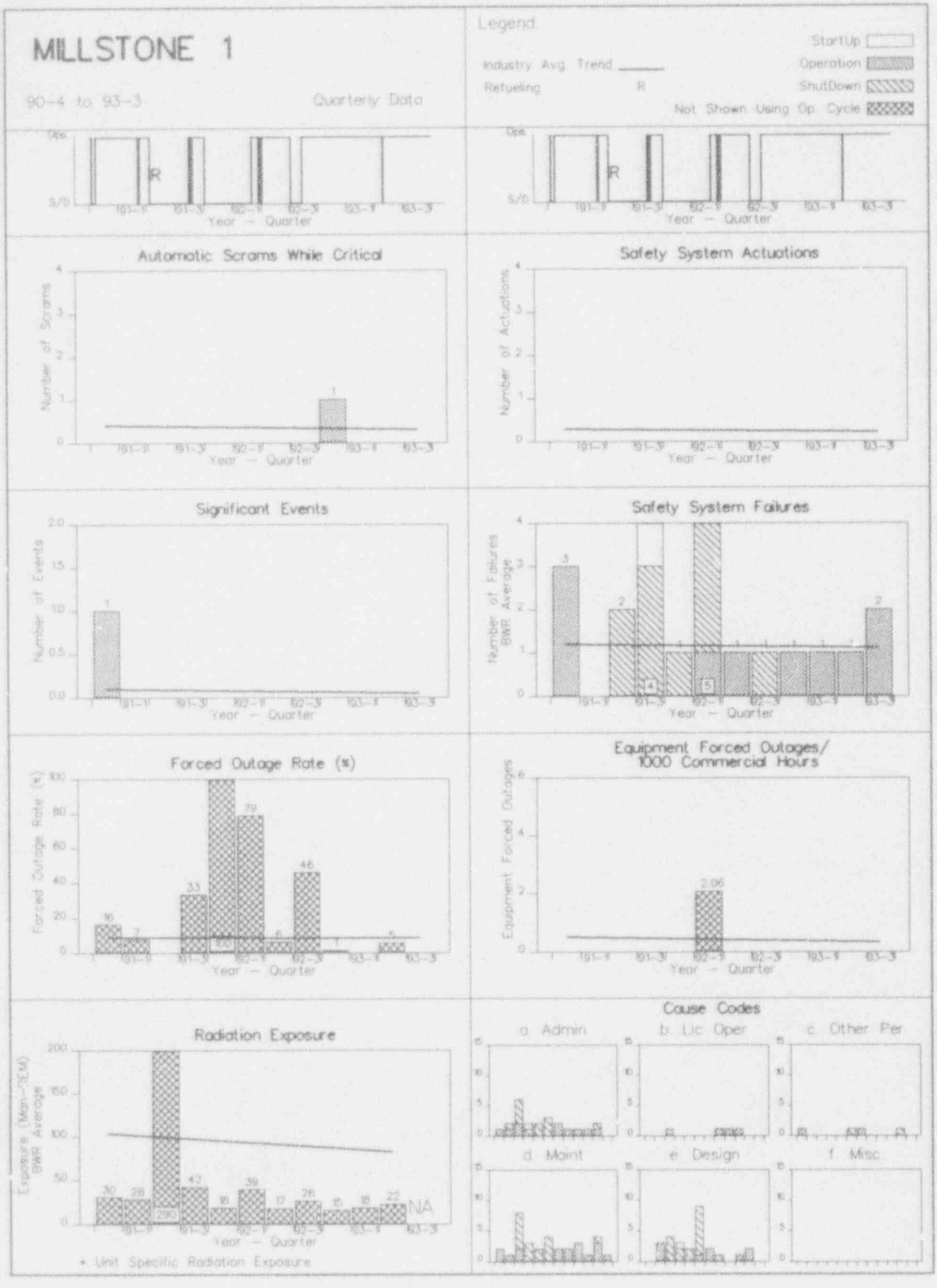
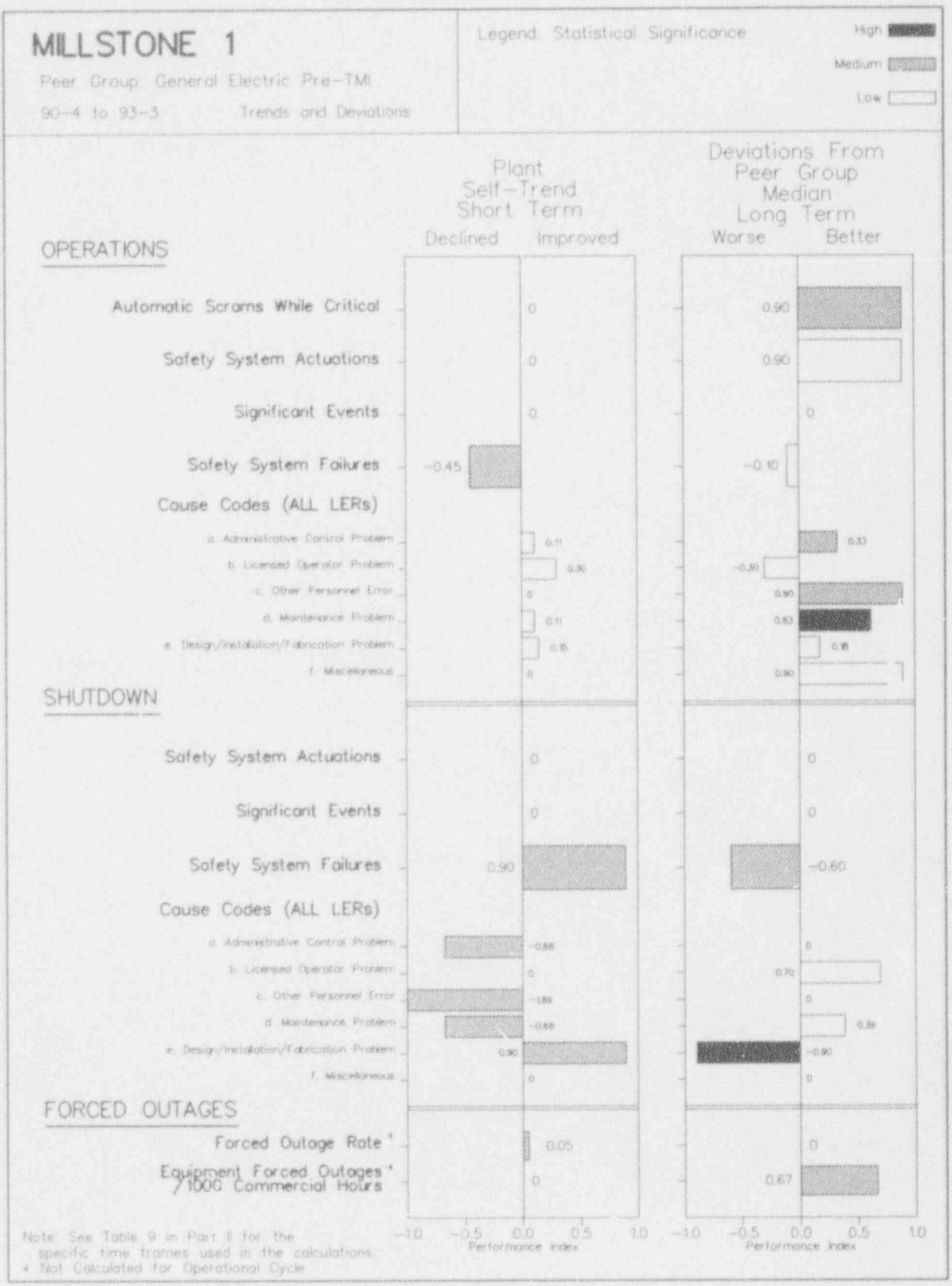

MILLSTONE 1
90-4 to 93-3
Quarterly Data
Legend
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Ops
S/D
Year – Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures
BWR Average
Forced Outage Rate (%)
Forced Outage Rate (%)
Equipment Forced Outages/
1000 Commercial Hours
Equipment Forced Outages
2.06
Radiation Exposure
Exposure (Man-rem)
BWR Average
NA
* Unit Specific Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc

FIGURE 7.55b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.56a

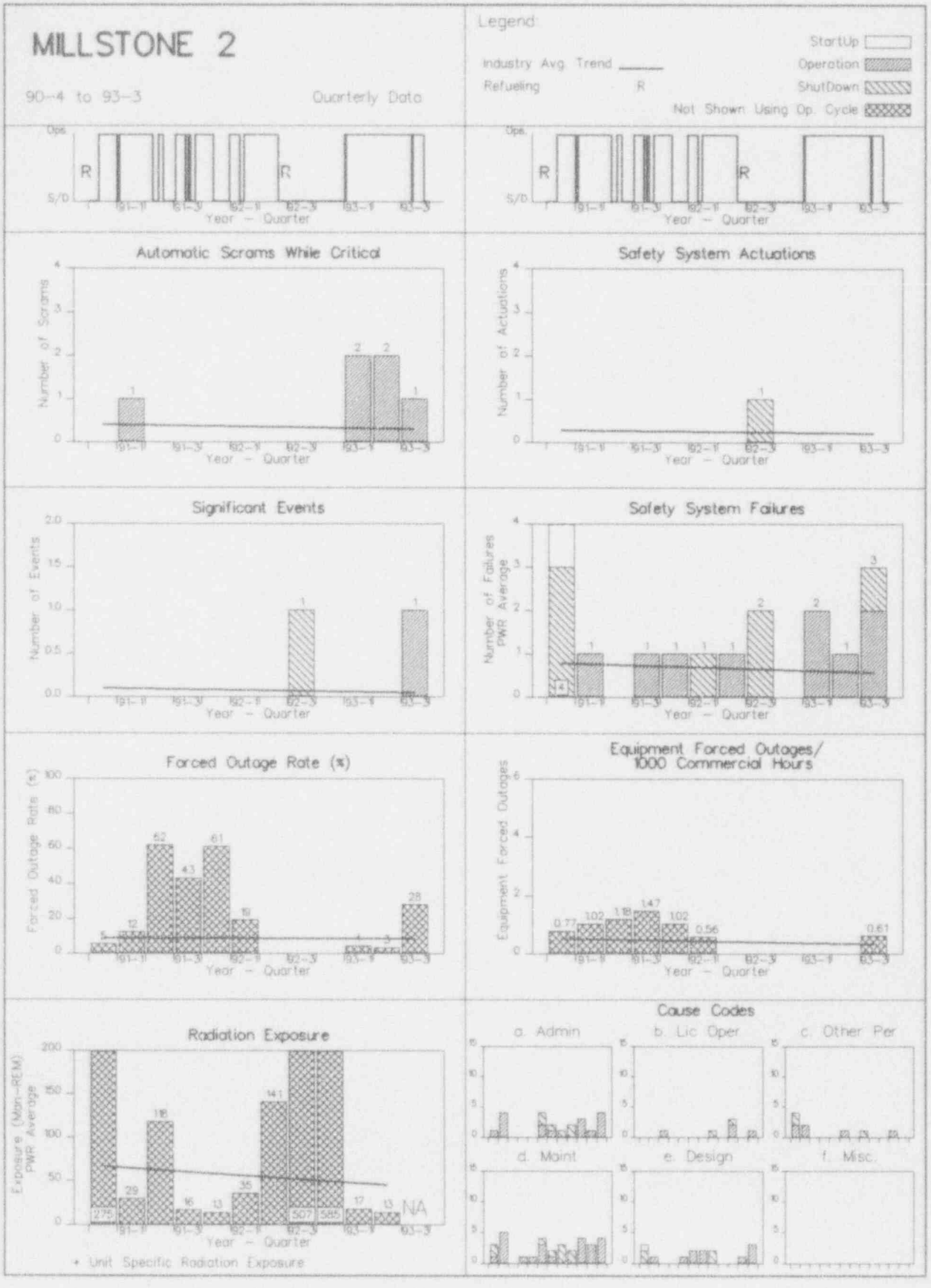
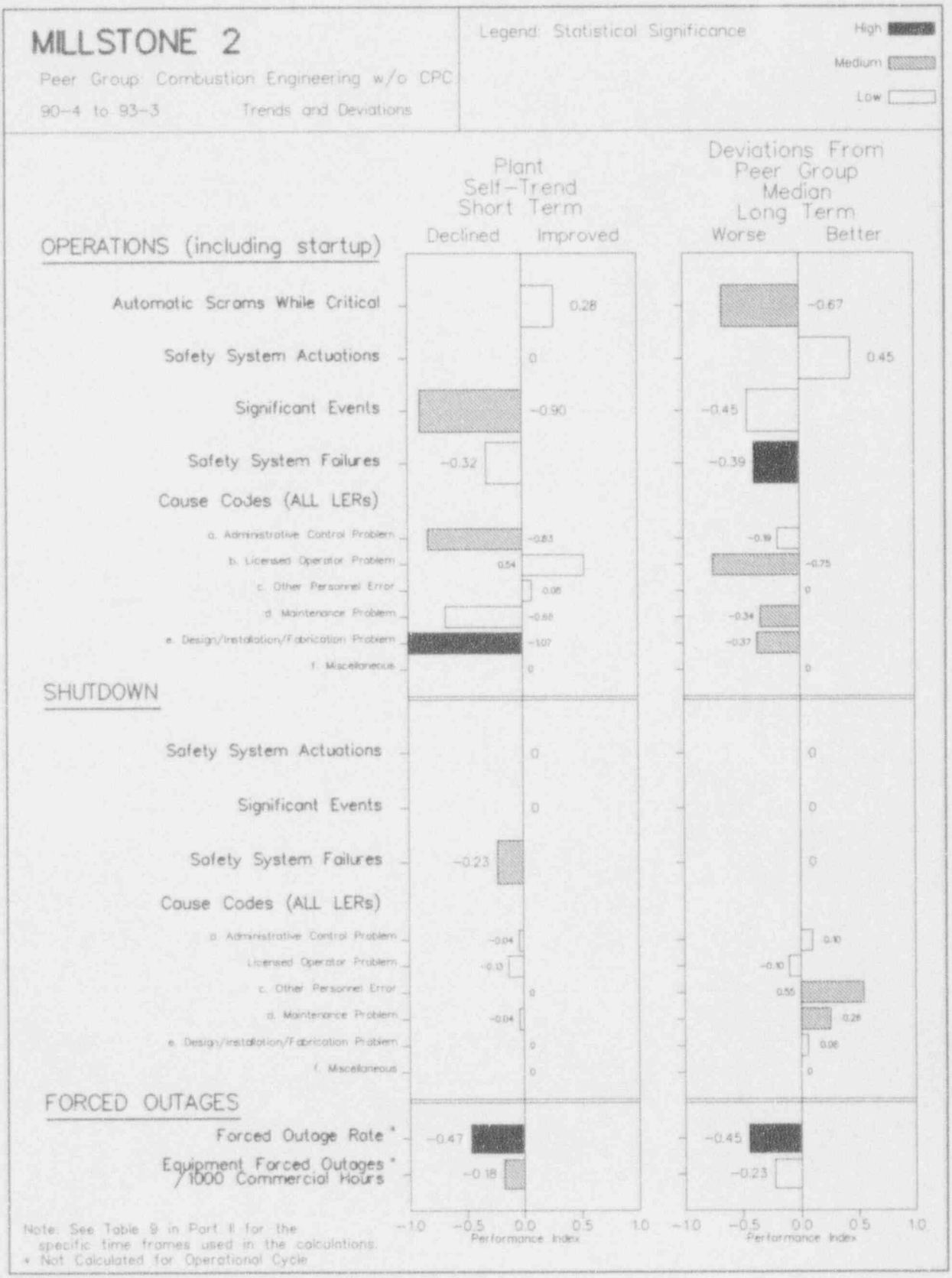

MILLSTONE 2
90-4 to 93-3
Quarterly Data
Legend:
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Industry Avg. Trend
Refueling
R
Dps.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures
PWR Average
Forced Outage Rate (%)
Equipment Forced Outages/
1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM)
PWR Average
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.
NA
* Unit Specific Radiation Exposure

FIGURE 7.56b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.57a

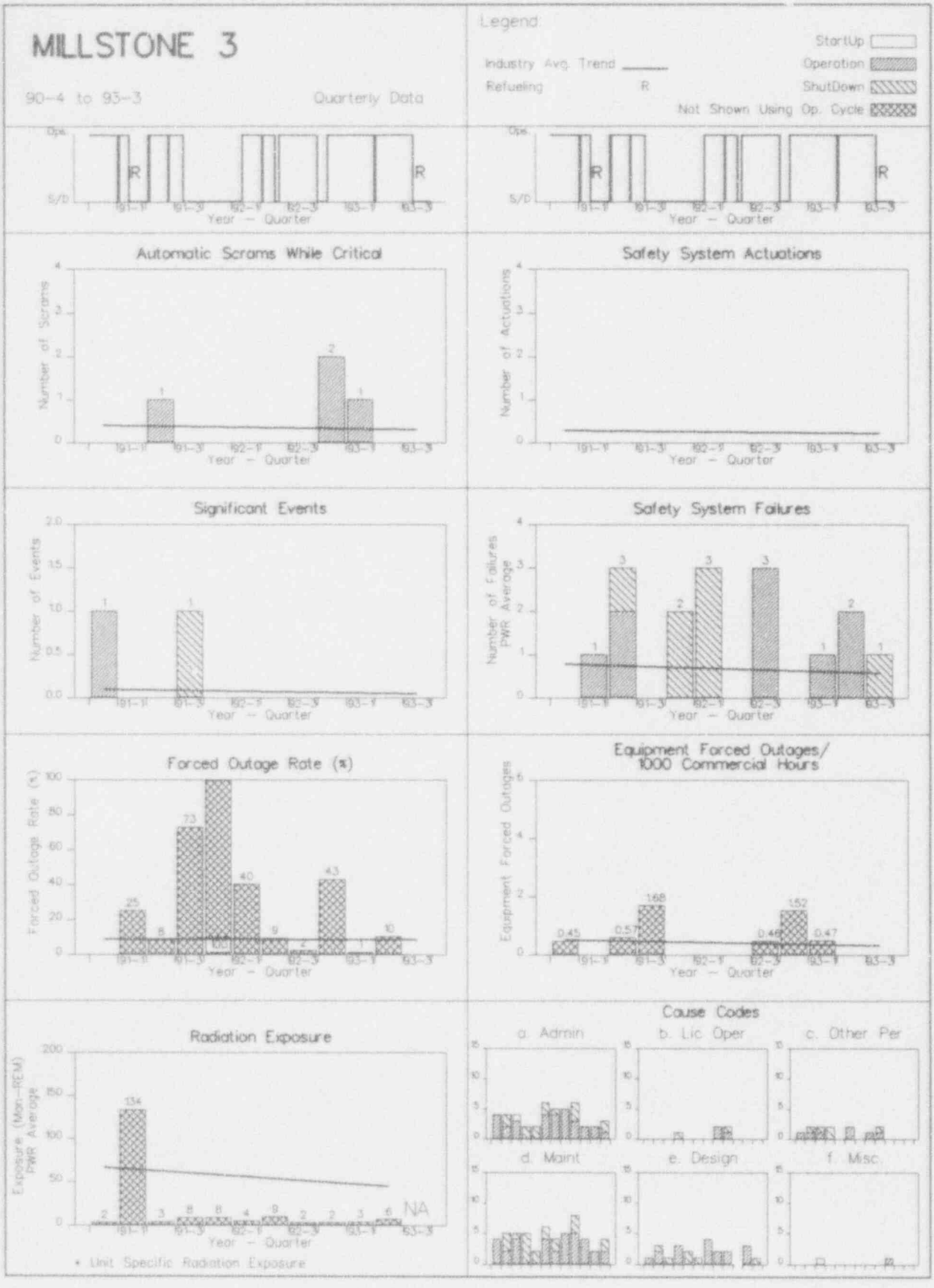
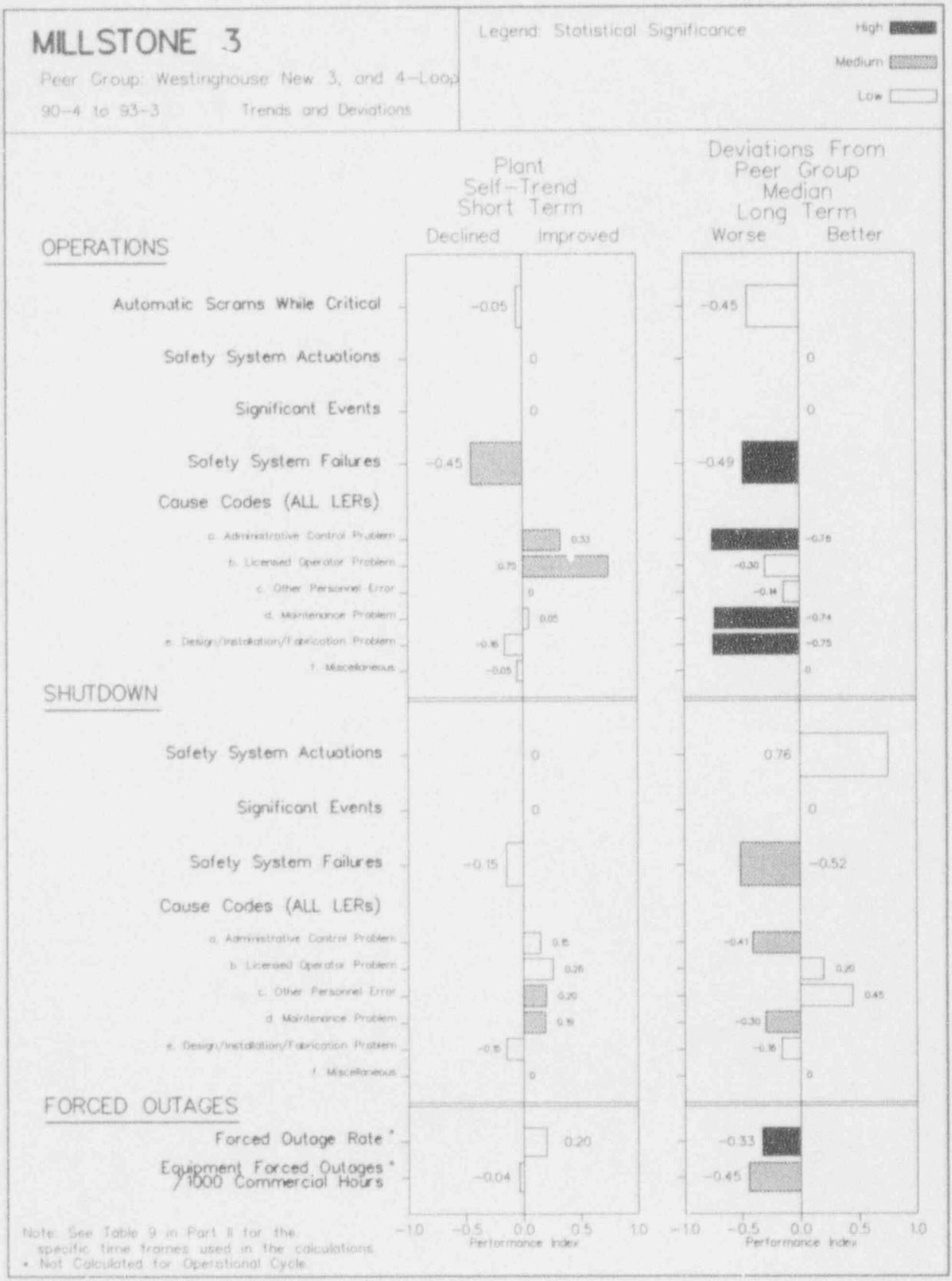

MILLSTONE 3
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Ops.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM) PWR Average
NA
* Unit Specific Radiation Exposure
Cause Codes
a. Admin
b. Lic. Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.57b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.58a

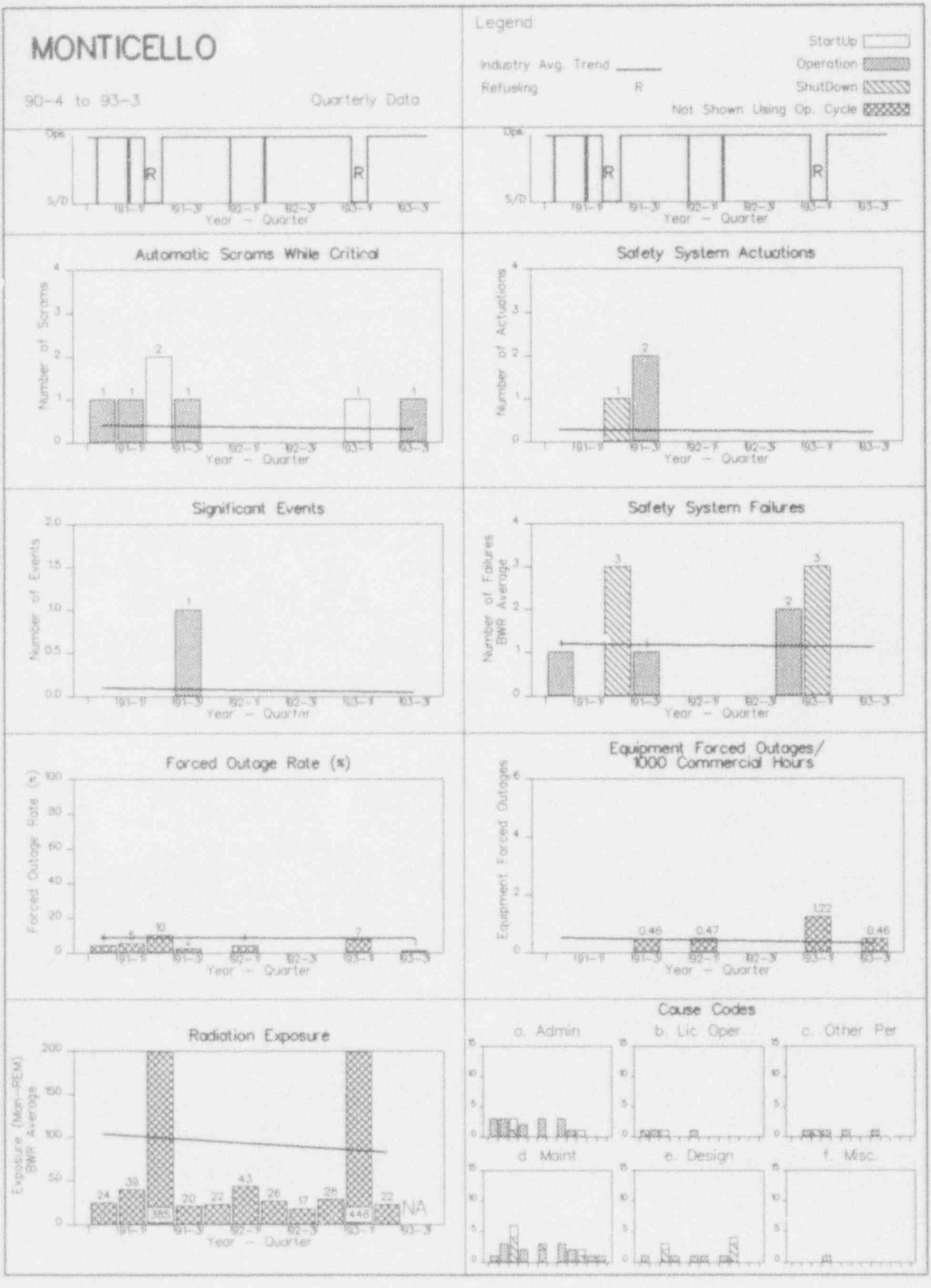

MONTICELLO
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Ops
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures
BWR Average
Forced Outage Rate (%)
Equipment Forced Outages/
1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM)
BWR Average
NA
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.58b

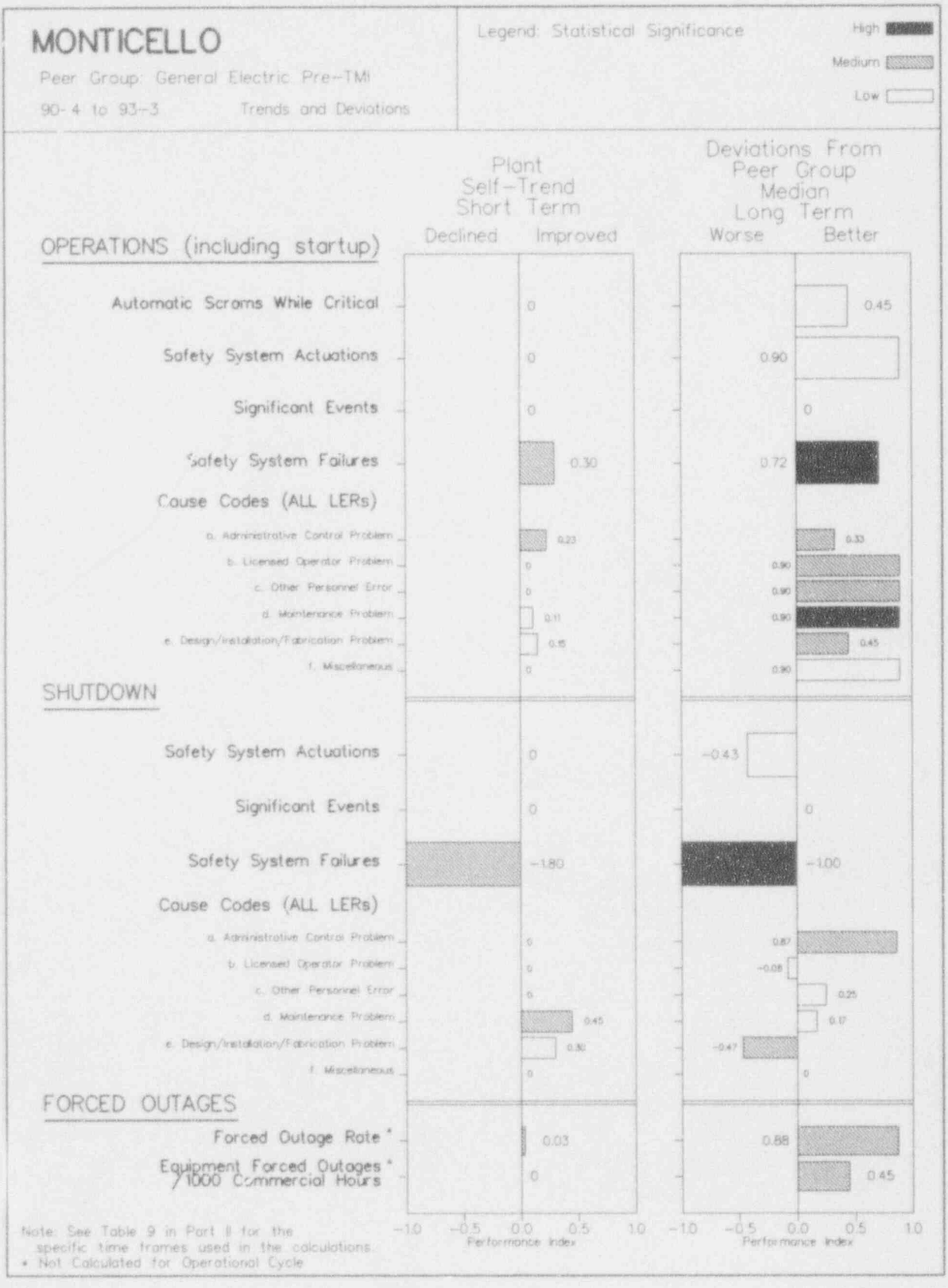

MONTICELLO
Peer Group: General Electric Pre-TMI
90-4 to 93-3 Trends and Deviations
Legend: Statistical Significance
High
Medium
Low
Plant Self-Trend Short Term
Deviations From Peer Group Median Long Term
Declined
Improved
Worse
Better
OPERATIONS (including startup)
Automatic Scrams While Critical
Safety System Actuations
Significant Events
Safety System Failures
Cause Codes (ALL LERs)
a. Administrative Control Problem
b. Licensed Operator Problem
c. Other Personnel Error
d. Maintenance Problem
e. Design/Installation/Fabrication Problem
f. Miscellaneous
SHUTDOWN
Safety System Actuations
Significant Events
Safety System Failures
Cause Codes (ALL LERs)
a. Administrative Control Problem
b. Licensed Operator Problem
c. Other Personnel Error
d. Maintenance Problem
e. Design/Installation/Fabrication Problem
f. Miscellaneous
FORCED OUTAGES
Forced Outage Rate *
Equipment Forced Outages * /1000 Commercial Hours
0
0.45
0.90
0
0
0.30
0.72
0.23
0.33
0.90
0.90
0.90
0.11
0.15
0.45
0.90
0
-0.43
0
0
-1.80
-1.00
0
0.87
0
-0.08
0
0.25
0.45
0.17
0.30
-0.47
0
0
0.03
0.88
0
0.45
-1.0
-0.5
0.0
0.5
1.0
Performance Index
Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.59a

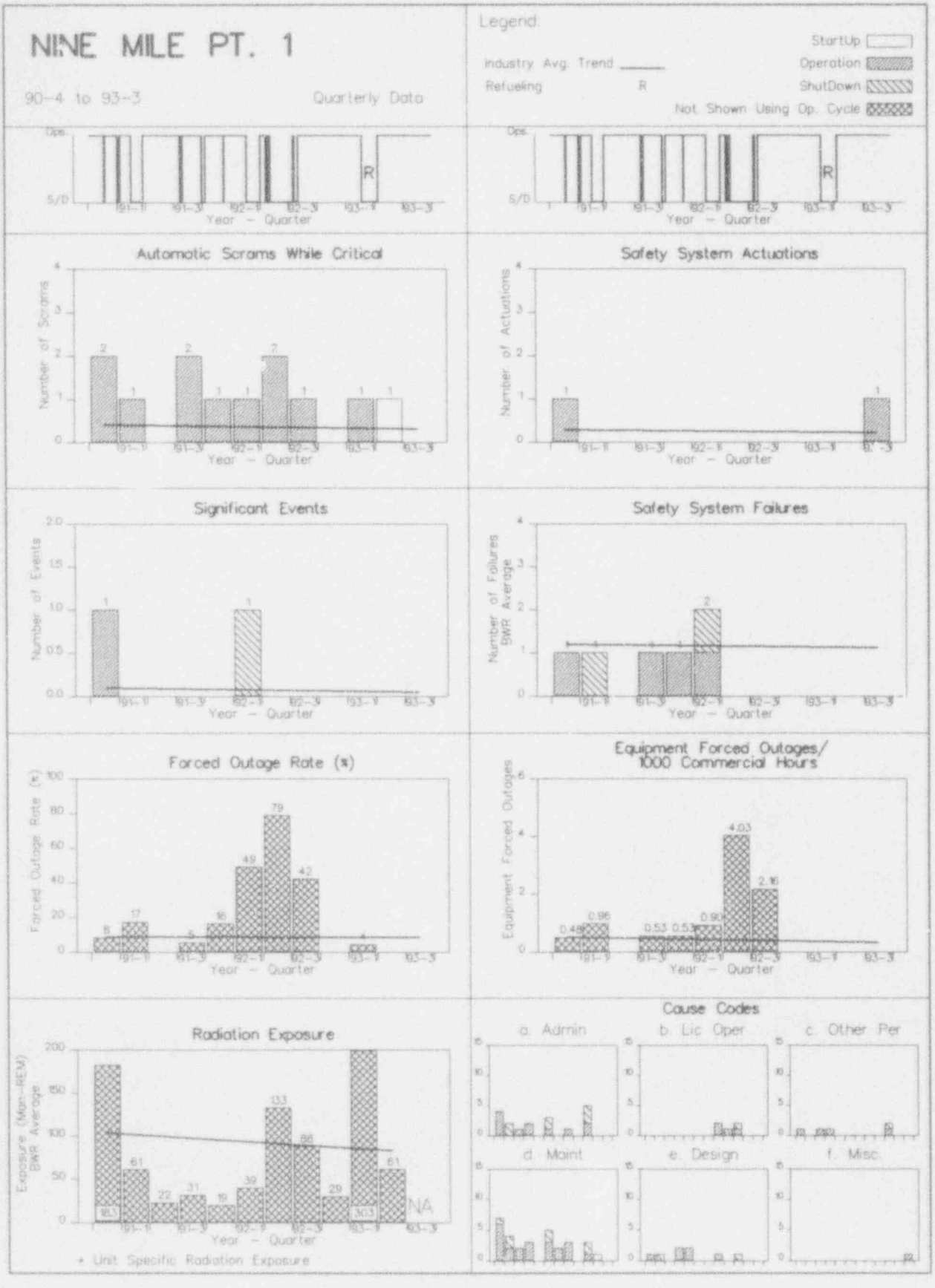
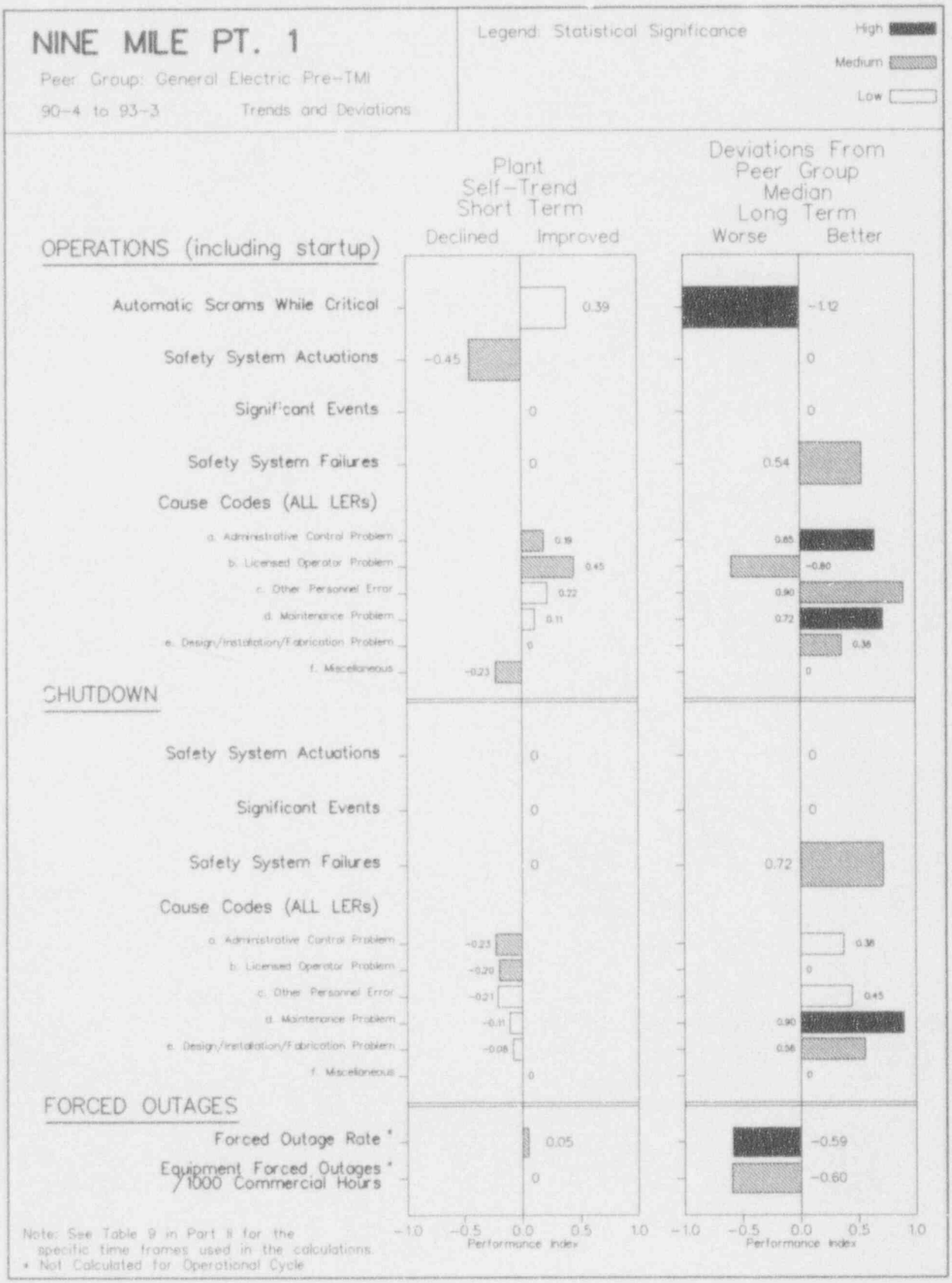

NINE MILE PT. 1
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Ops.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures
BWR Average
Forced Outage Rate (%)
Equipment Forced Outages/
1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM)
BWR Average
NA
* Unit Specific Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.59b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.60a

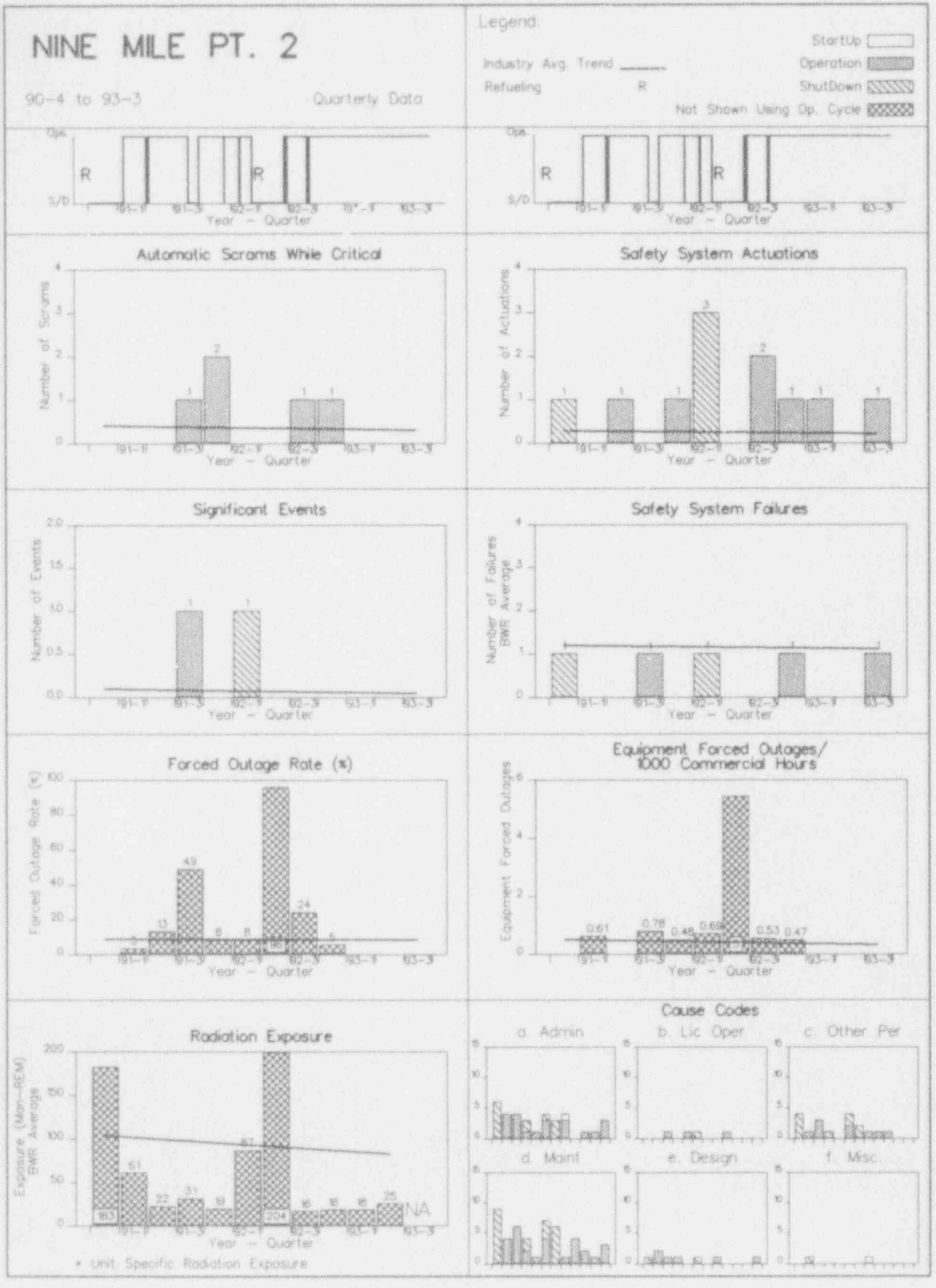
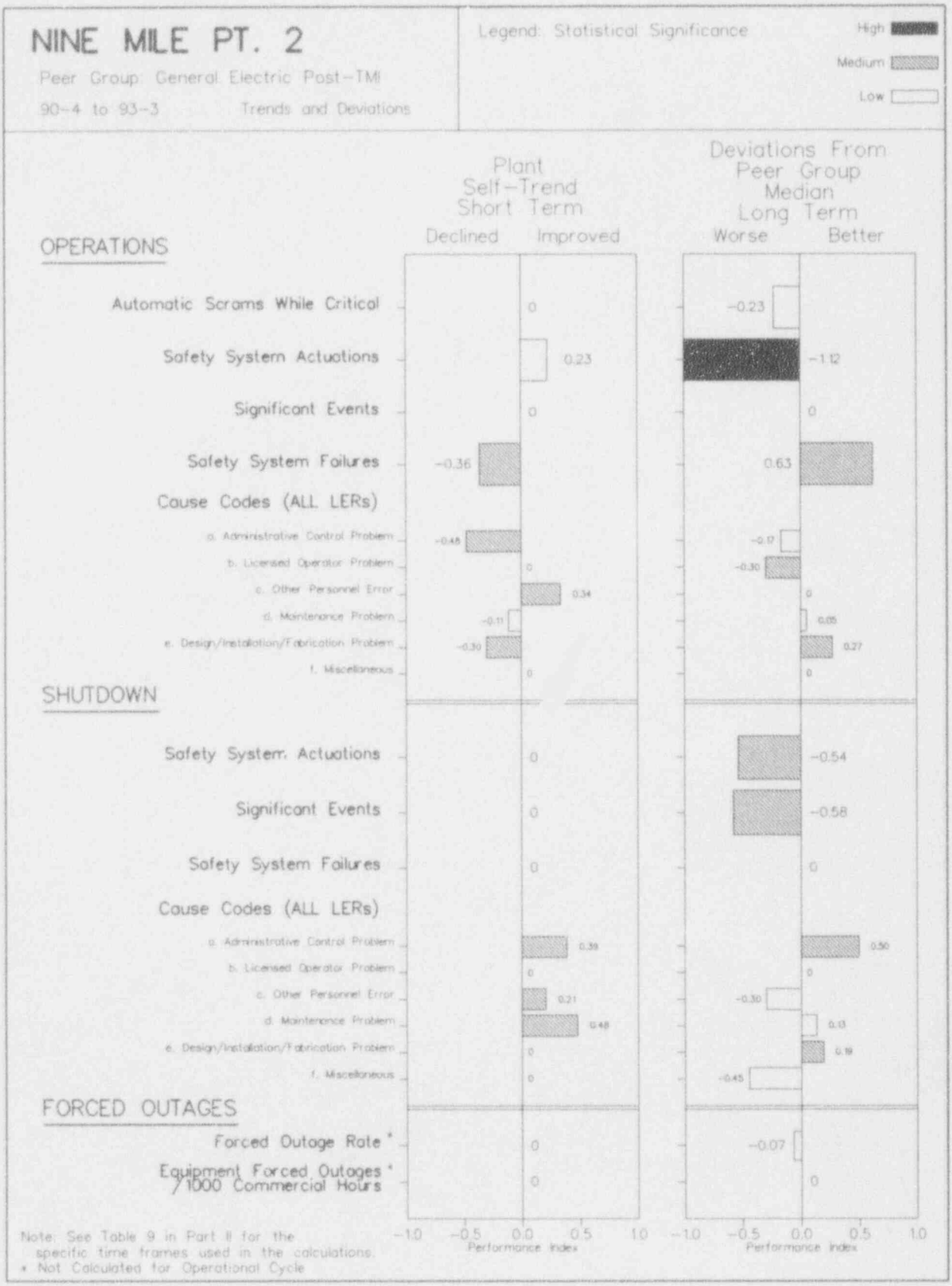

NINE MILE PT. 2
90-4 to 93-3
Quarterly Data
Legend:
StartUp
Industry Avg. Trend
Operation
Refueling
R
ShutDown
Not Shown Using Op. Cycle
Opn.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures
BWR Average
Forced Outage Rate (%)
Equipment Forced Outages/
1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM)
BWR Average
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.
* Unit Specific Radiation Exposure

FIGURE 7.60b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.61a

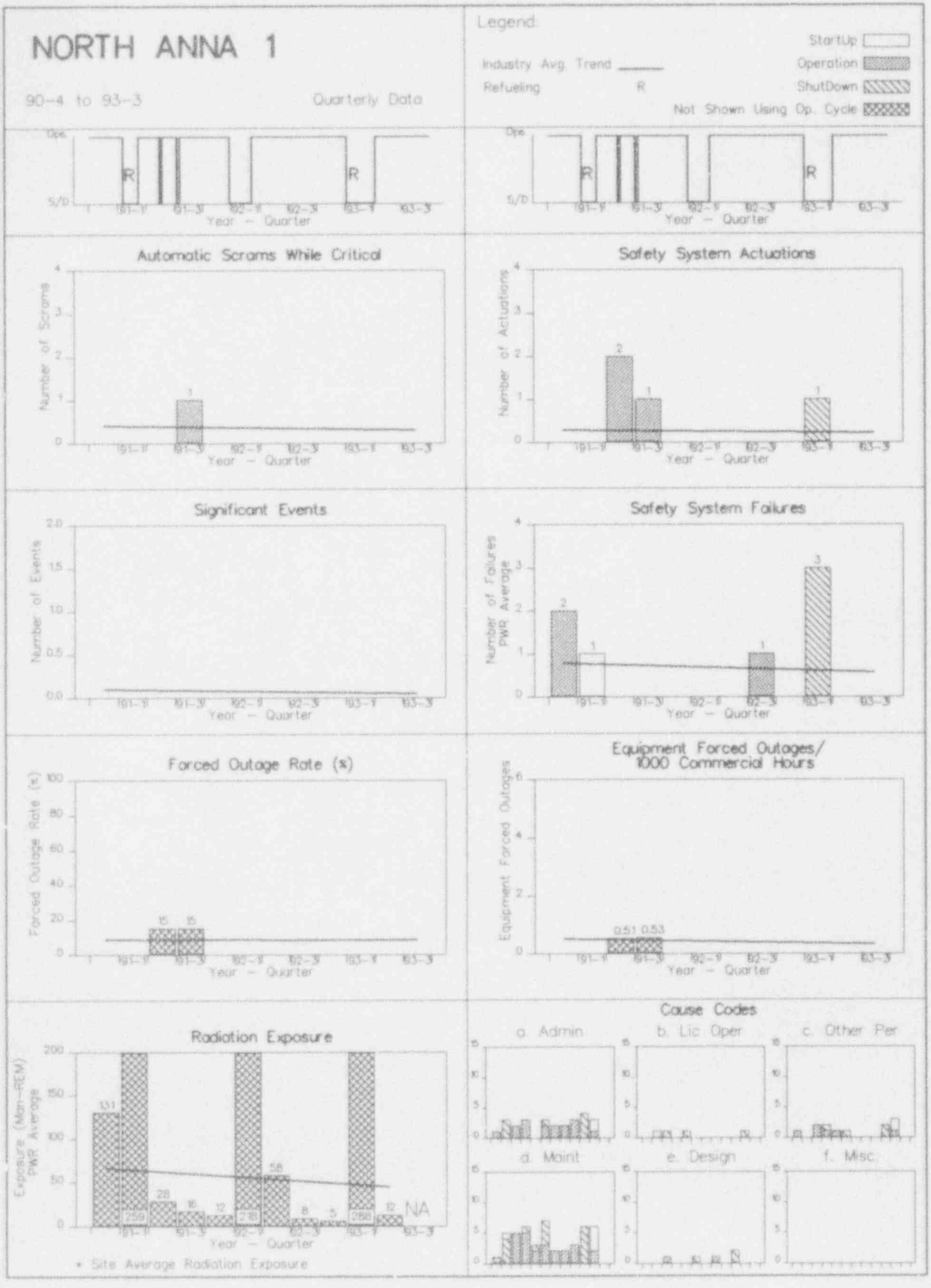
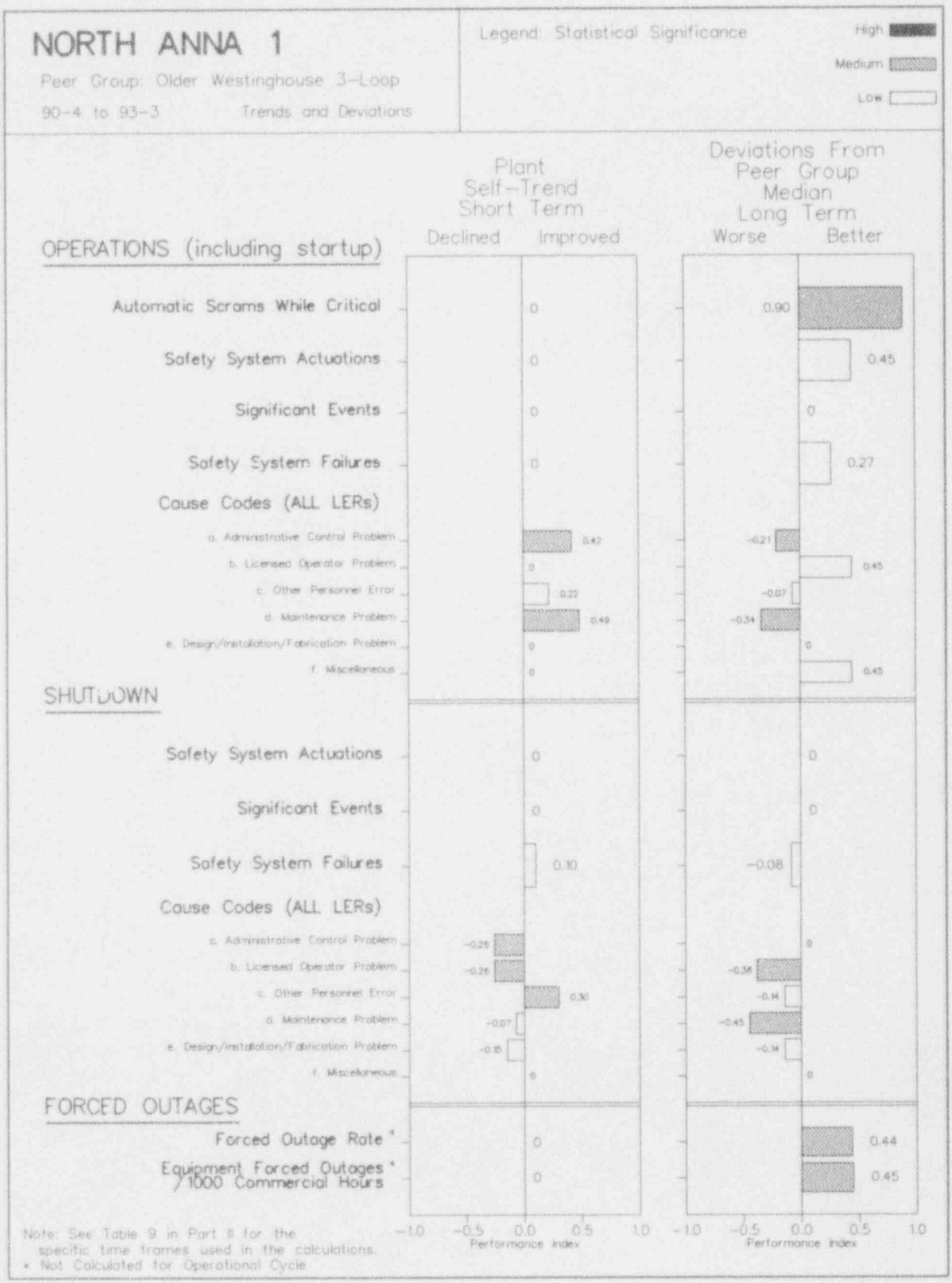

NORTH ANNA 1
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Opx
S/D
R
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
0.51 0.53
Radiation Exposure
Exposure (Man-REM) PWR Average
NA
* Site Average Radiation Exposure
Cause Codes
a. Admin
b. Lic. Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.6 1b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.62a

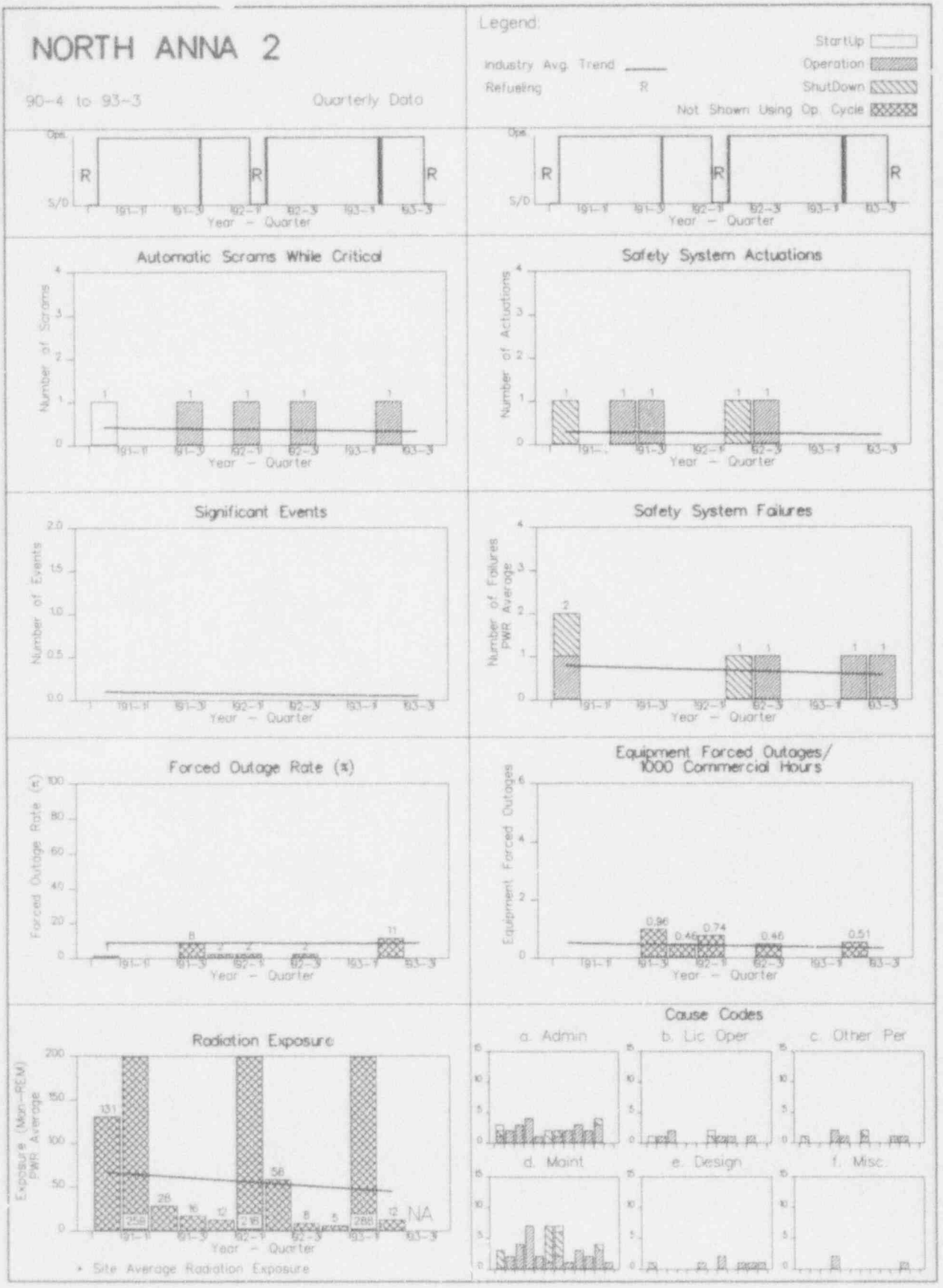

NORTH ANNA 2
90-4 to 93-3
Quarterly Data
Legend:
StartUp
Industry Avg. Trend
Operation
Refueling
R
ShutDown
Not Shown Using Op. Cycle
Opn.
S/D
R
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures
PWR Average
Forced Outage Rate (%)
Forced Outage Rate (%)
Equipment Forced Outages/
1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM)
PWR Average
NA
* Site Average Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc

FIGURE 7.62b

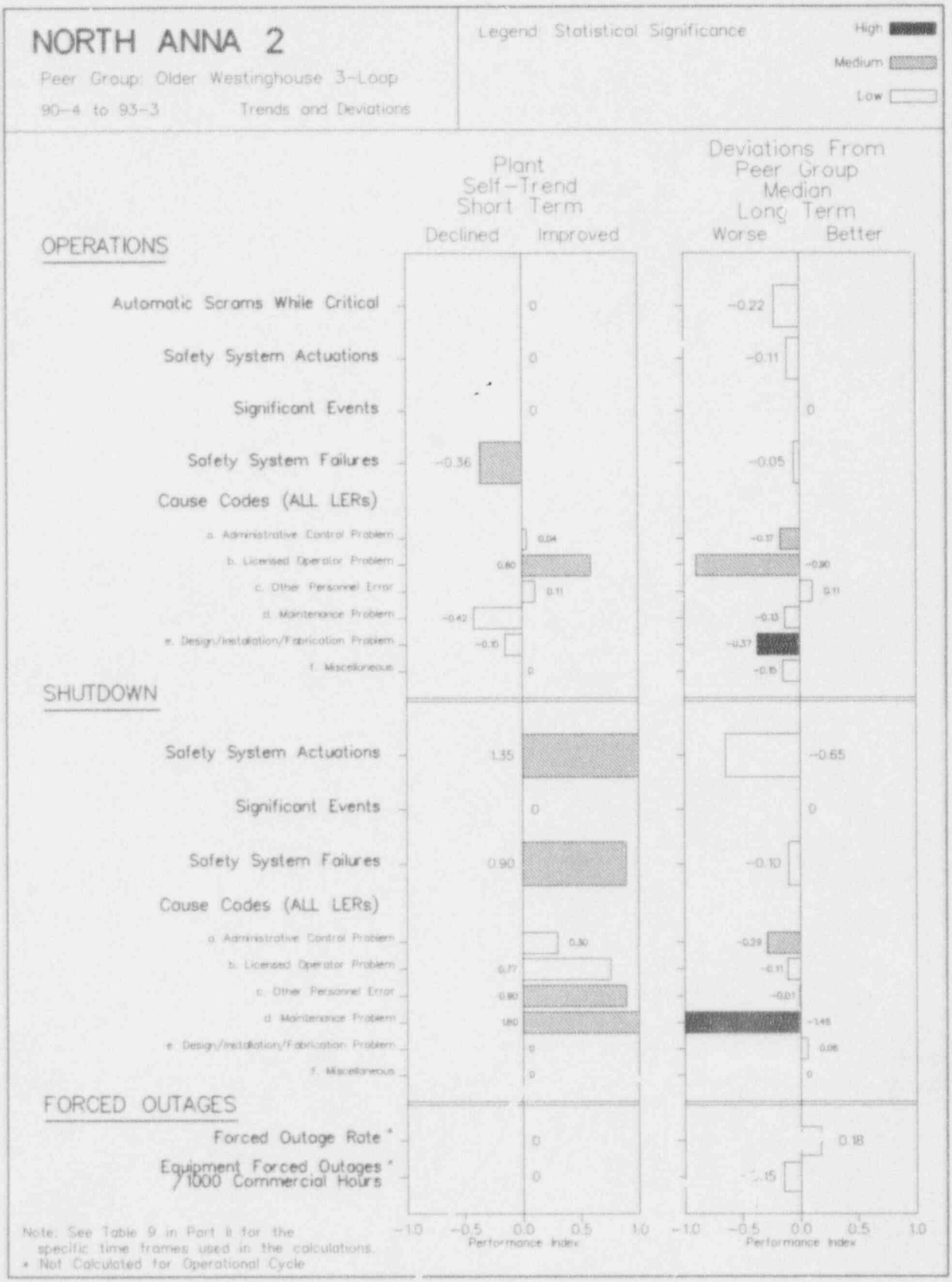

NORTH ANNA 2
Peer Group: Older Westinghouse 3-Loop
90-4 to 93-3 Trends and Deviations
Legend: Statistical Significance
High
Medium
Low
Plant Self-Trend Short Term
Declined
Improved
Deviations From Peer Group Median Long Term
Worse
Better
OPERATIONS
Automatic Scrams While Critical
Safety System Actuations
Significant Events
Safety System Failures
Cause Codes (ALL LERs)
a. Administrative Control Problem
b. Licensed Operator Problem
c. Other Personnel Error
d. Maintenance Problem
e. Design/Installation/Fabrication Problem
f. Miscellaneous
SHUTDOWN
Safety System Actuations
Significant Events
Safety System Failures
Cause Codes (ALL LERs)
a. Administrative Control Problem
b. Licensed Operator Problem
c. Other Personnel Error
d. Maintenance Problem
e. Design/Installation/Fabrication Problem
f. Miscellaneous
FORCED OUTAGES
Forced Outage Rate *
Equipment Forced Outages * / 1000 Commercial Hours
-1.0 -0.5 0.0 0.5 1.0
Performance Index
Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.63a

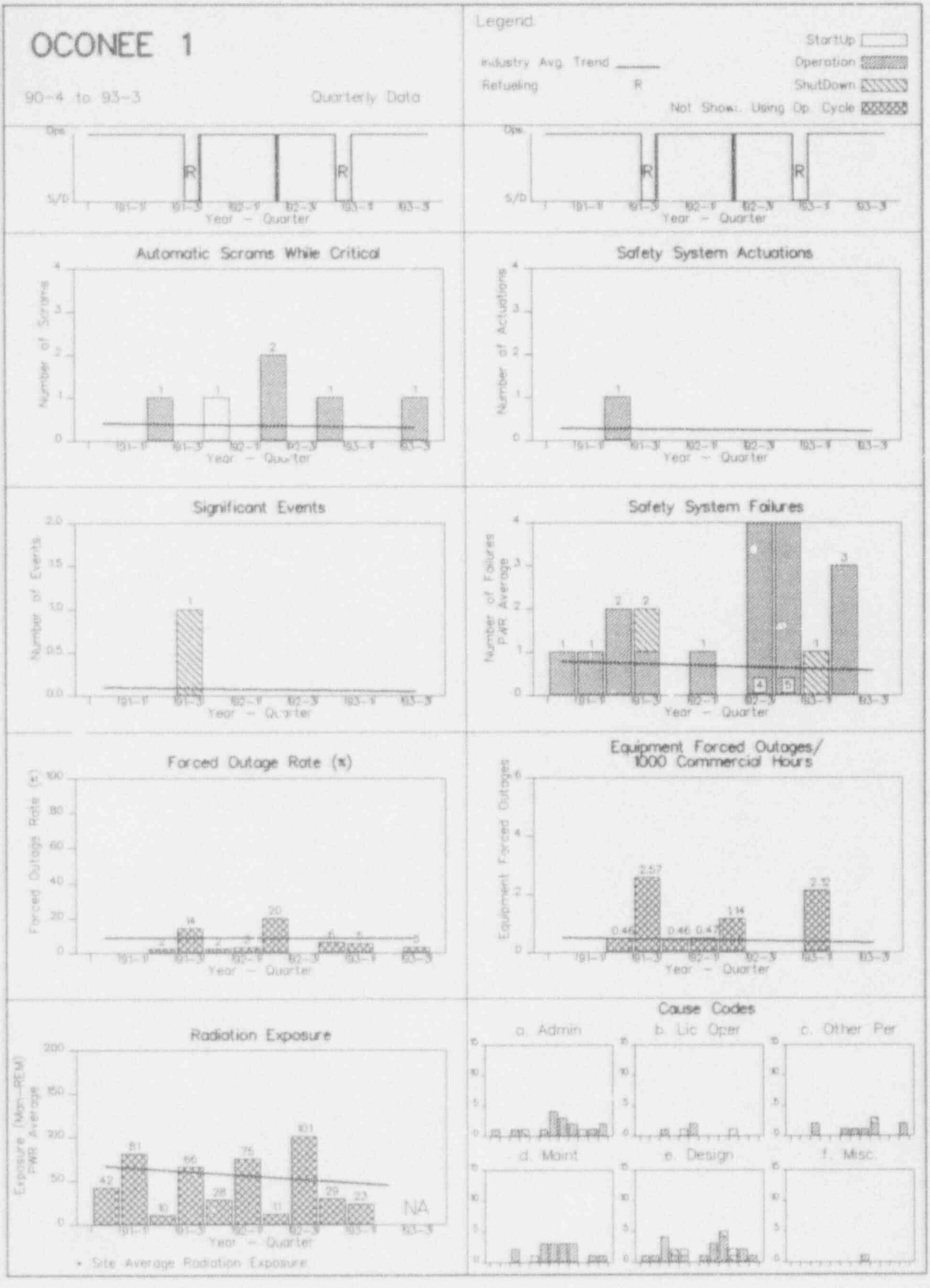
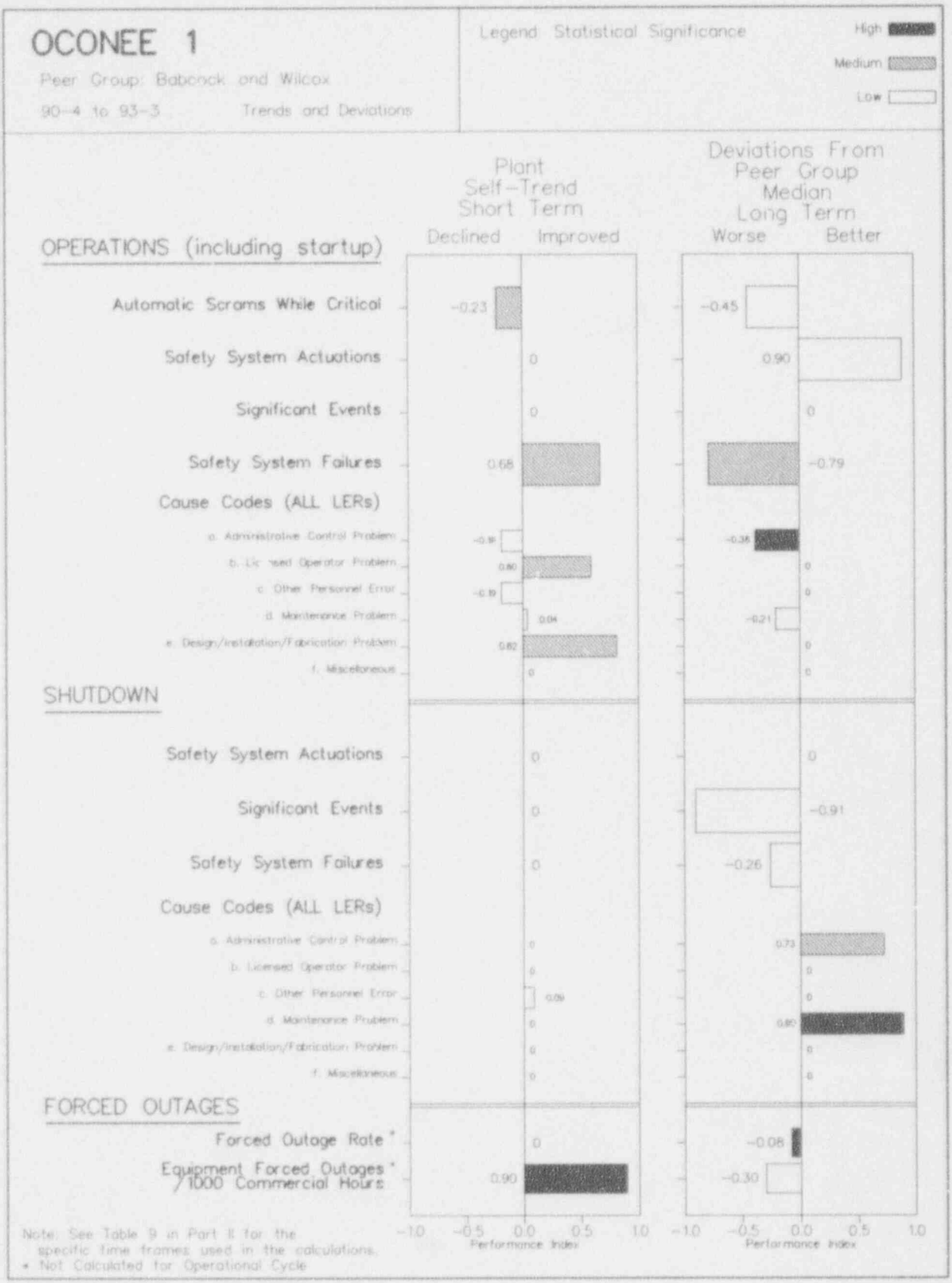

OCONEE 1
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling R
StartUp
Operation
ShutDown
Not Shown, Using Op. Cycle
Ops
S/D
R
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM) PWR Average
NA
Site Average Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.63b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.64a

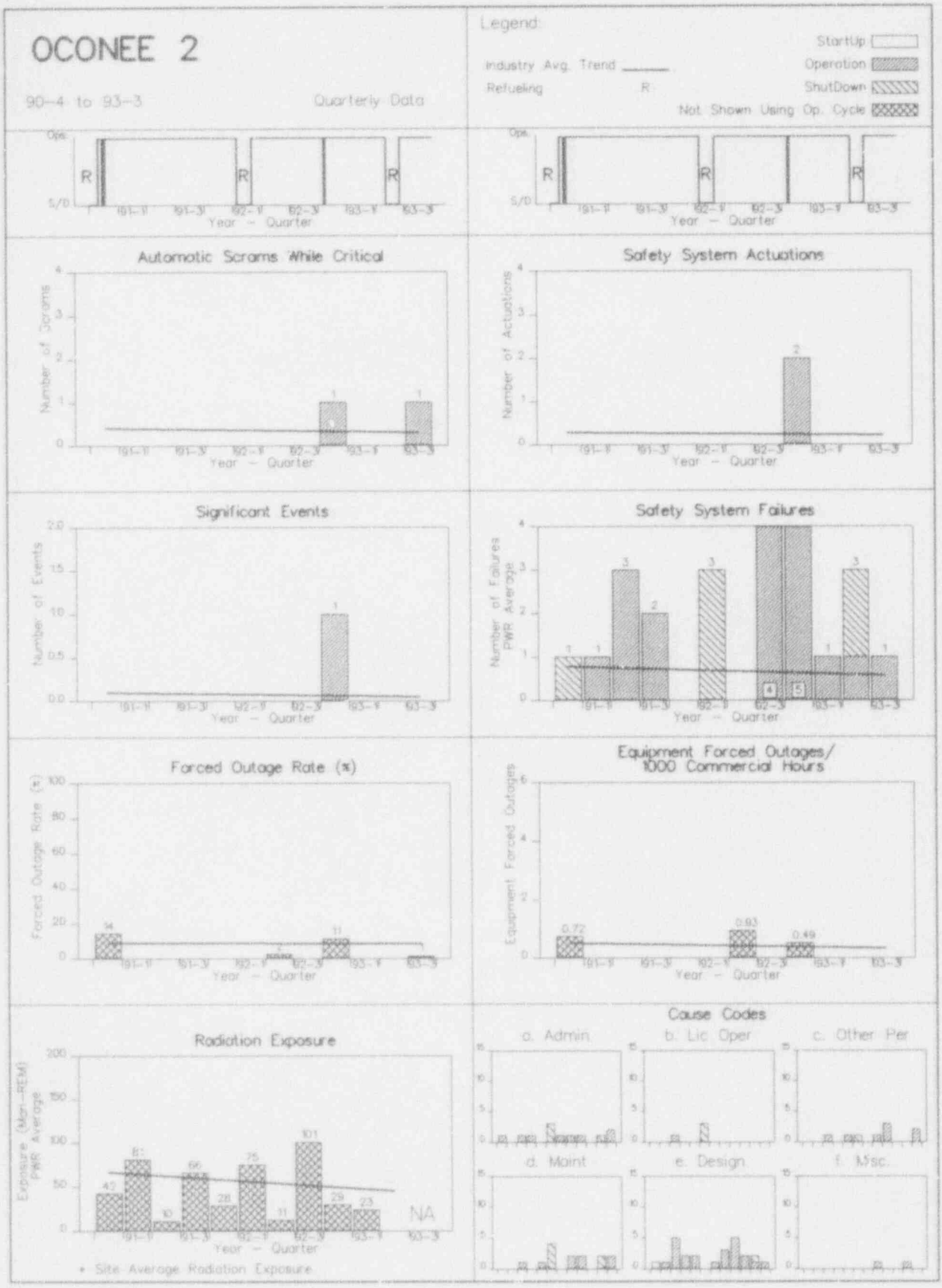

OCONEE 2
90-4 to 93-3
Quarterly Data
Legend:
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Industry Avg. Trend
Refueling
R
Ops.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM) PWR Average
NA
* Site Average Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.64b

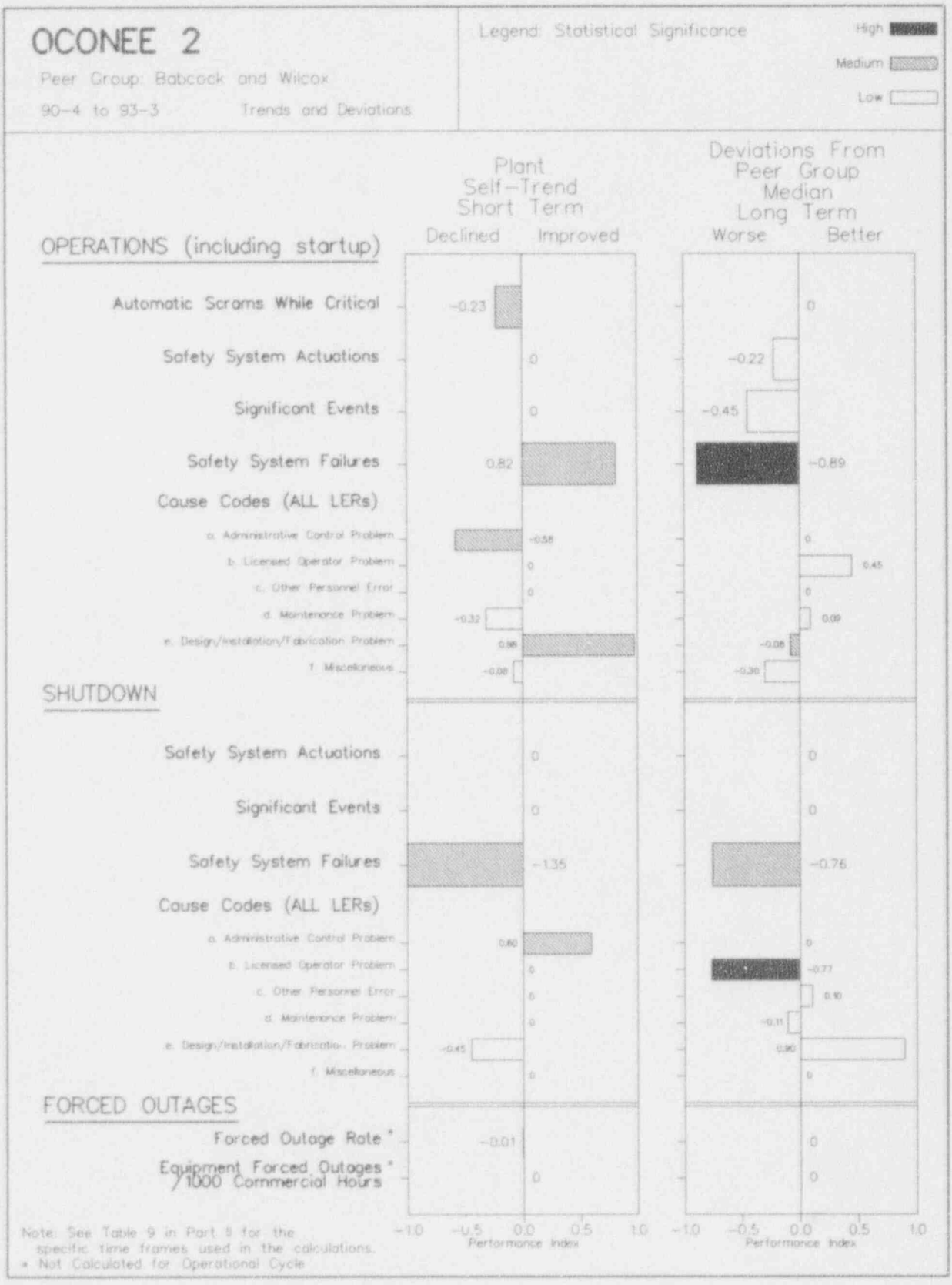

OCONEE 2
Peer Group: Babcock and Wilcox
90-4 to 93-3 Trends and Deviations
Legend: Statistical Significance
High
Medium
Low
Plant Self-Trend Short Term
Declined
Improved
Deviations From Peer Group Median Long Term
Worse
Better
OPERATIONS (including startup)
Automatic Scrams While Critical
-0.23
0
Safety System Actuations
0
-0.22
Significant Events
0
-0.45
Safety System Failures
0.82
-0.89
Cause Codes (ALL LERs)
a. Administrative Control Problem
-0.58
0
b. Licensed Operator Problem
0
0.45
c. Other Personnel Error
0
0
d. Maintenance Problem
-0.32
0.09
e. Design/Installation/Fabrication Problem
0.98
-0.08
f. Miscellaneous
-0.09
-0.30
SHUTDOWN
Safety System Actuations
0
0
Significant Events
0
0
Safety System Failures
-1.35
-0.76
Cause Codes (ALL LERs)
a. Administrative Control Problem
0.80
0
b. Licensed Operator Problem
0
-0.77
c. Other Personnel Error
0
0.10
d. Maintenance Problem
0
-0.11
e. Design/Installation/Fabrication Problem
-0.45
0.90
f. Miscellaneous
0
0
FORCED OUTAGES
Forced Outage Rate *
-0.01
0
Equipment Forced Outages * /1000 Commercial Hours
0
0
-1.0
-0.5
0.0
0.5
1.0
Performance Index
Note: See Table 9 in Part 9 for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.65a

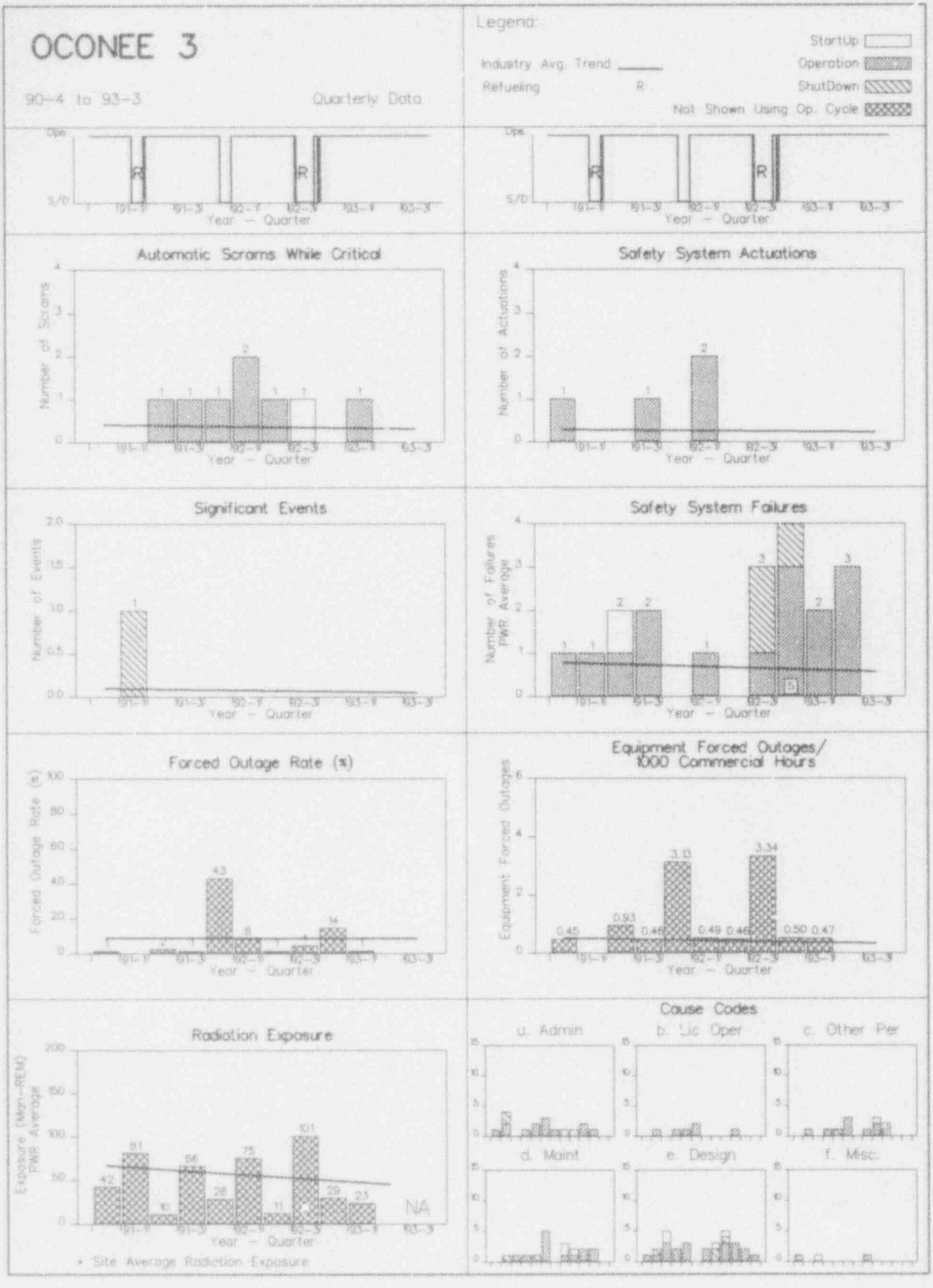

OCONEE 3
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Ops.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures
PWR Average
Forced Outage Rate (%)
Equipment Forced Outages/
1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM)
PWR Average
NA
+ Site Average Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.65b

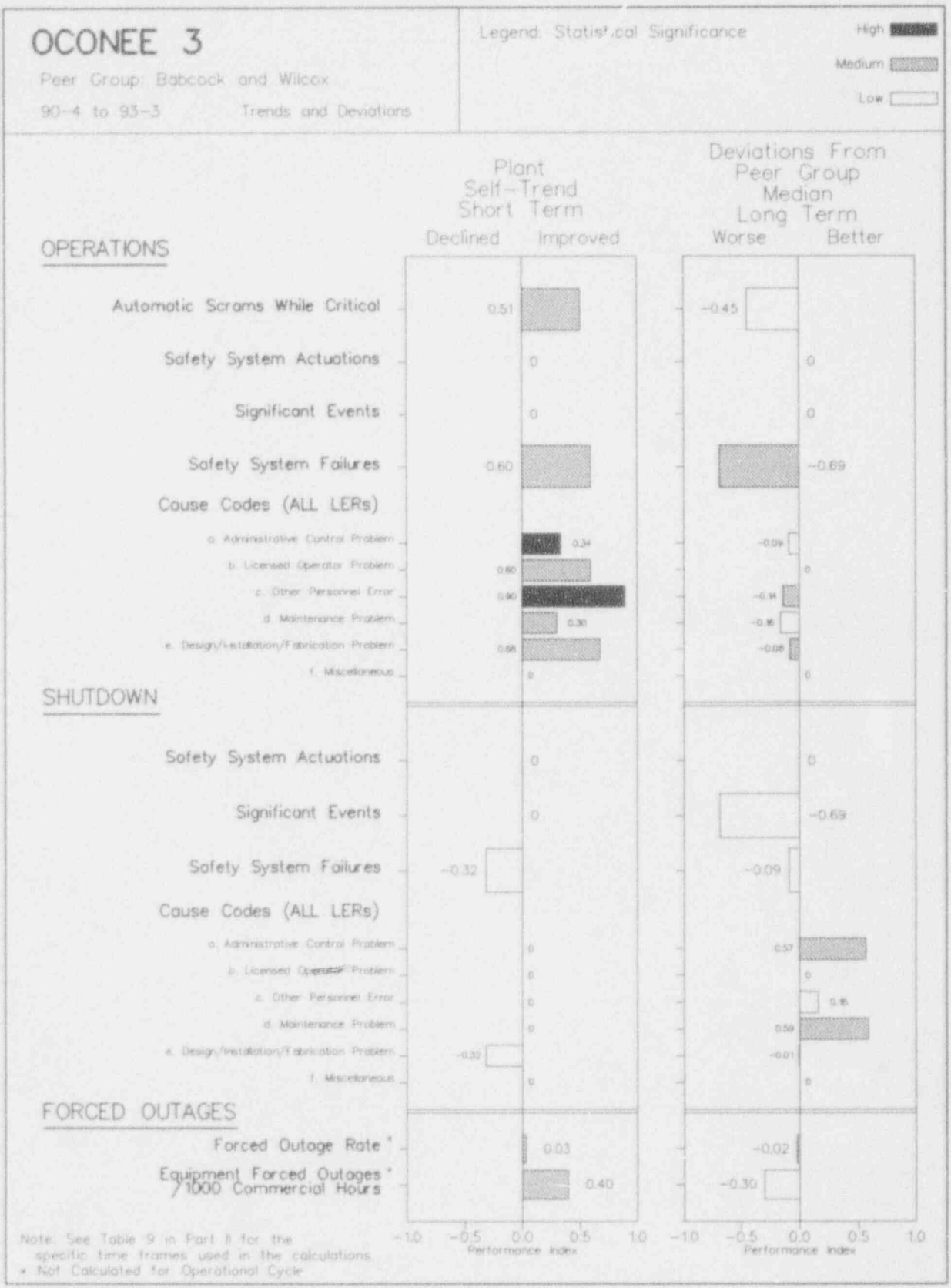

OCONEE 3
Peer Group: Babcock and Wilcox
90-4 to 93-3 Trends and Deviations
Legend: Statistical Significance
High
Medium
Low
Plant Self-Trend Short Term
Declined Improved
Deviations From Peer Group Median Long Term
Worse Better
OPERATIONS
Automatic Scrams While Critical
0.51
-0.45
Safety System Actuations
0
0
Significant Events
0
0
Safety System Failures
0.60
-0.69
Cause Codes (ALL LERs)
a. Administrative Control Problem
0.34
-0.09
b. Licensed Operator Problem
0.60
0
c. Other Personnel Error
0.90
-0.14
d. Maintenance Problem
0.30
-0.16
e. Design/Installation/Fabrication Problem
0.68
-0.08
f. Miscellaneous
0
0
SHUTDOWN
Safety System Actuations
0
0
Significant Events
0
-0.69
Safety System Failures
-0.32
-0.09
Cause Codes (ALL LERs)
a. Administrative Control Problem
0
0.57
b. Licensed Operator Problem
0
0
c. Other Personnel Error
0
0.16
d. Maintenance Problem
0
0.59
e. Design/Installation/Fabrication Problem
-0.32
-0.01
f. Miscellaneous
0
0
FORCED OUTAGES
Forced Outage Rate *
0.03
-0.02
Equipment Forced Outages * / 1000 Commercial Hours
0.40
-0.30
-1.0 -0.5 0.0 0.5 1.0
Performance Index
-1.0 -0.5 0.0 0.5 1.0
Performance Index
Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.66a

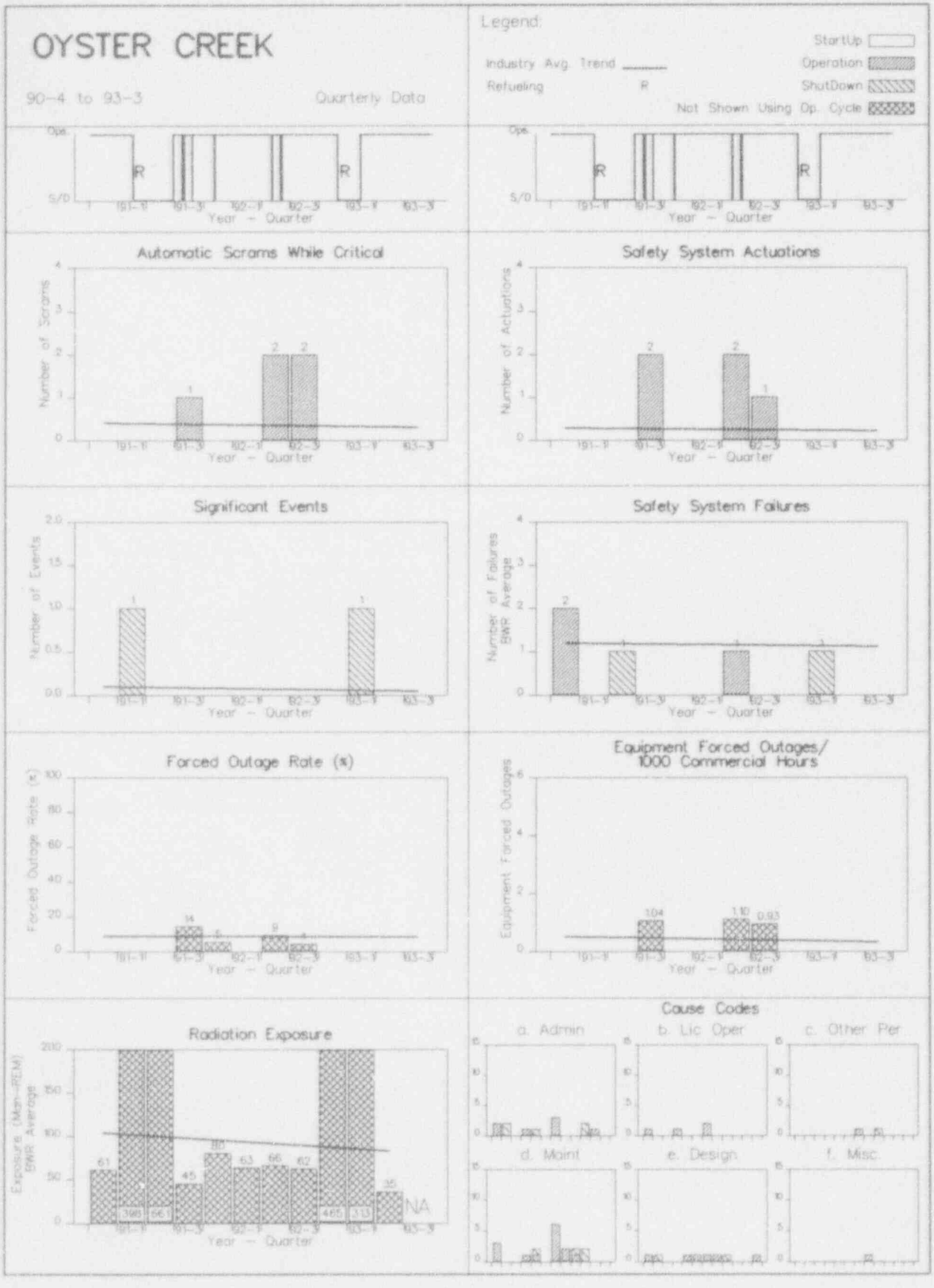

OYSTER CREEK
90-4 to 93-3
Quarterly Data
Legend:
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Industry Avg. Trend
Refueling
R
Ops.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures
BWR Average
Forced Outage Rate (%)
Equipment Forced Outages/
1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM)
BWR Average
NA
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.66b

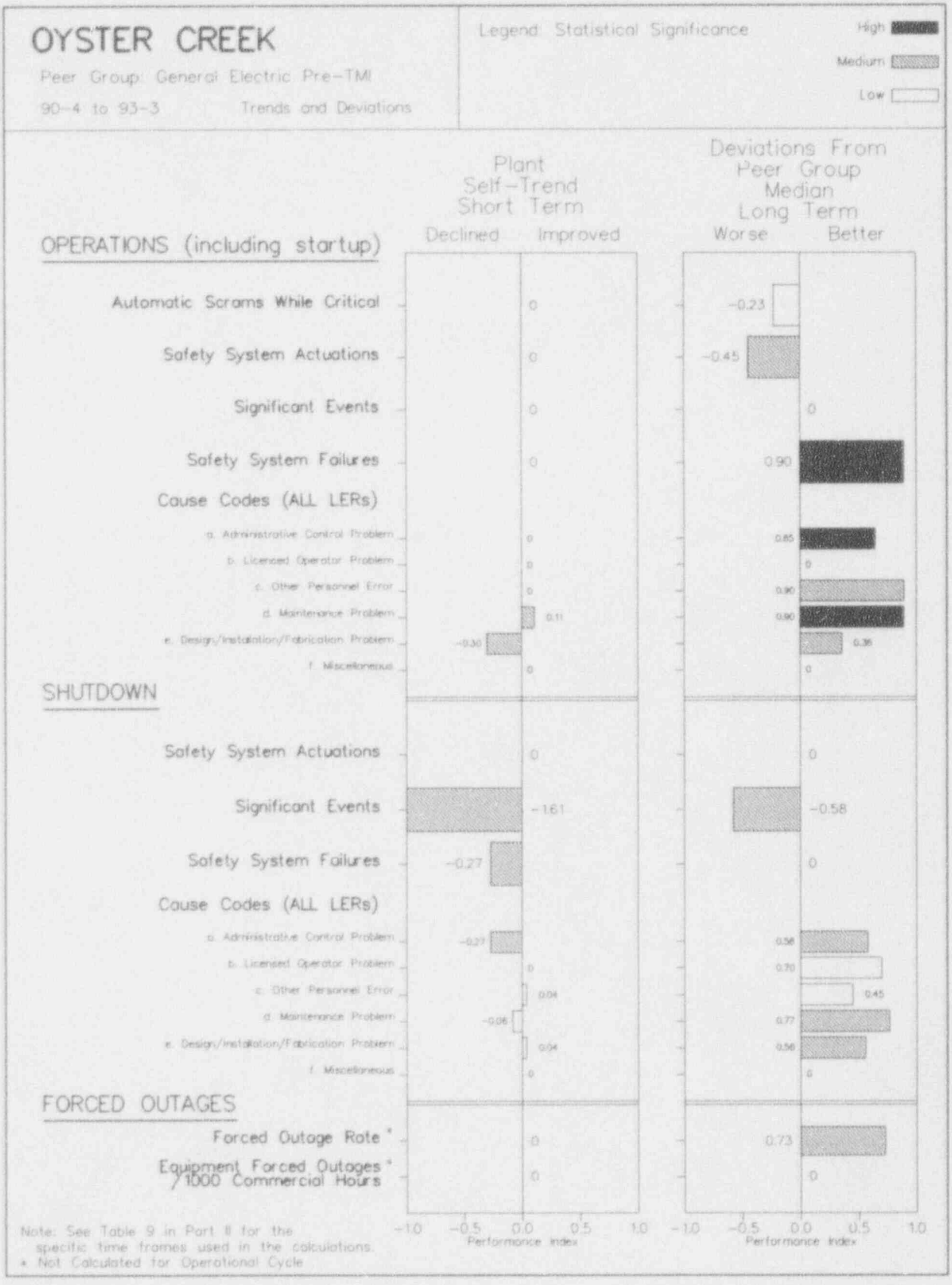

OYSTER CREEK
Peer Group: General Electric Pre-TMI
90-4 to 93-3 Trends and Deviations
Legend: Statistical Significance
High
Medium
Low
Plant Self-Trend Short Term
Declined
Improved
Deviations From Peer Group Median Long Term
Worse
Better
OPERATIONS (including startup)
Automatic Scrams While Critical
Safety System Actuations
Significant Events
Safety System Failures
Cause Codes (ALL LERs)
a. Administrative Control Problem
b. Licensed Operator Problem
c. Other Personnel Error
d. Maintenance Problem
e. Design/Installation/Fabrication Problem
f. Miscellaneous
SHUTDOWN
Safety System Actuations
Significant Events
Safety System Failures
Cause Codes (ALL LERs)
a. Administrative Control Problem
b. Licensed Operator Problem
c. Other Personnel Error
d. Maintenance Problem
e. Design/Installation/Fabrication Problem
f. Miscellaneous
FORCED OUTAGES
Forced Outage Rate *
Equipment Forced Outages * /1000 Commercial Hours
-1.0 -0.5 0.0 0.5 1.0
Performance Index
Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.67a

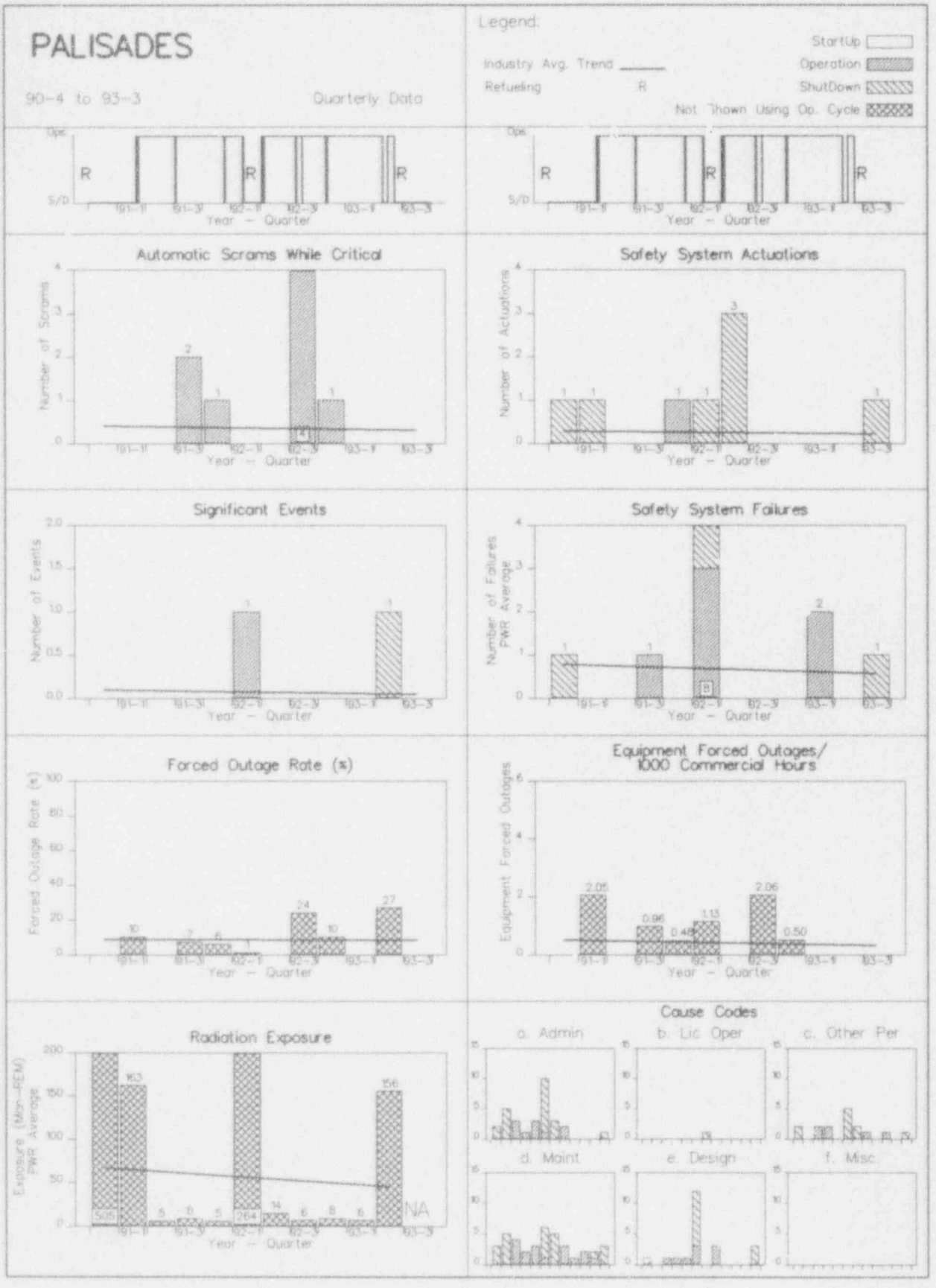

PALISADES
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Ops.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM) PWR Average
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.67b

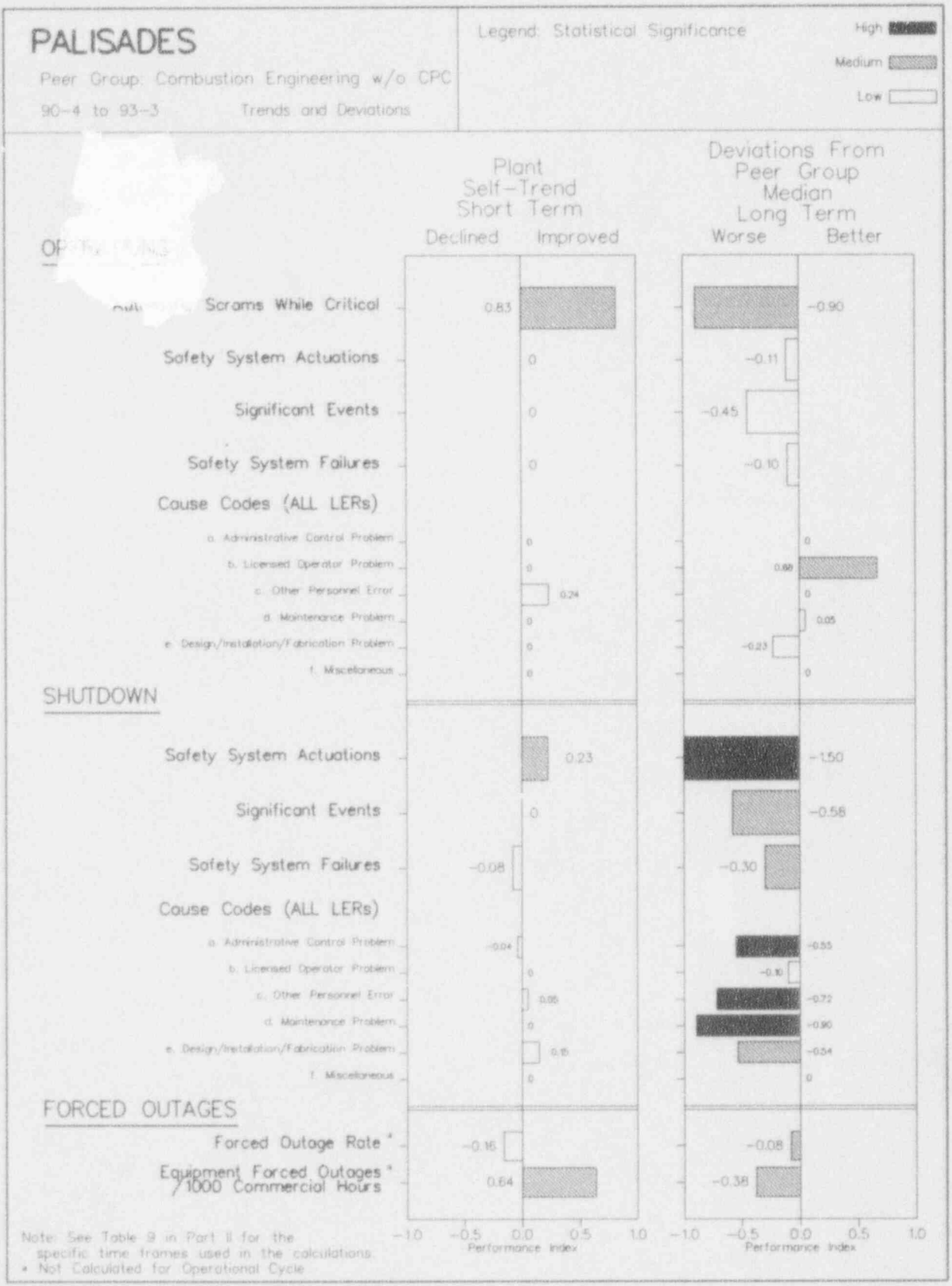

PALISADES
Peer Group: Combustion Engineering w/o CPC
90-4 to 93-3 Trends and Deviations
Legend: Statistical Significance
High
Medium
Low
Plant Self-Trend Short Term
Declined
Improved
Deviations From Peer Group Median Long Term
Worse
Better
Scrams While Critical
0.83
-0.90
Safety System Actuations
0
-0.11
Significant Events
0
-0.45
Safety System Failures
0
-0.10
Cause Codes (ALL LERs)
a. Administrative Control Problem
0
0
b. Licensed Operator Problem
0
0.68
c. Other Personnel Error
0.24
0
d. Maintenance Problem
0
0.05
e. Design/Installation/Fabrication Problem
0
-0.23
f. Miscellaneous
0
0
SHUTDOWN
Safety System Actuations
0.23
-1.50
Significant Events
0
-0.58
Safety System Failures
-0.08
-0.30
Cause Codes (ALL LERs)
a. Administrative Control Problem
-0.04
-0.55
b. Licensed Operator Problem
0
-0.10
c. Other Personnel Error
0.05
-0.72
d. Maintenance Problem
0
-0.90
e. Design/Installation/Fabrication Problem
0.15
-0.54
f. Miscellaneous
0
0
FORCED OUTAGES
Forced Outage Rate *
-0.16
-0.08
Equipment Forced Outages * /1000 Commercial Hours
0.64
-0.38
-1.0 -0.5 0.0 0.5 1.0
Performance Index
-1.0 -0.5 0.0 0.5 1.0
Performance Index
Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.68o

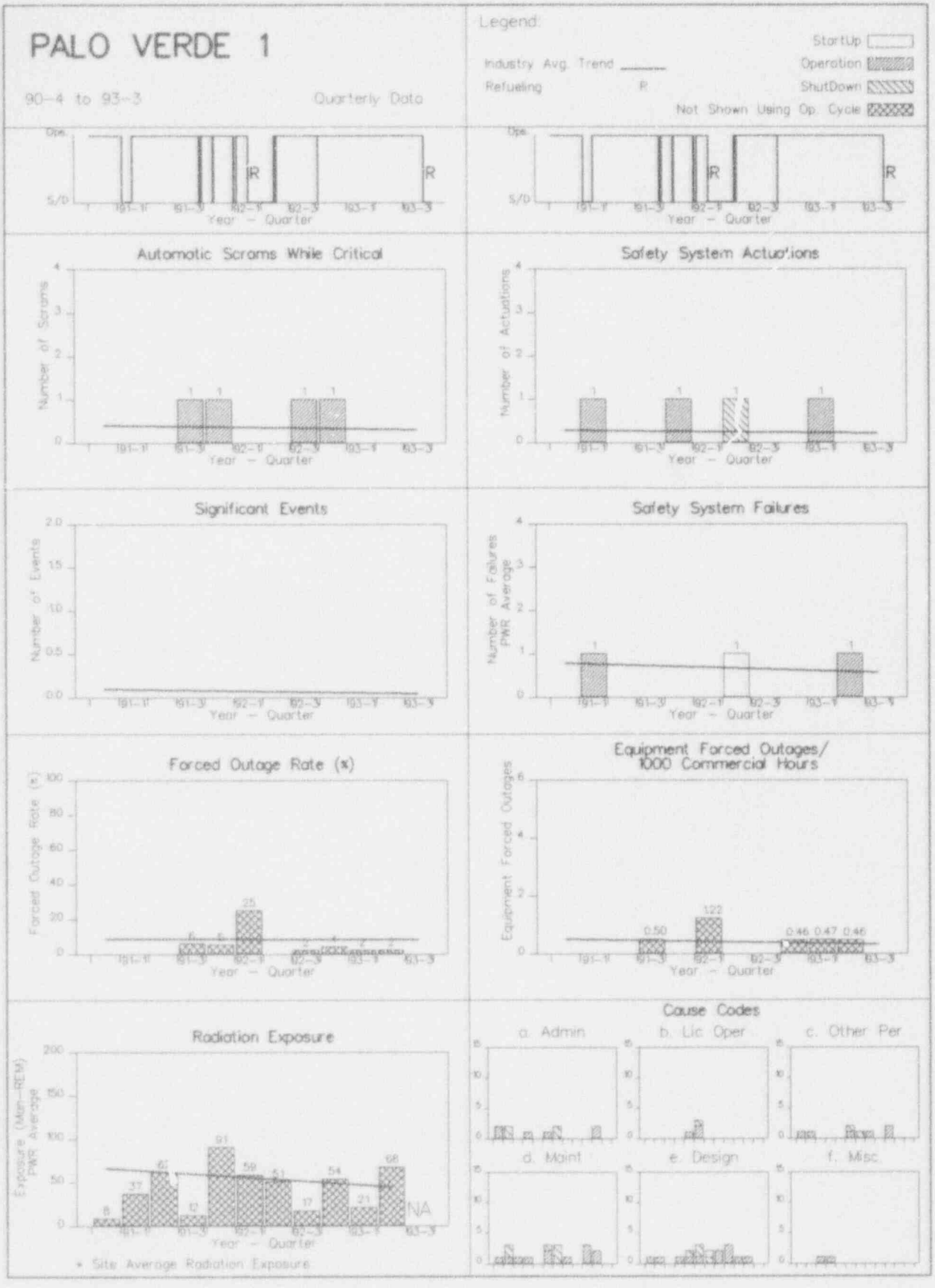
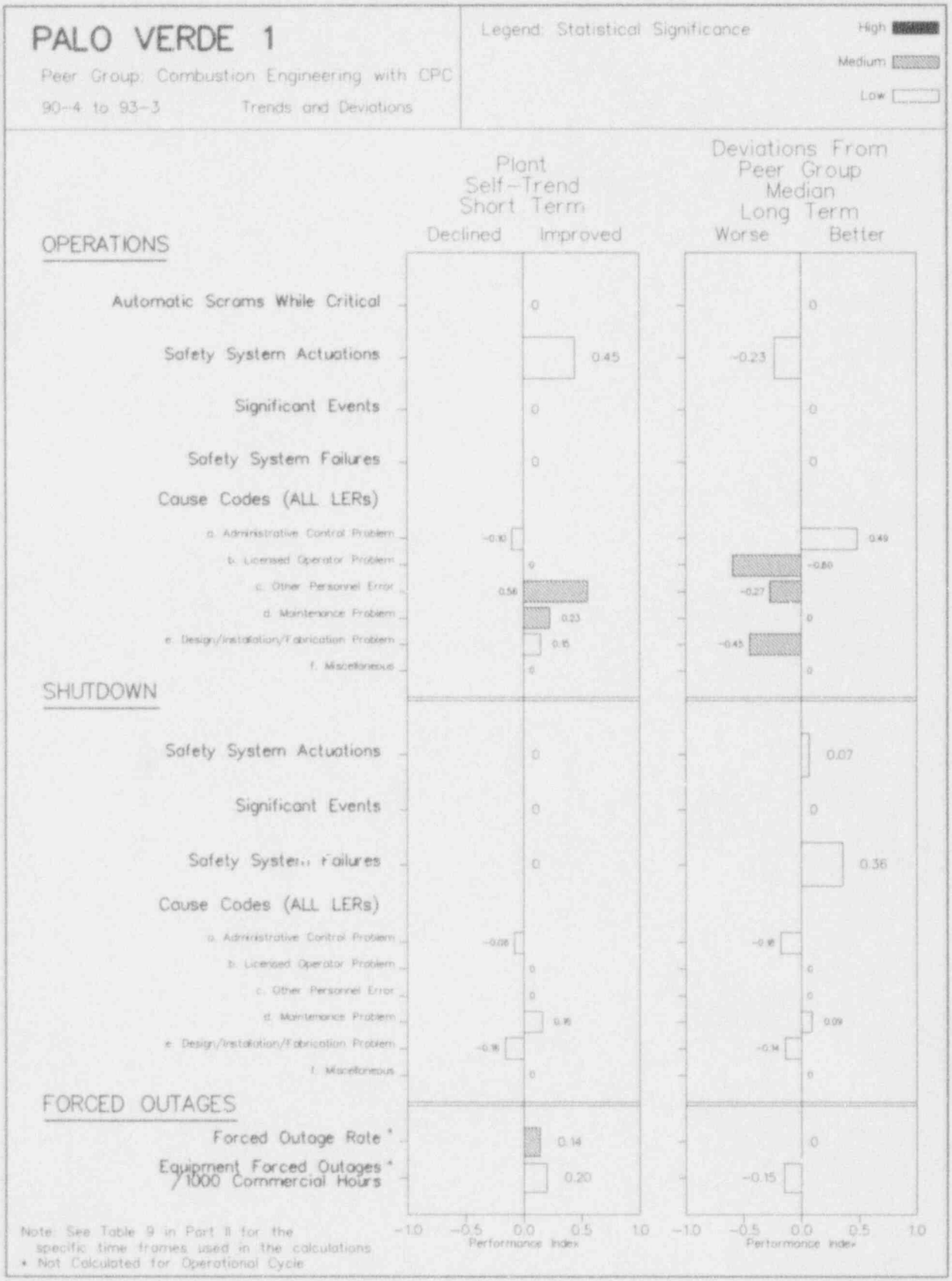

PALO VERDE 1
90-4 to 93-3
Quarterly Data
Legend:
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Industry Avg. Trend
Refueling
R
Opn.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures
PWR Average
Forced Outage Rate (%)
Equipment Forced Outages/
1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM)
PWR Average
NA
* Site Average Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.68b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.69a

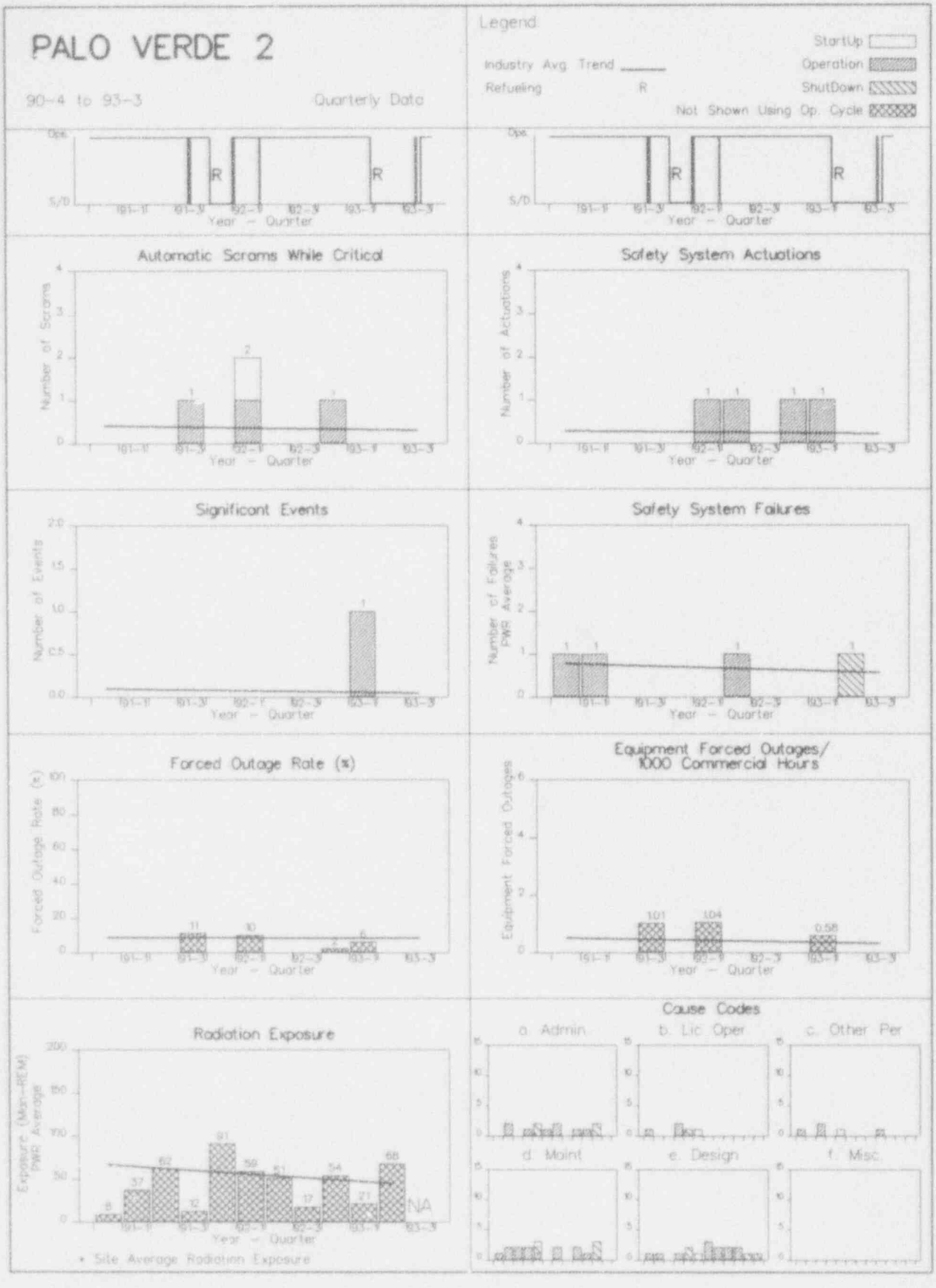

PALO VERDE 2
90-4 to 93-3
Quarterly Data
Legend
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Ops.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM) PWR Average
Site Average Radiation Exposure
Cause Codes
a. Admin
b. Lic. Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.69b

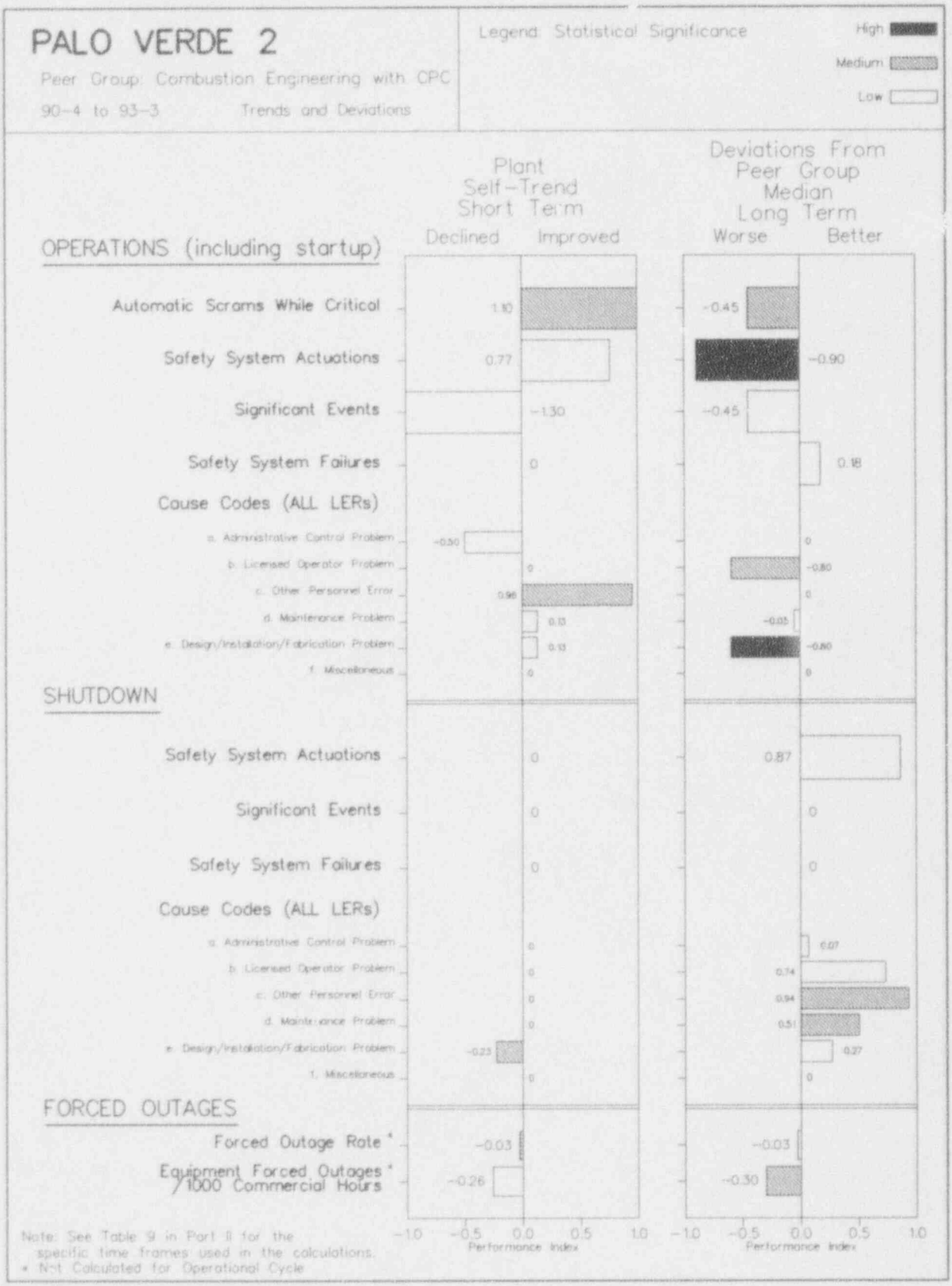

PALO VERDE 2
Peer Group: Combustion Engineering with CPC
90-4 to 93-3 Trends and Deviations
Legend: Statistical Significance
High
Medium
Low
Plant Self-Trend Short Term
Declined
Improved
Deviations From Peer Group Median Long Term
Worse
Better
OPERATIONS (including startup)
Automatic Scrams While Critical
1.10
-0.45
Safety System Actuations
0.77
-0.90
Significant Events
-1.30
-0.45
Safety System Failures
0
0.18
Cause Codes (ALL LERs)
a. Administrative Control Problem
-0.30
0
b. Licensed Operator Problem
0
-0.80
c. Other Personnel Error
0.96
0
d. Maintenance Problem
0.13
-0.05
e. Design/Installation/Fabrication Problem
0.13
-0.80
f. Miscellaneous
0
0
SHUTDOWN
Safety System Actuations
0
0.87
Significant Events
0
0
Safety System Failures
0
0
Cause Codes (ALL LERs)
a. Administrative Control Problem
0
0.07
b. Licensed Operator Problem
0
0.74
c. Other Personnel Error
0
0.94
d. Maintenance Problem
0
0.51
e. Design/Installation/Fabrication Problem
-0.23
0.27
f. Miscellaneous
0
0
FORCED OUTAGES
Forced Outage Rate *
-0.03
-0.03
Equipment Forced Outages * /1000 Commercial Hours
-0.26
-0.30
-1.0 -0.5 0.0 0.5 1.0
Performance Index
-1.0 -0.5 0.0 0.5 1.0
Performance Index
Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.70a

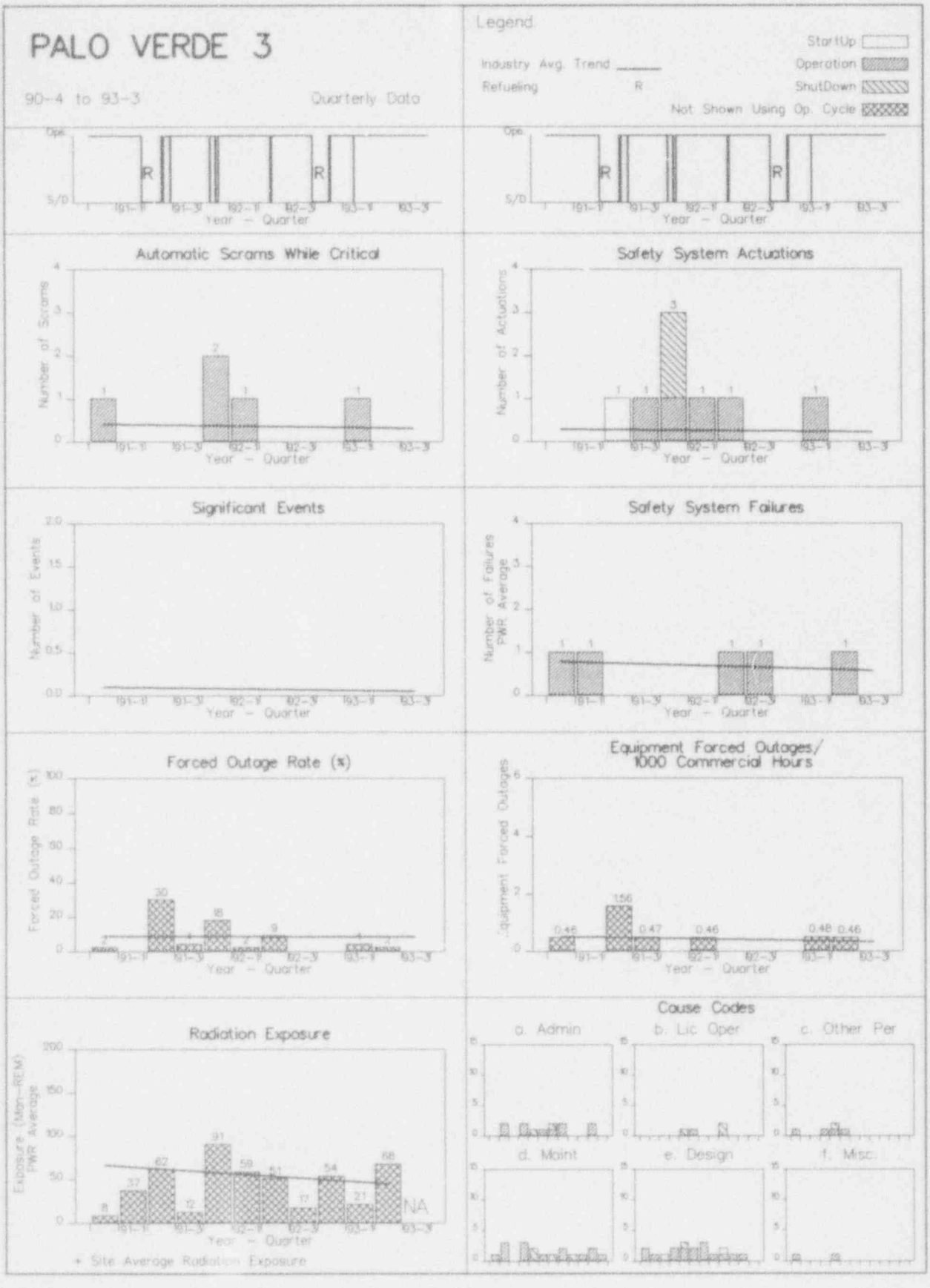

PALO VERDE 3
90-4 to 93-3
Quarterly Data
Legend
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Ope.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures
PWR Average
Forced Outage Rate (%)
Equipment Forced Outages/
1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM)
PWR Average
NA
* Site Average Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.70b

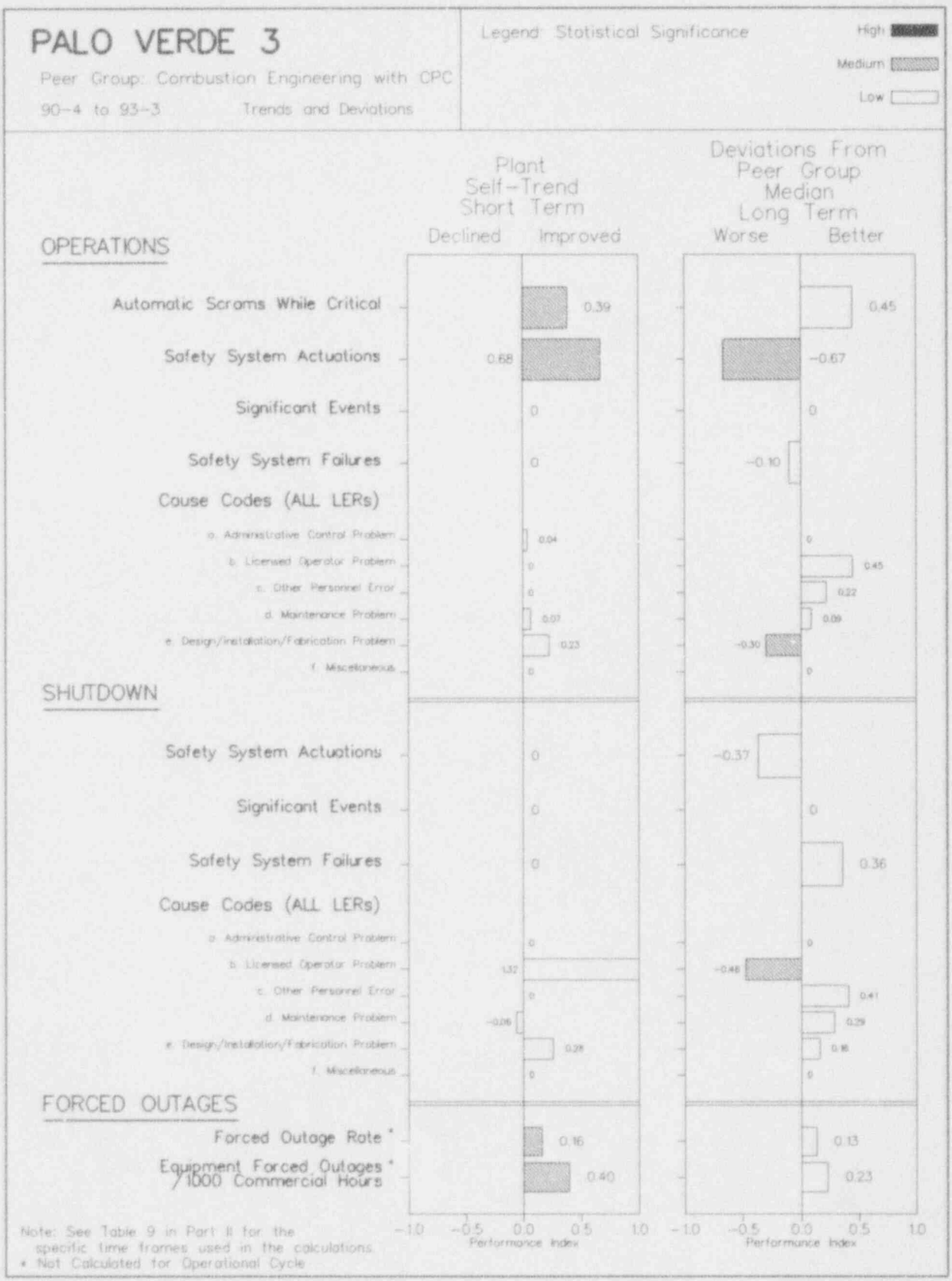

PALO VERDE 3
Peer Group: Combustion Engineering with CPC
90-4 to 93-3 Trends and Deviations
Legend: Statistical Significance
High
Medium
Low
Plant Self-Trend Short Term
Declined
Improved
Deviations From Peer Group Median Long Term
Worse
Better
OPERATIONS
Automatic Scrams While Critical
0.39
0.45
Safety System Actuations
0.68
-0.67
Significant Events
0
0
Safety System Failures
0
-0.10
Cause Codes (ALL LERs)
a. Administrative Control Problem
0.04
0
b. Licensed Operator Problem
0
0.45
c. Other Personnel Error
0
0.22
d. Maintenance Problem
0.07
0.09
e. Design/Installation/Fabrication Problem
0.23
-0.30
f. Miscellaneous
0
0
SHUTDOWN
Safety System Actuations
0
-0.37
Significant Events
0
0
Safety System Failures
0
0.36
Cause Codes (ALL LERs)
a. Administrative Control Problem
0
0
b. Licensed Operator Problem
1.32
-0.48
c. Other Personnel Error
0
0.41
d. Maintenance Problem
-0.06
0.29
e. Design/Installation/Fabrication Problem
0.28
0.16
f. Miscellaneous
0
0
FORCED OUTAGES
Forced Outage Rate *
0.16
0.13
Equipment Forced Outages * /1000 Commercial Hours
0.40
0.23
-1.0 -0.5 0.0 0.5 1.0
Performance Index
-1.0 -0.5 0.0 0.5 1.0
Performance Index
Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.71a

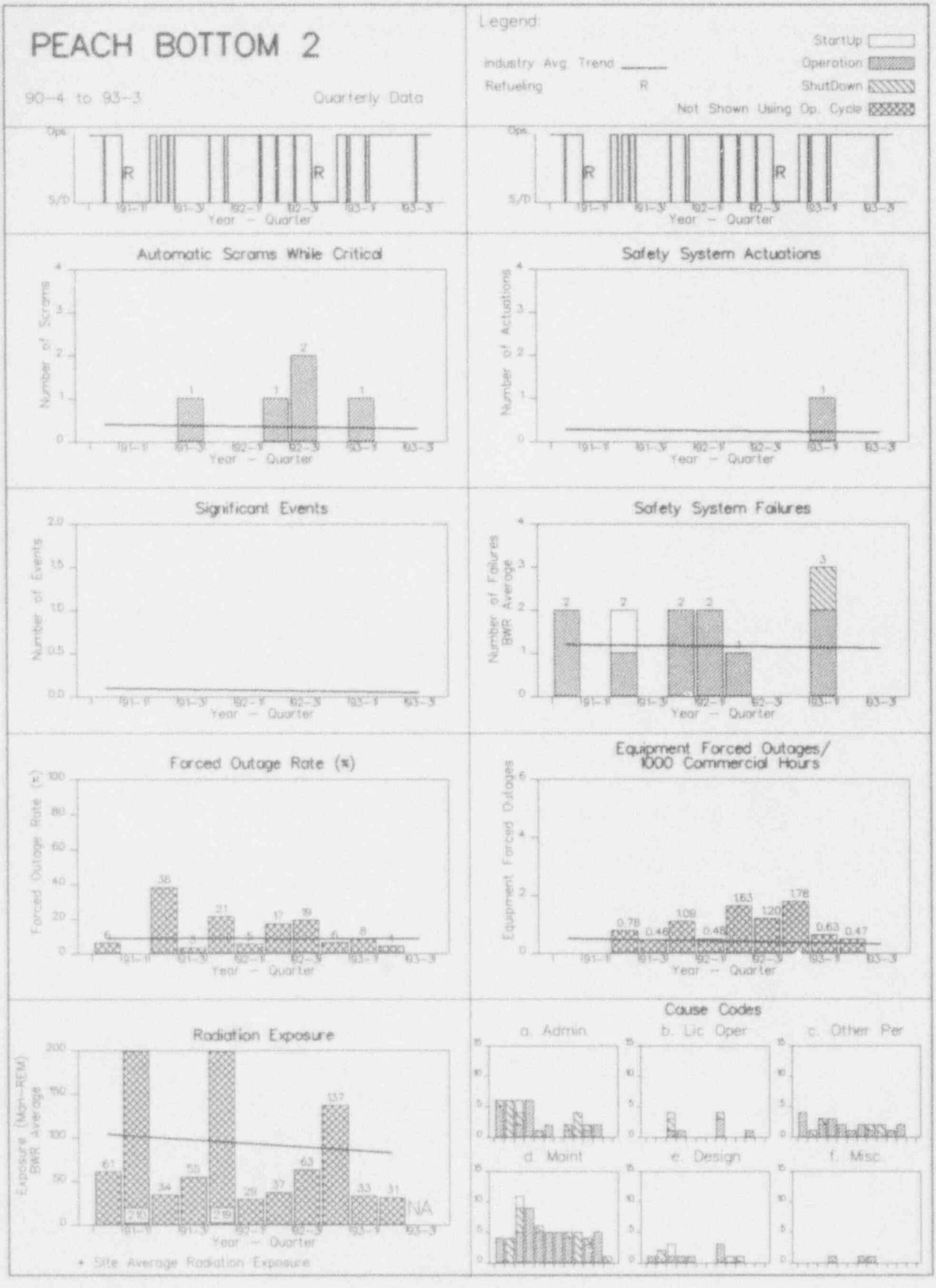
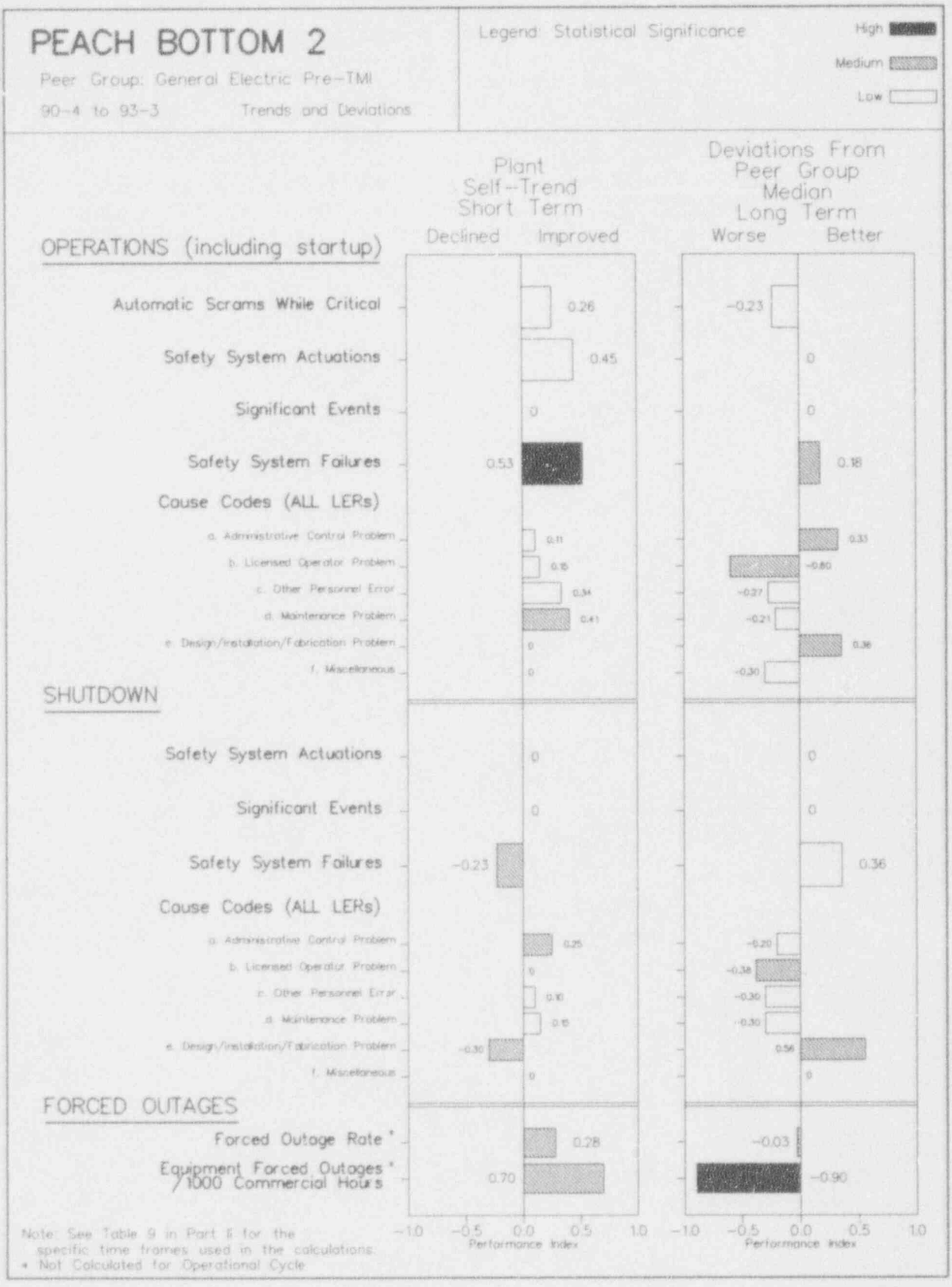

PEACH BOTTOM 2
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Ops.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures BWR Average
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM) BWR Average
NA
* Site Average Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc

FIGURE 7.71b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.72a

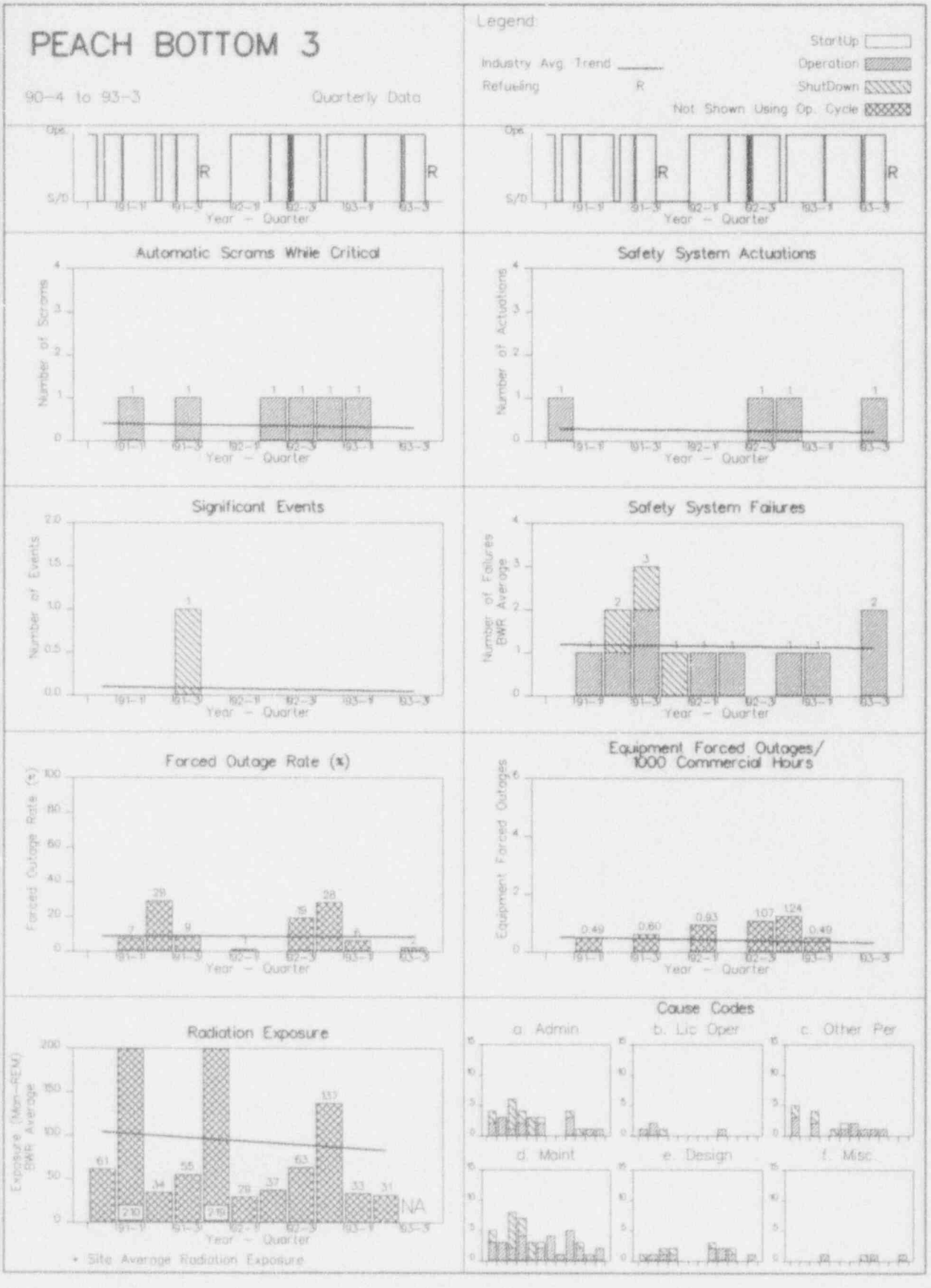

PEACH BOTTOM 3
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Opr.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures BWR Average
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM) BWR Average
NA
* Site Average Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc

FIGURE 7.72b

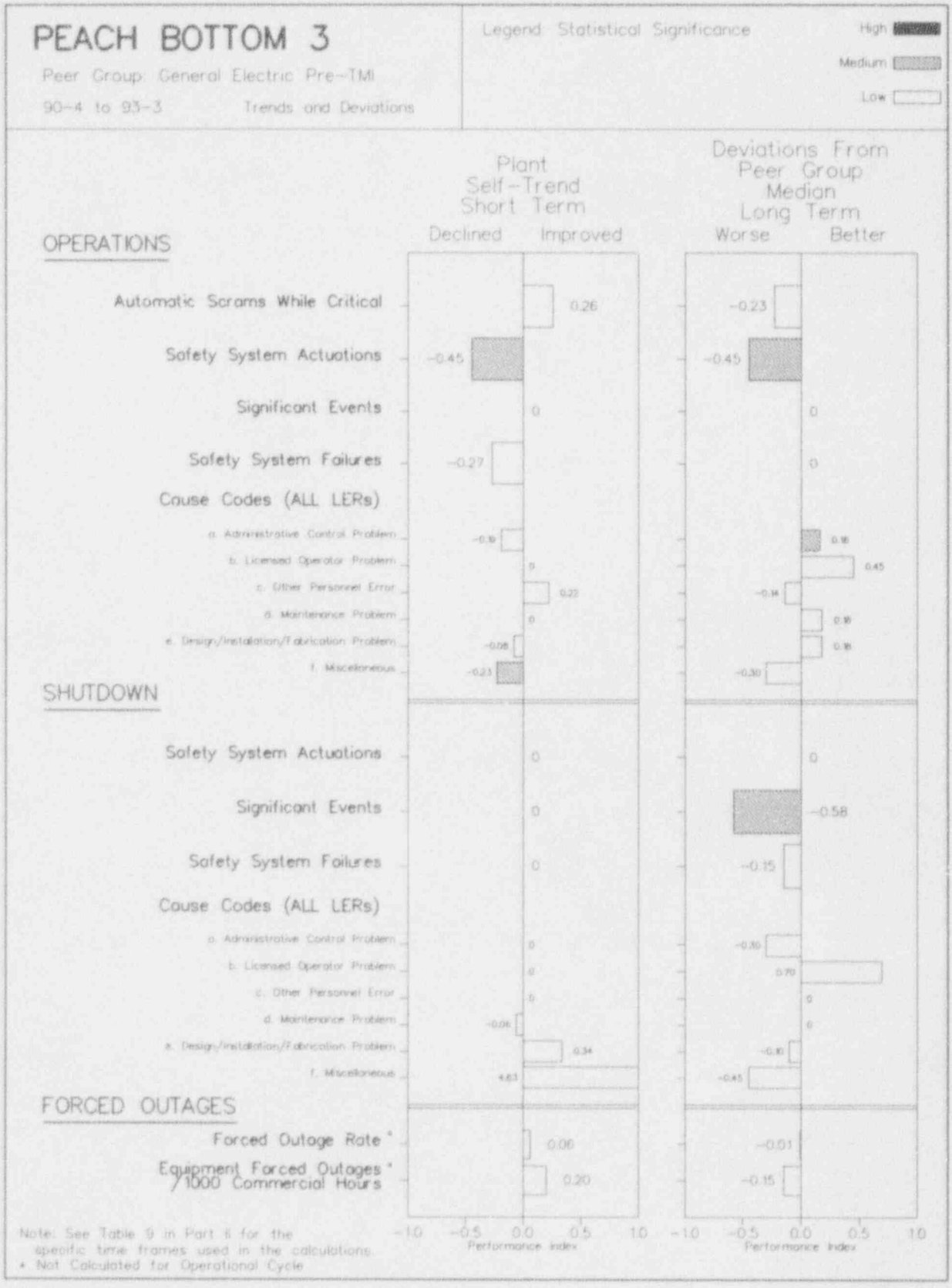

PEACH BOTTOM 3
Peer Group: General Electric Pre-TMI
90-4 to 93-3 Trends and Deviations
Legend: Statistical Significance
High
Medium
Low
Plant Self-Trend Short Term
Declined
Improved
Deviations From Peer Group Median Long Term
Worse
Better
OPERATIONS
Automatic Scrams While Critical
0.26
-0.23
Safety System Actuations
-0.45
-0.45
Significant Events
0
0
Safety System Failures
-0.27
0
Cause Codes (ALL LERs)
a. Administrative Control Problem
-0.19
0.18
b. Licensed Operator Problem
0
0.45
c. Other Personnel Error
0.22
-0.14
d. Maintenance Problem
0
0.18
e. Design/Installation/Fabrication Problem
-0.08
0.18
f. Miscellaneous
-0.23
-0.30
SHUTDOWN
Safety System Actuations
0
0
Significant Events
0
-0.58
Safety System Failures
0
-0.15
Cause Codes (ALL LERs)
a. Administrative Control Problem
0
-0.20
b. Licensed Operator Problem
0
0.70
c. Other Personnel Error
0
0
d. Maintenance Problem
-0.06
0
e. Design/Installation/Fabrication Problem
0.34
-0.10
f. Miscellaneous
4.83
-0.45
FORCED OUTAGES
Forced Outage Rate *
0.00
-0.01
Equipment Forced Outages * /1000 Commercial Hours
0.20
-0.15
-1.0
-0.5
0.0
0.5
1.0
Performance Index
Note: See Table 9 in Part 6 for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.73a

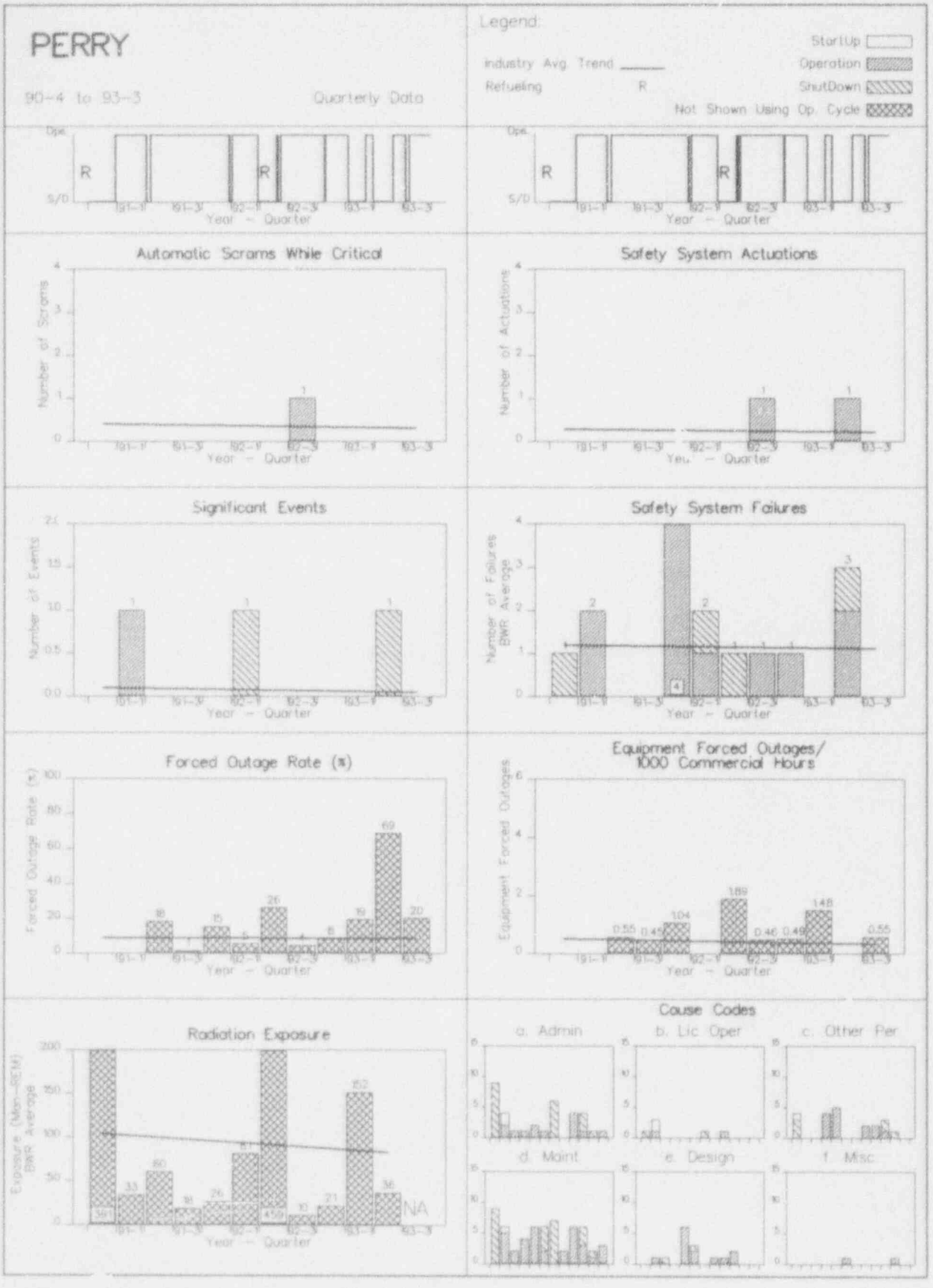
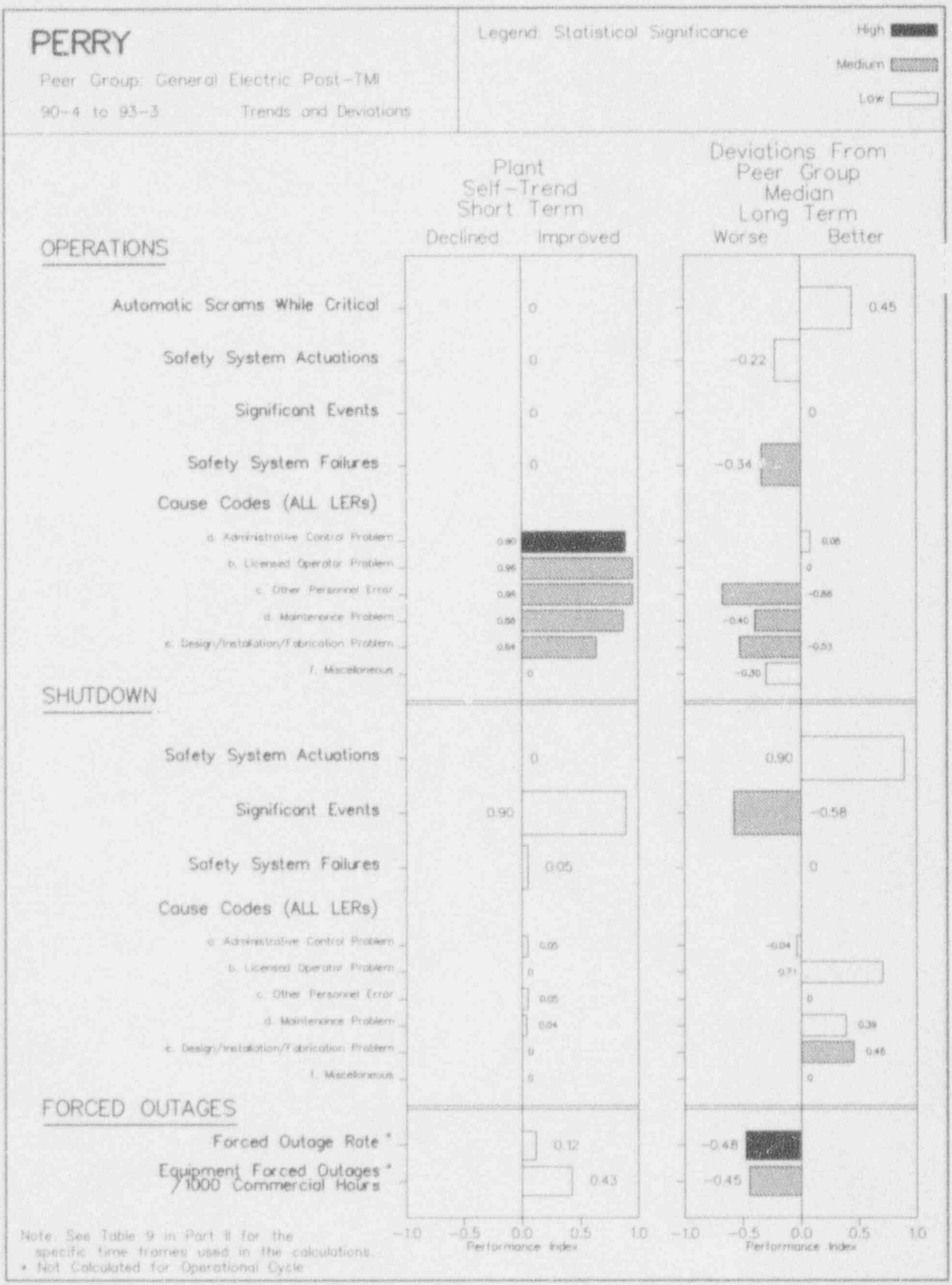

PERRY
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Opr.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures
BWR Average
Forced Outage Rate (%)
Forced Outage Rate (%)
Equipment Forced Outages/
1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM)
BWR Average
NA
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc

FIGURE 7.73b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.74a

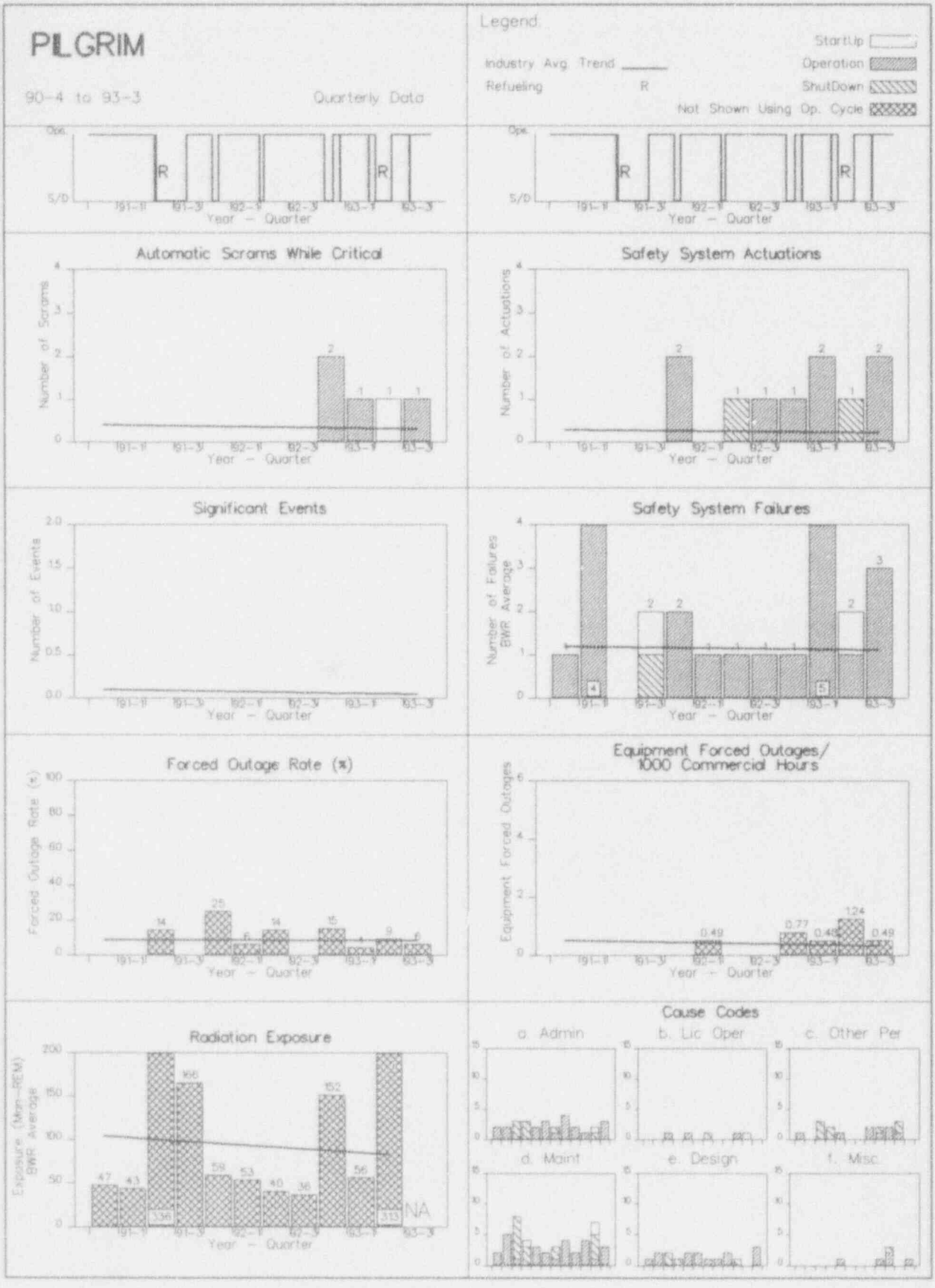

PILGRIM
90-4 to 93-3
Quarterly Data
Legend
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Opn.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures
BWR Average
Forced Outage Rate (%)
Equipment Forced Outages/
1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM)
BWR Average
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.74b

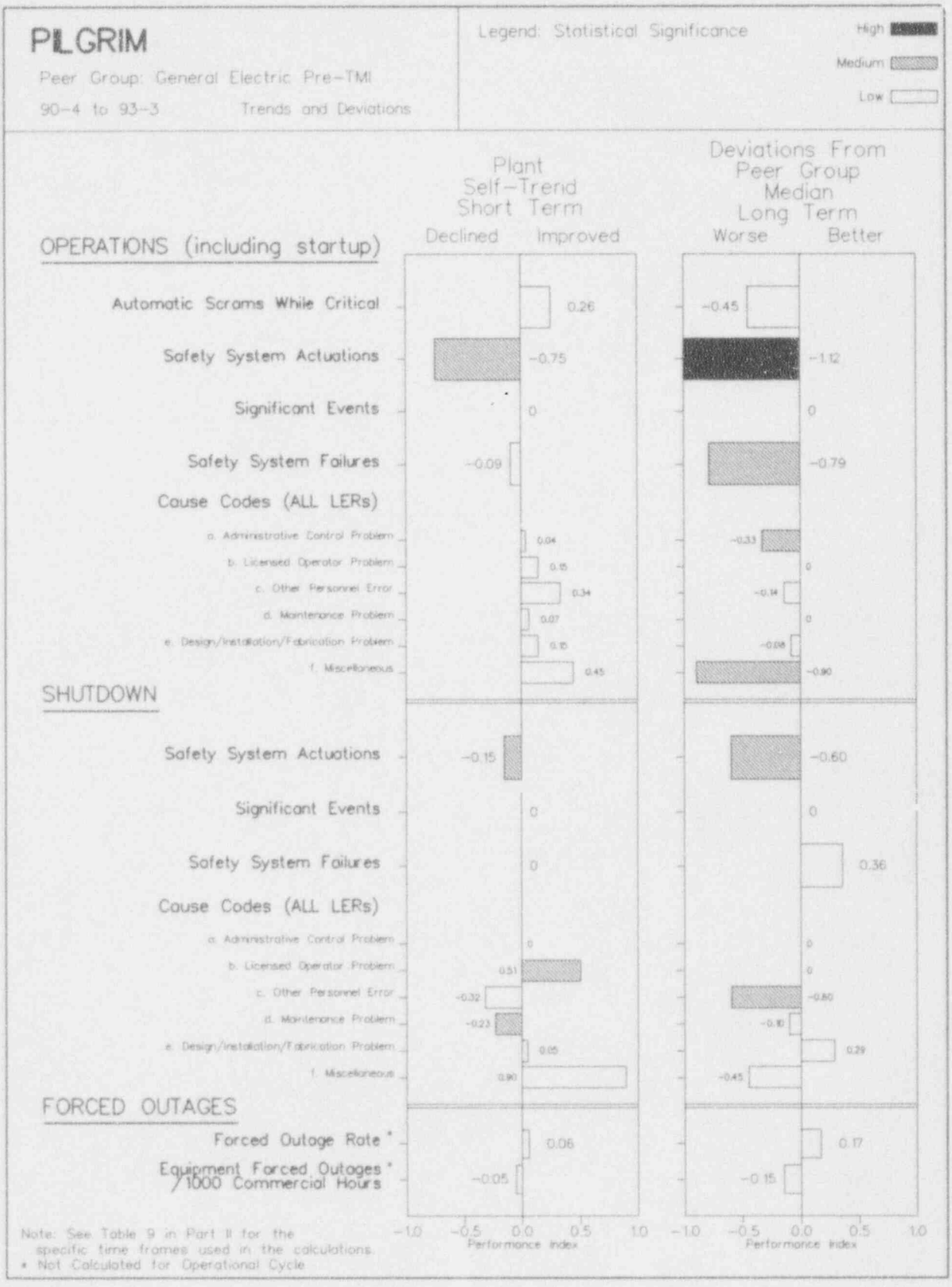

PILGRIM
Peer Group: General Electric Pre-TMI
90-4 to 93-3 Trends and Deviations
Legend: Statistical Significance
High
Medium
Low
Plant Self-Trend Short Term
Deviations From Peer Group Median Long Term
Declined
Improved
Worse
Better
OPERATIONS (including startup)
Automatic Scrams While Critical
0.26
-0.45
Safety System Actuations
-0.75
-1.12
Significant Events
0
0
Safety System Failures
-0.09
-0.79
Cause Codes (ALL LERs)
a. Administrative Control Problem
0.04
-0.33
b. Licensed Operator Problem
0.15
0
c. Other Personnel Error
0.34
-0.14
d. Maintenance Problem
0.07
0
e. Design/Installation/Fabrication Problem
0.15
-0.08
f. Miscellaneous
0.45
-0.90
SHUTDOWN
Safety System Actuations
-0.15
-0.60
Significant Events
0
0
Safety System Failures
0
0.36
Cause Codes (ALL LERs)
a. Administrative Control Problem
0
0
b. Licensed Operator Problem
0.51
0
c. Other Personnel Error
-0.32
-0.80
d. Maintenance Problem
-0.23
-0.10
e. Design/Installation/Fabrication Problem
0.05
0.29
f. Miscellaneous
0.90
-0.45
FORCED OUTAGES
Forced Outage Rate *
0.06
0.17
Equipment Forced Outages * /1000 Commercial Hours
-0.05
-0.15
-1.0 -0.5 0.0 0.5 1.0
Performance Index
-1.0 -0.5 0.0 0.5 1.0
Performance Index
Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.75a

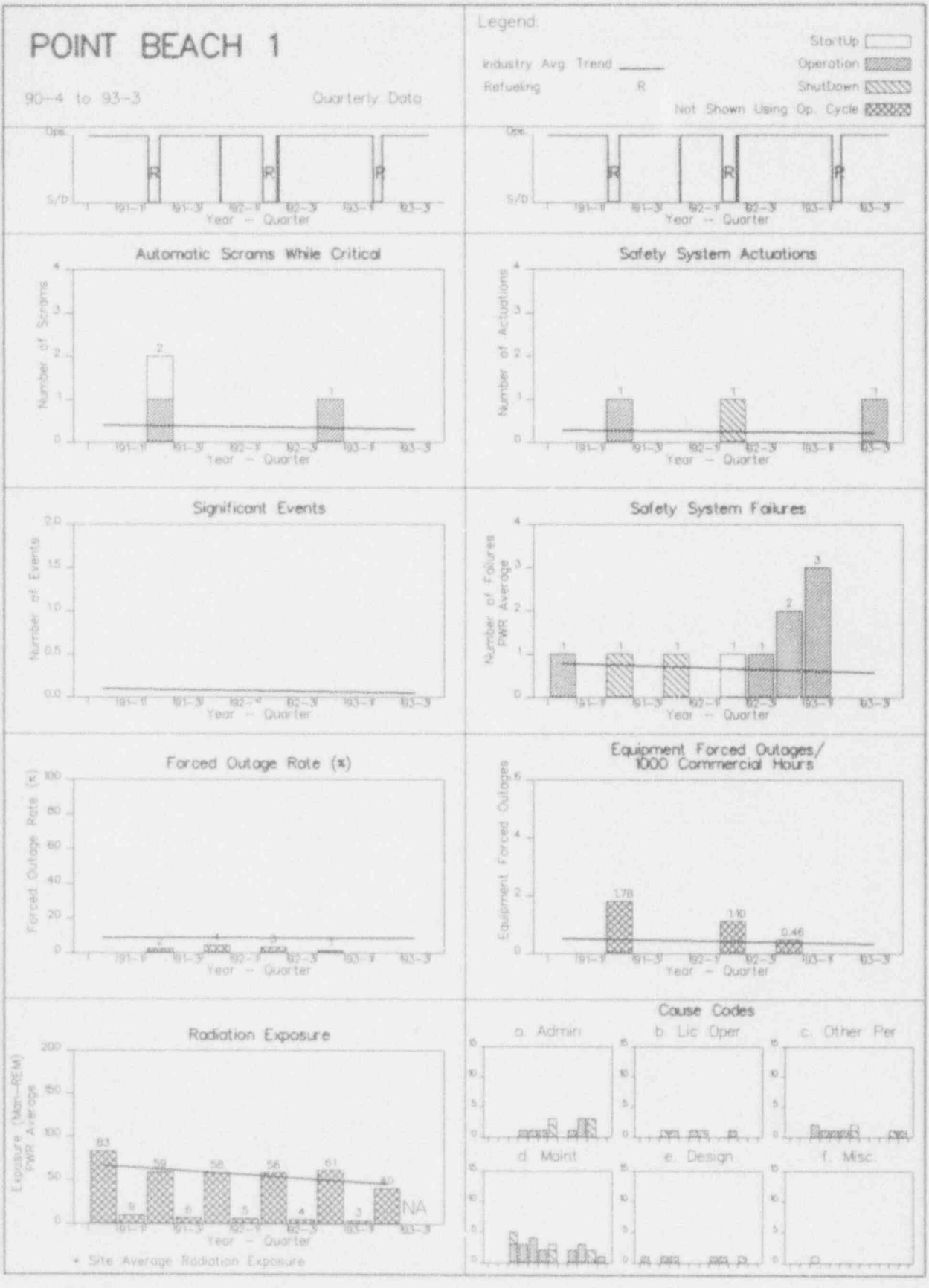
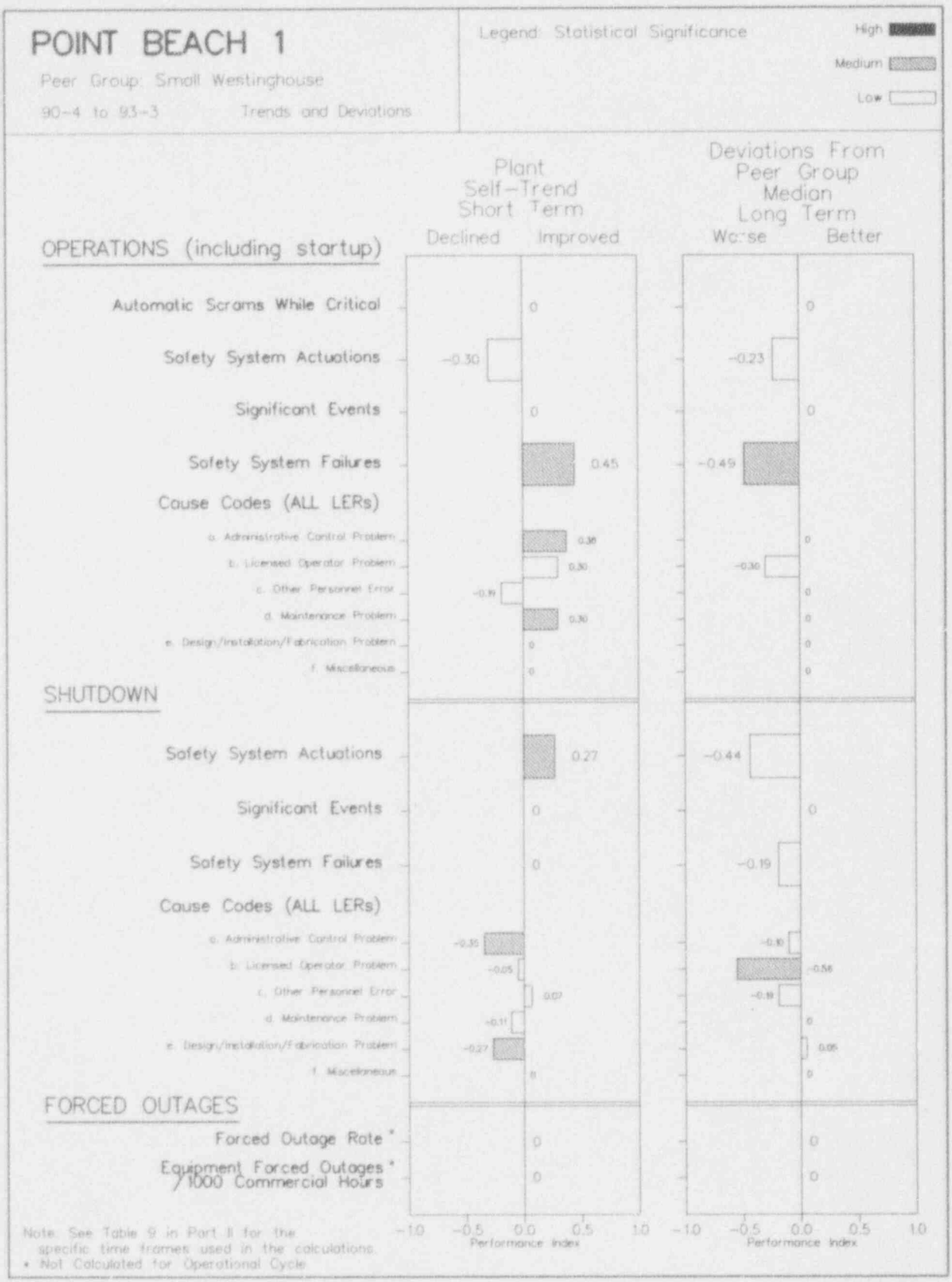

POINT BEACH 1
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Opr.
S/D
Year -- Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
1.78
1.10
0.46
Radiation Exposure
Exposure (Man-REM) PWR Average
83
9
59
8
58
5
56
4
61
3
40
NA
* Site Average Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.75b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.76a

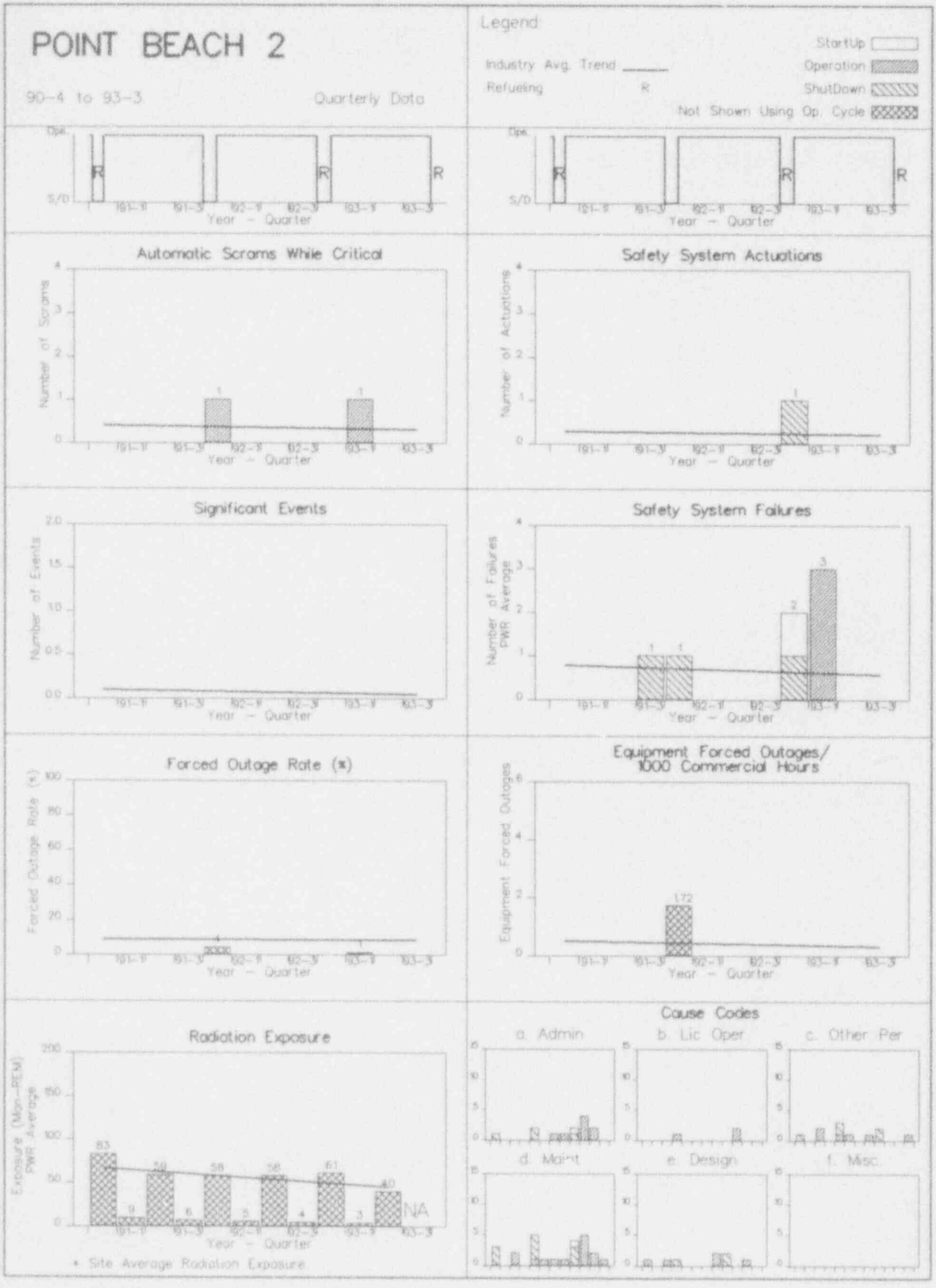
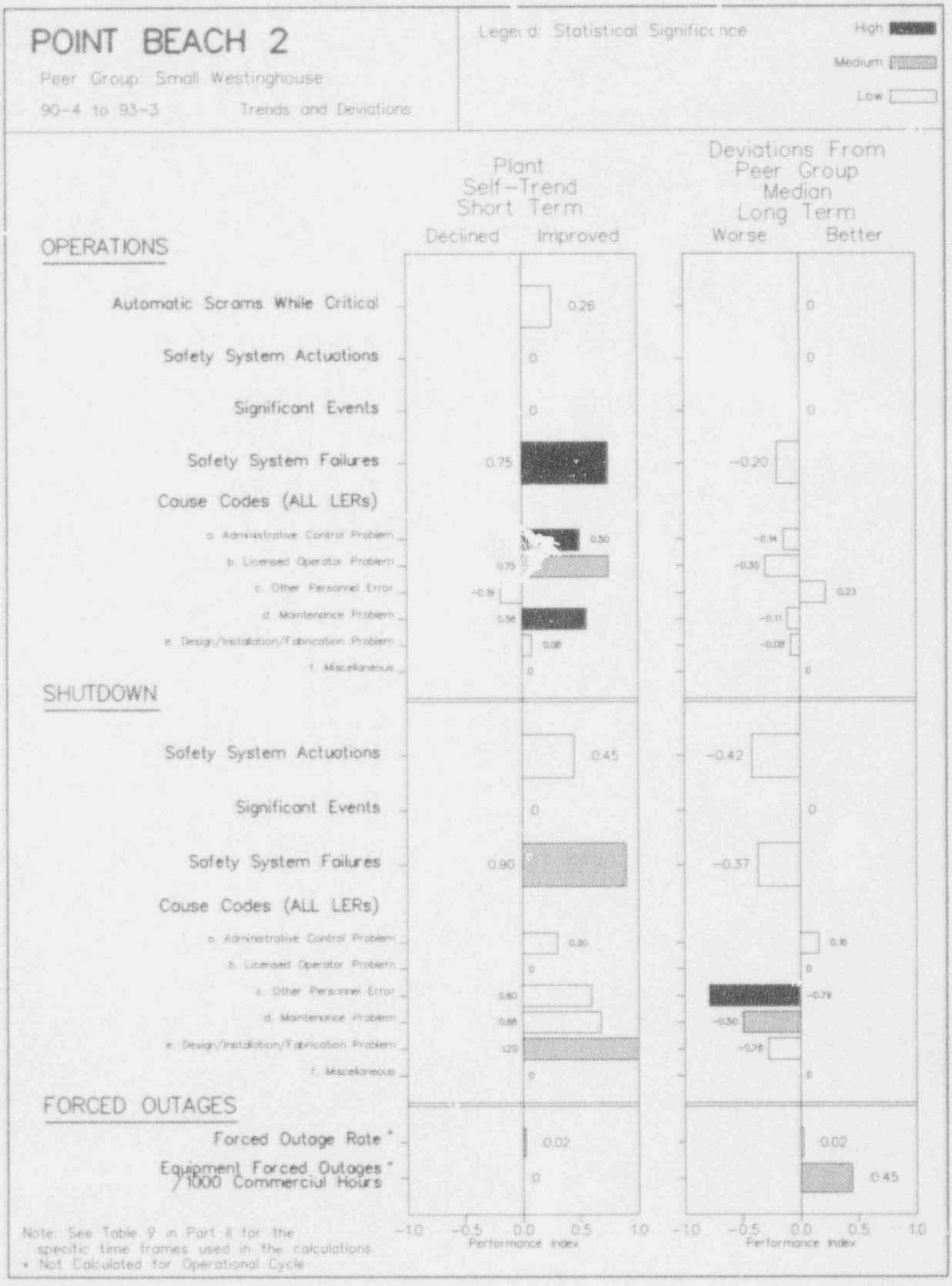

POINT BEACH 2
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Dpk
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM) PWR Average
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.
NA
* Site Average Radiation Exposure

FIGURE 7.7c6



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.77a

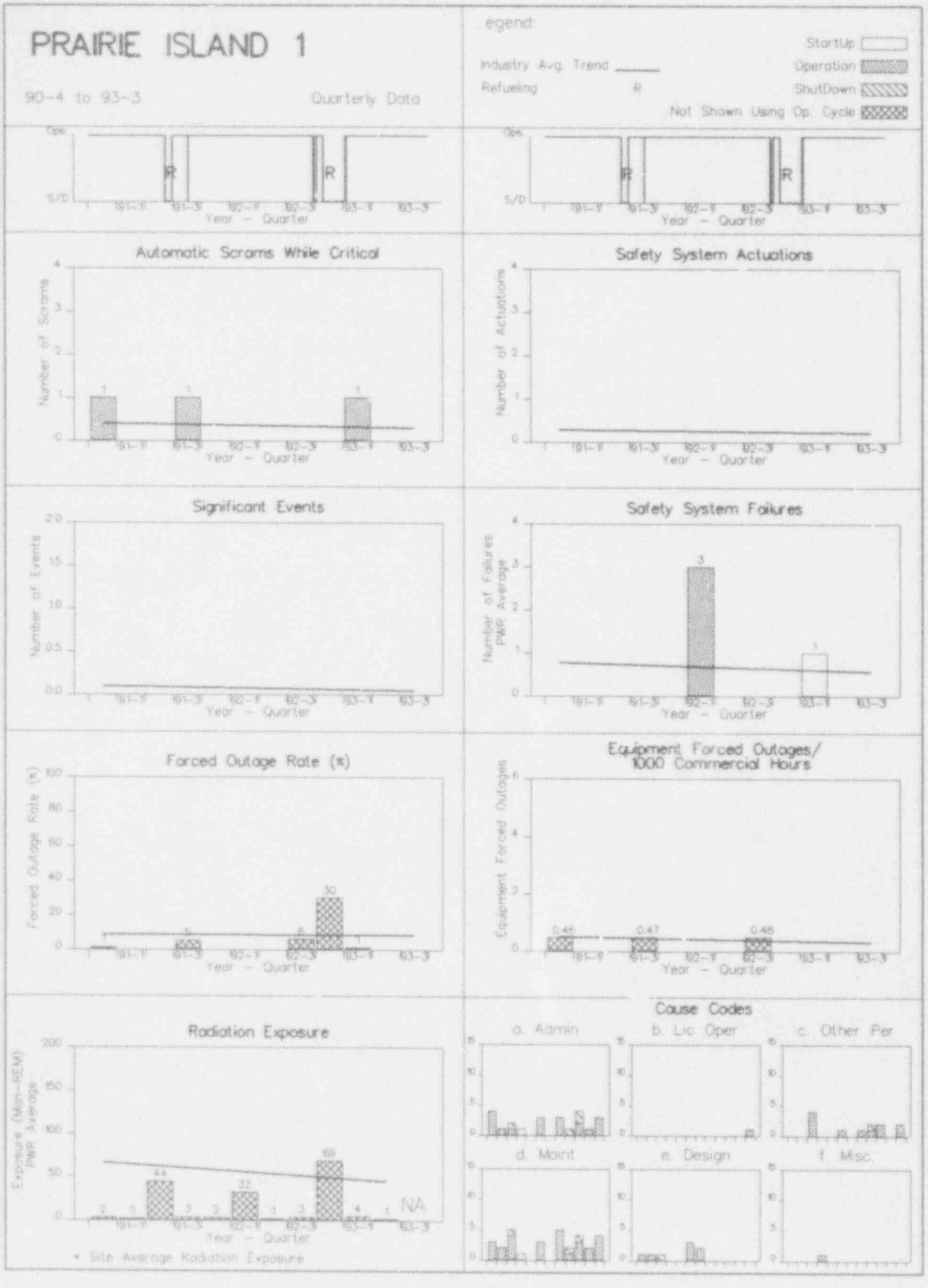
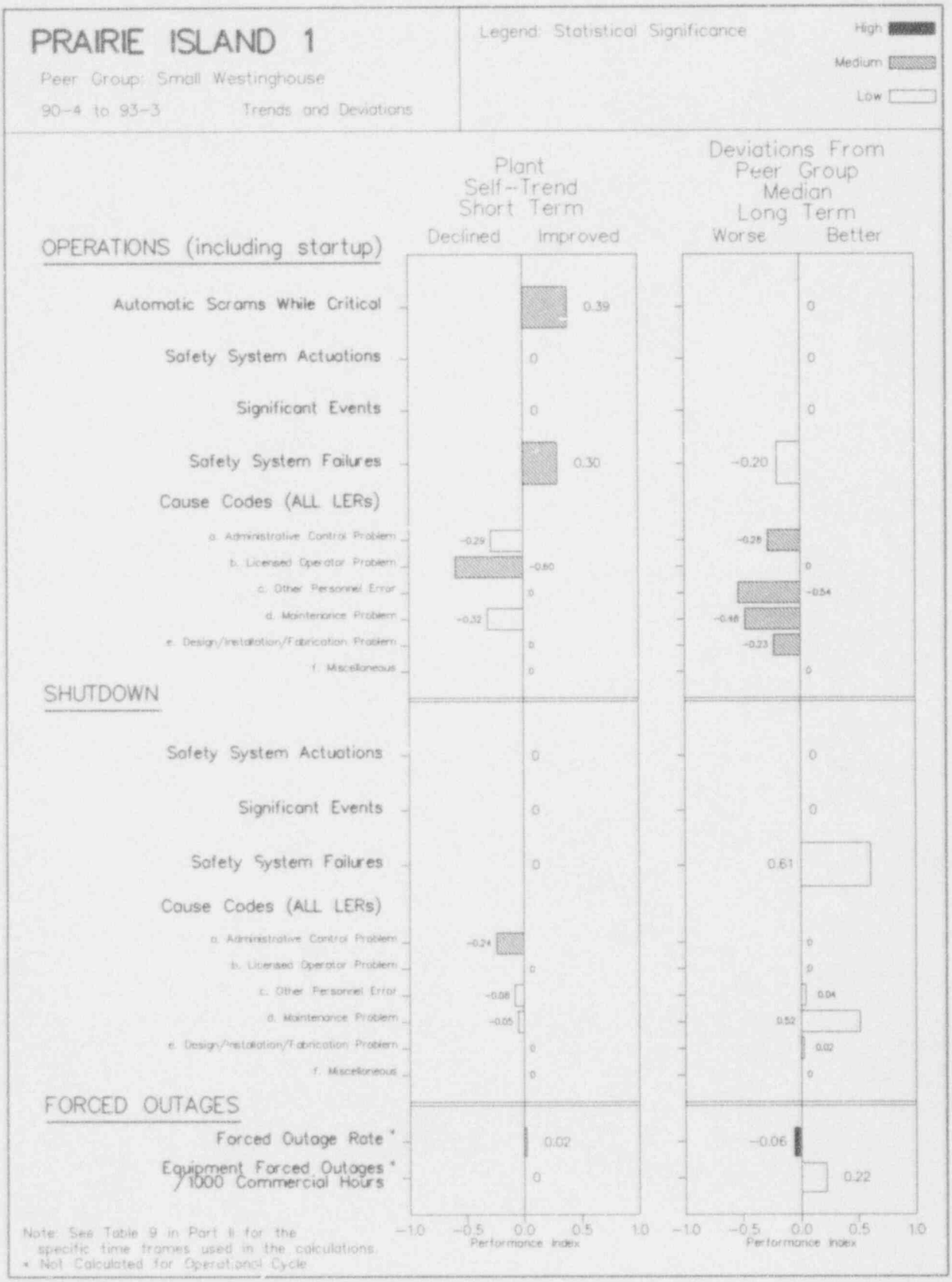

PRAIRIE ISLAND 1
90-4 to 93-3
Quarterly Data
egend:
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM) PWR Average
NA
* Site Average Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.77b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.78a

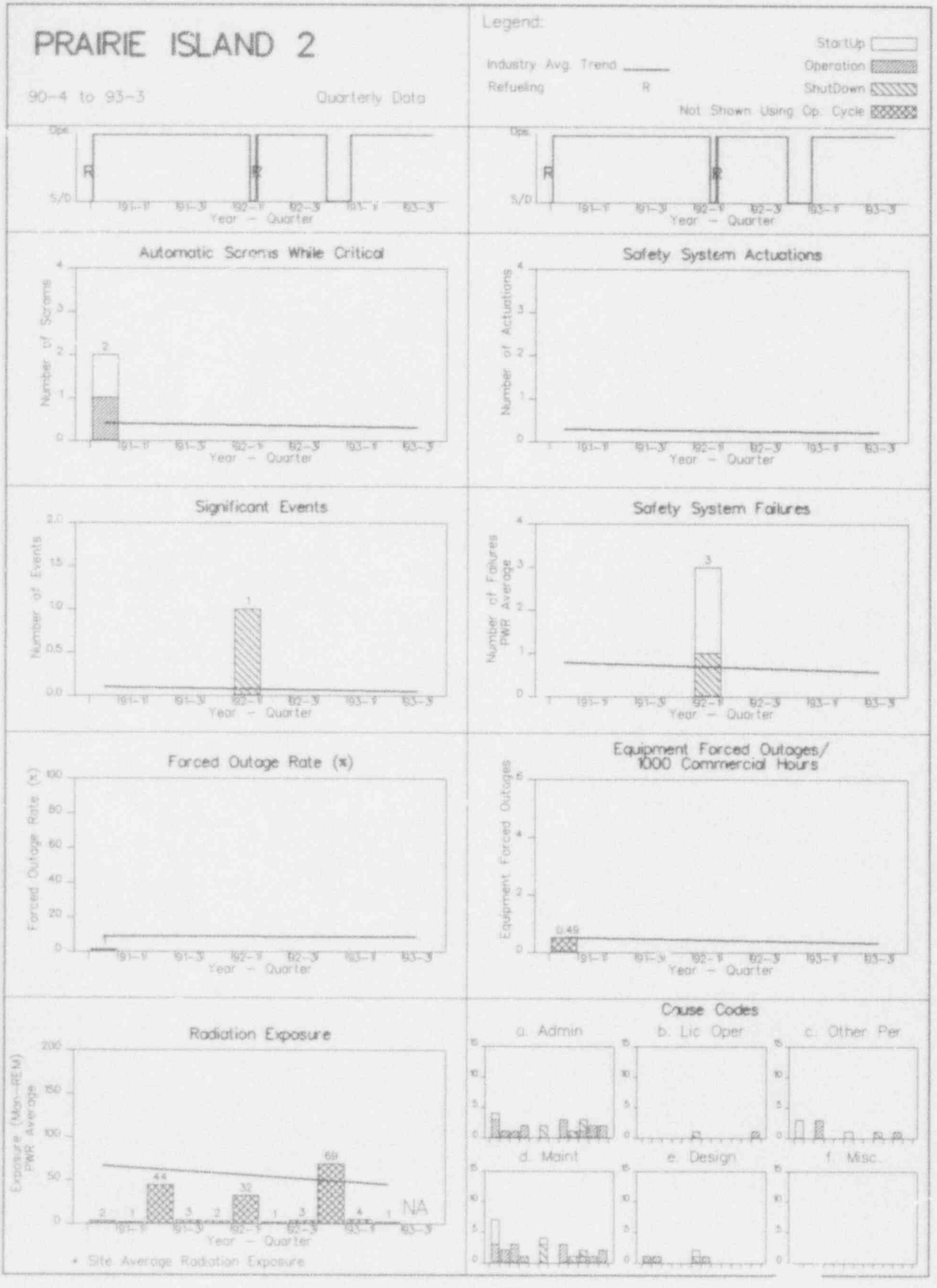

PRAIRIE ISLAND 2
90-4 to 93-3
Quarterly Data
Legend:
StartUp
Operation
ShutDown
Industry Avg. Trend
Refueling
R
Not Shown Using Op. Cycle
Ops.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM) PWR Average
Site Average Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.78b

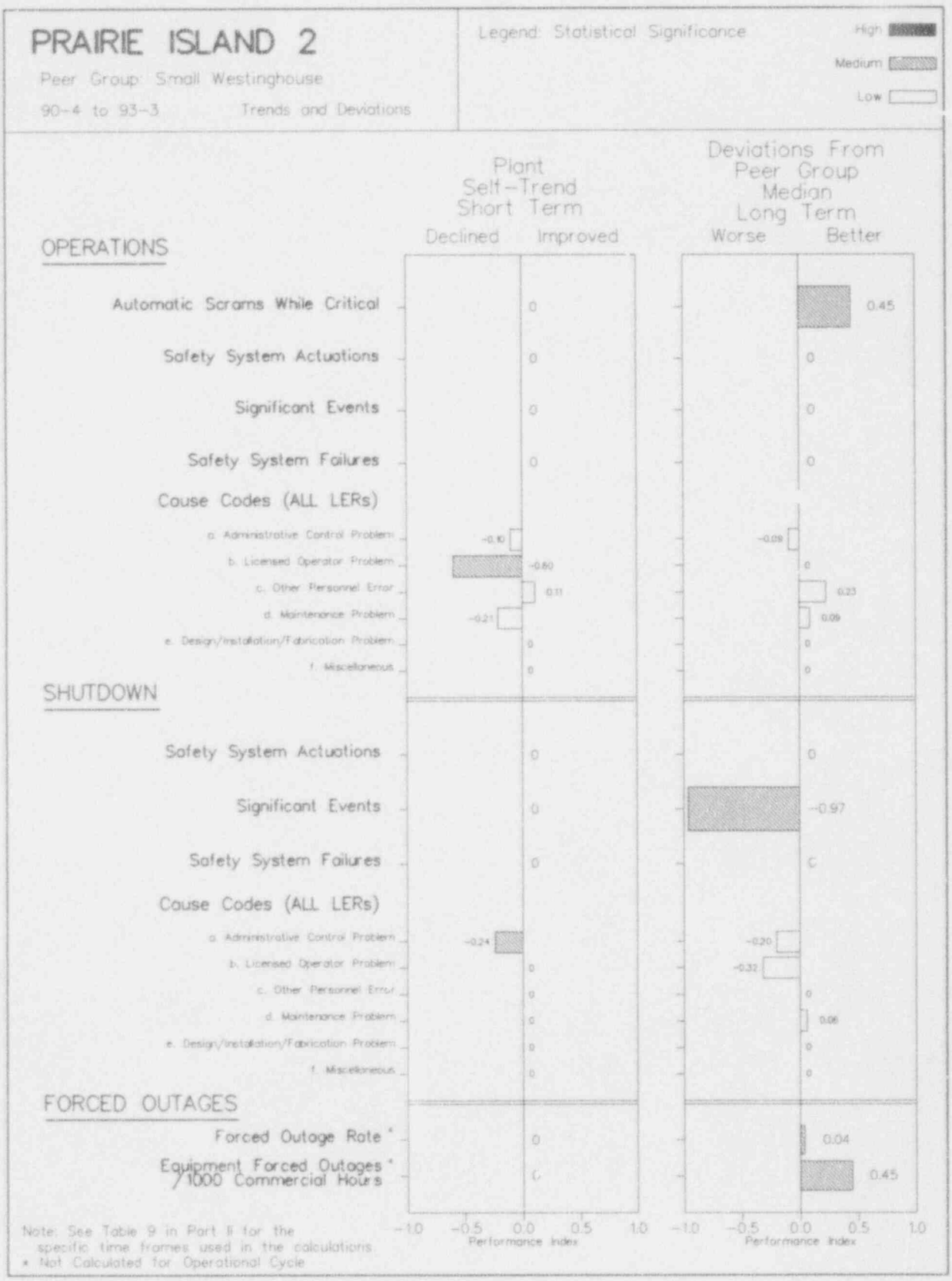

PRAIRIE ISLAND 2
Peer Group: Small Westinghouse
90-4 to 93-3 Trends and Deviations
Legend: Statistical Significance
High
Medium
Low
Plant Self-Trend Short Term
Declined Improved
Deviations From Peer Group Median Long Term
Worse Better
OPERATIONS
Automatic Scrams While Critical
Safety System Actuations
Significant Events
Safety System Failures
Cause Codes (ALL LERs)
a. Administrative Control Problem
b. Licensed Operator Problem
c. Other Personnel Error
d. Maintenance Problem
e. Design/Installation/Fabrication Problem
f. Miscellaneous
SHUTDOWN
Safety System Actuations
Significant Events
Safety System Failures
Cause Codes (ALL LERs)
a. Administrative Control Problem
b. Licensed Operator Problem
c. Other Personnel Error
d. Maintenance Problem
e. Design/Installation/Fabrication Problem
f. Miscellaneous
FORCED OUTAGES
Forced Outage Rate *
Equipment Forced Outages * /1000 Commercial Hours
0.45
-0.10
-0.60
0.11
-0.21
-0.09
0.23
0.09
-0.97
-0.24
-0.20
-0.32
0.06
0.04
0.45
-1.0 -0.5 0.0 0.5 1.0
Performance Index
Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.79a

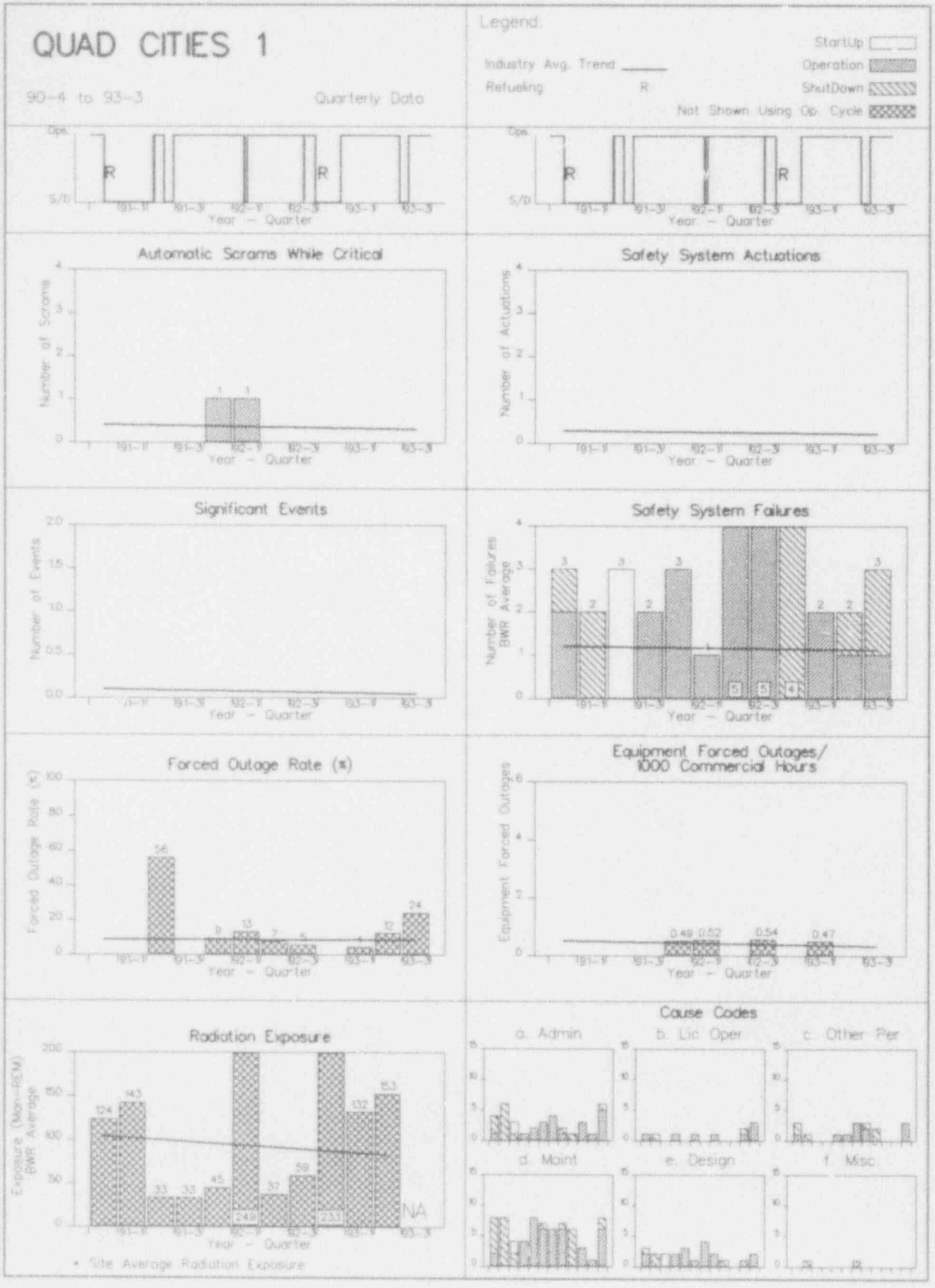
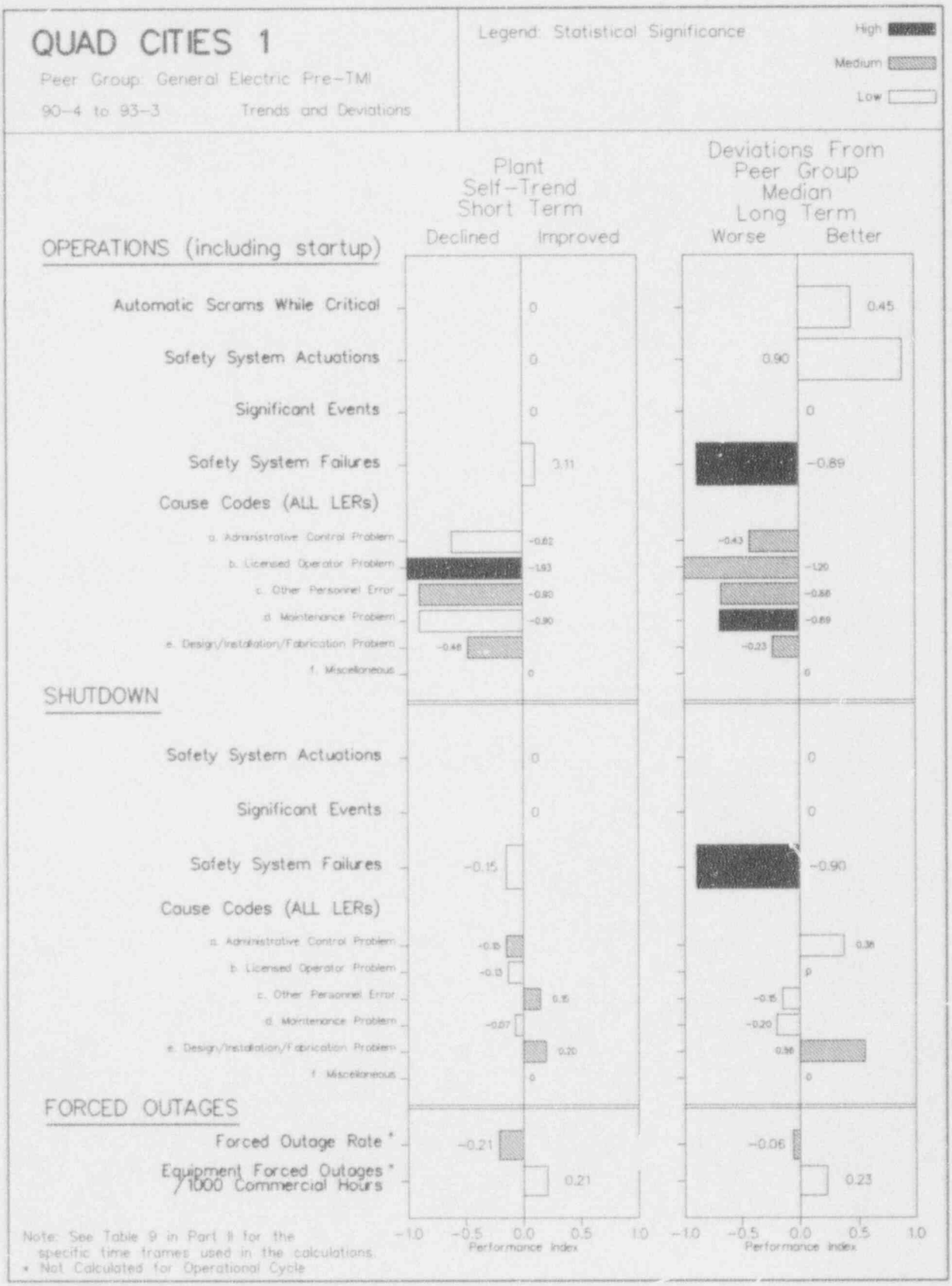

QUAD CITIES 1
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Ops.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures BWR Average
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM) BWR Average
Site Average Radiation Exposure
Cause Codes
a. Admin
b. Lic. Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.79b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.80a

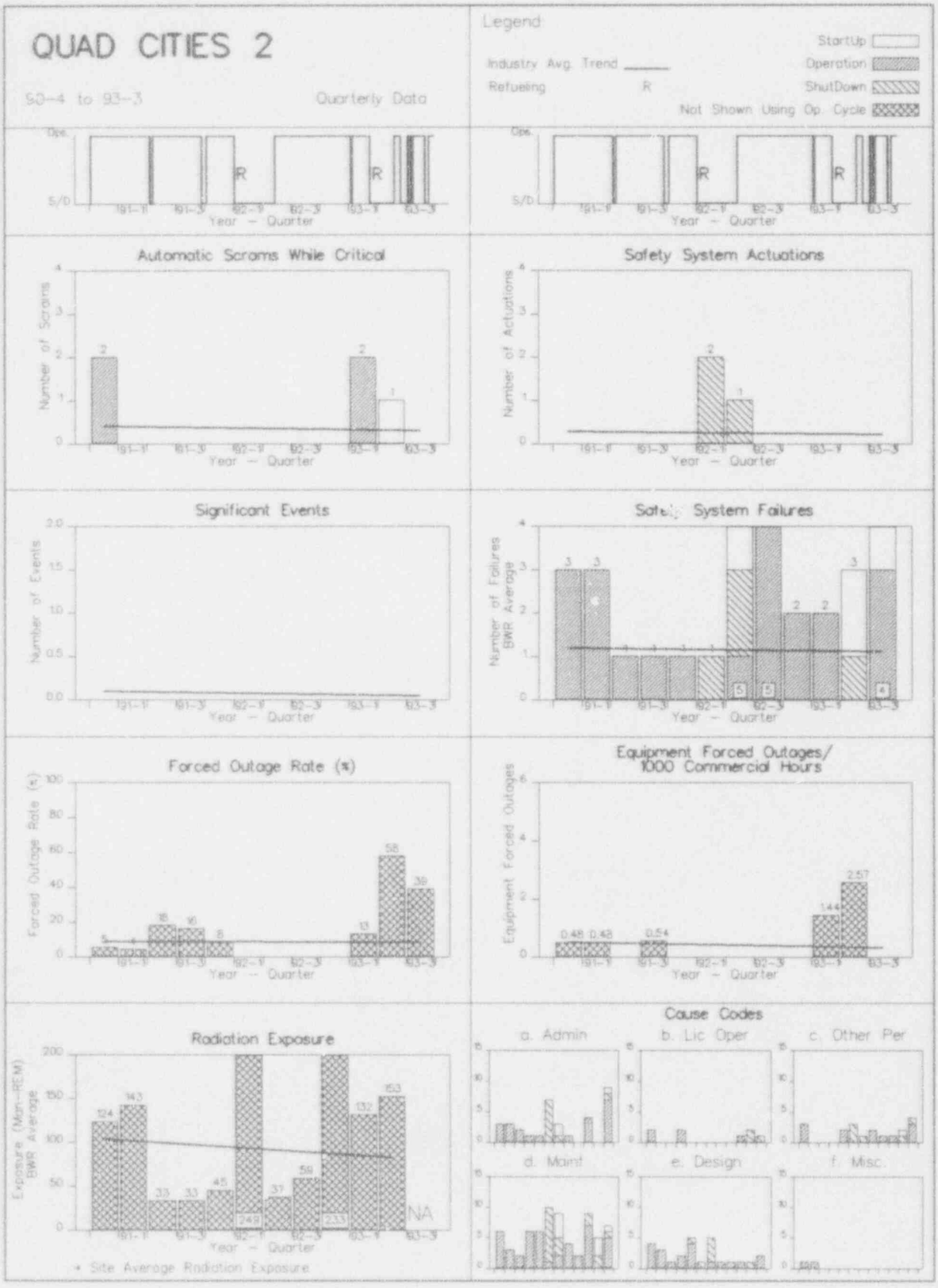

QUAD CITIES 2
90-4 to 93-3
Quarterly Data
Legend
Industry Avg. Trend
Refueling R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Ops.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures BWR Average
Forced Outage Rate (%)
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM) BWR Average
NA
* Site Average Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.80b

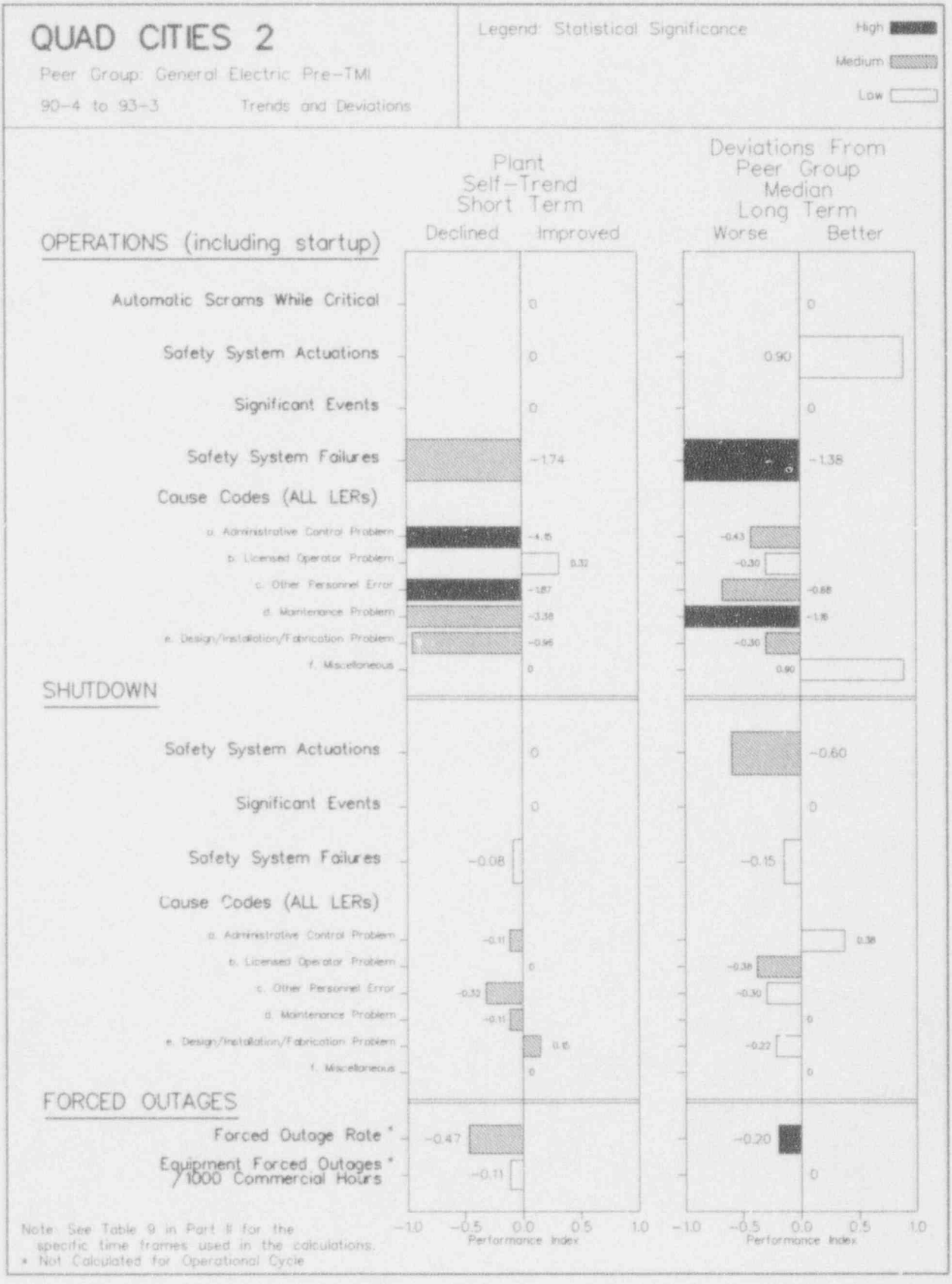

QUAD CITIES 2
Peer Group: General Electric Pre-TMI
90-4 to 93-3 Trends and Deviations
Legend: Statistical Significance
High
Medium
Low
Plant Self-Trend Short Term
Declined
Improved
Deviations From Peer Group Median Long Term
Worse
Better
OPERATIONS (including startup)
Automatic Scrams While Critical
0
0
Safety System Actuations
0
0.90
Significant Events
0
0
Safety System Failures
-1.74
-1.38
Cause Codes (ALL LERs)
a. Administrative Control Problem
-4.15
-0.43
b. Licensed Operator Problem
0.32
-0.30
c. Other Personnel Error
-1.87
-0.88
d. Maintenance Problem
-3.38
-1.18
e. Design/Installation/Fabrication Problem
-0.96
-0.30
f. Miscellaneous
0
0.90
SHUTDOWN
Safety System Actuations
0
-0.60
Significant Events
0
0
Safety System Failures
-0.08
-0.15
Cause Codes (ALL LERs)
a. Administrative Control Problem
-0.11
0.38
b. Licensed Operator Problem
0
-0.38
c. Other Personnel Error
-0.32
-0.30
d. Maintenance Problem
-0.11
0
e. Design/Installation/Fabrication Problem
0.15
-0.22
f. Miscellaneous
0
0
FORCED OUTAGES
Forced Outage Rate *
-0.47
-0.20
Equipment Forced Outages * /1000 Commercial Hours
-0.11
0
-1.0
-0.5
0.0
0.5
1.0
Performance Index
Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.81a

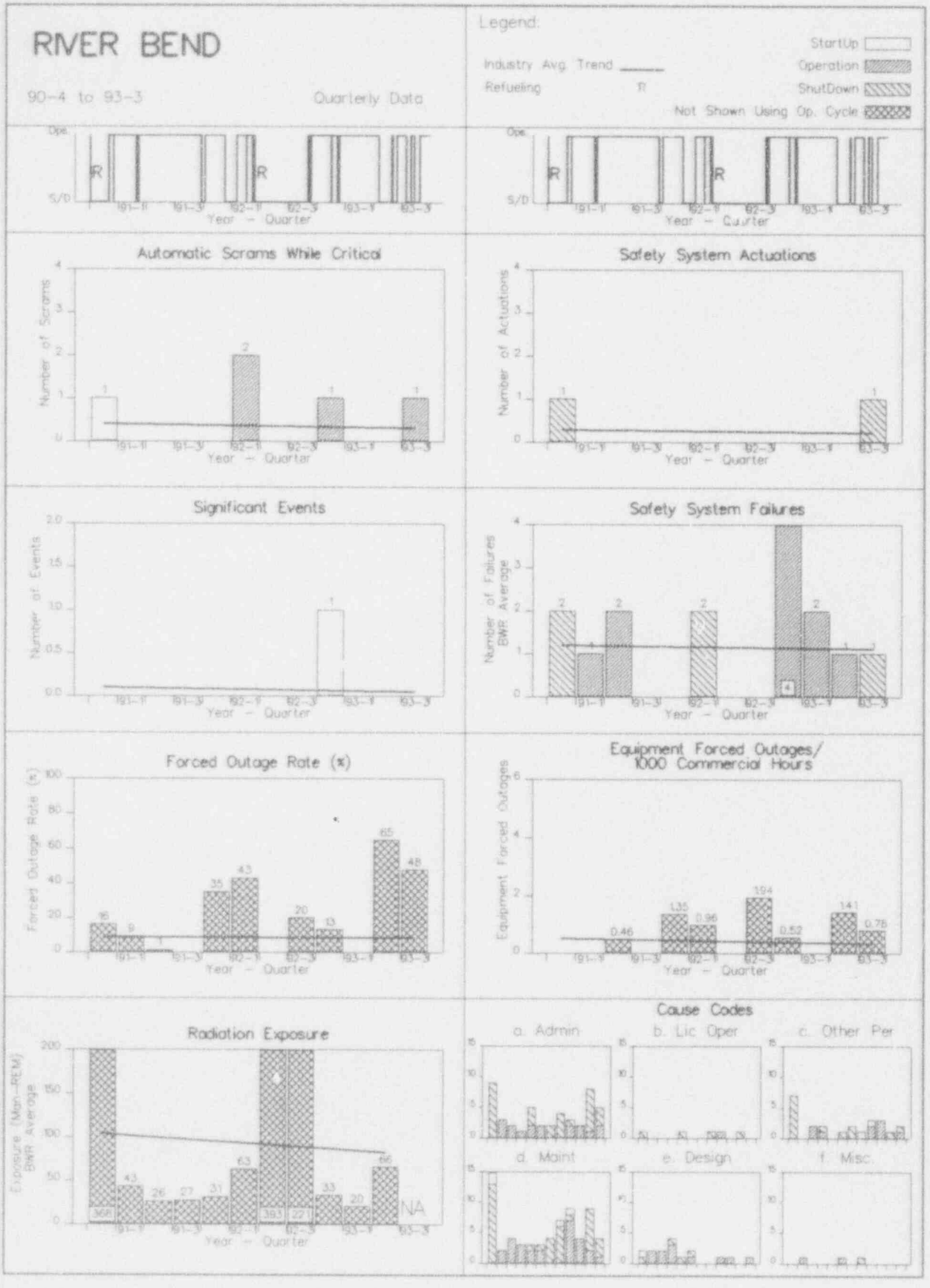
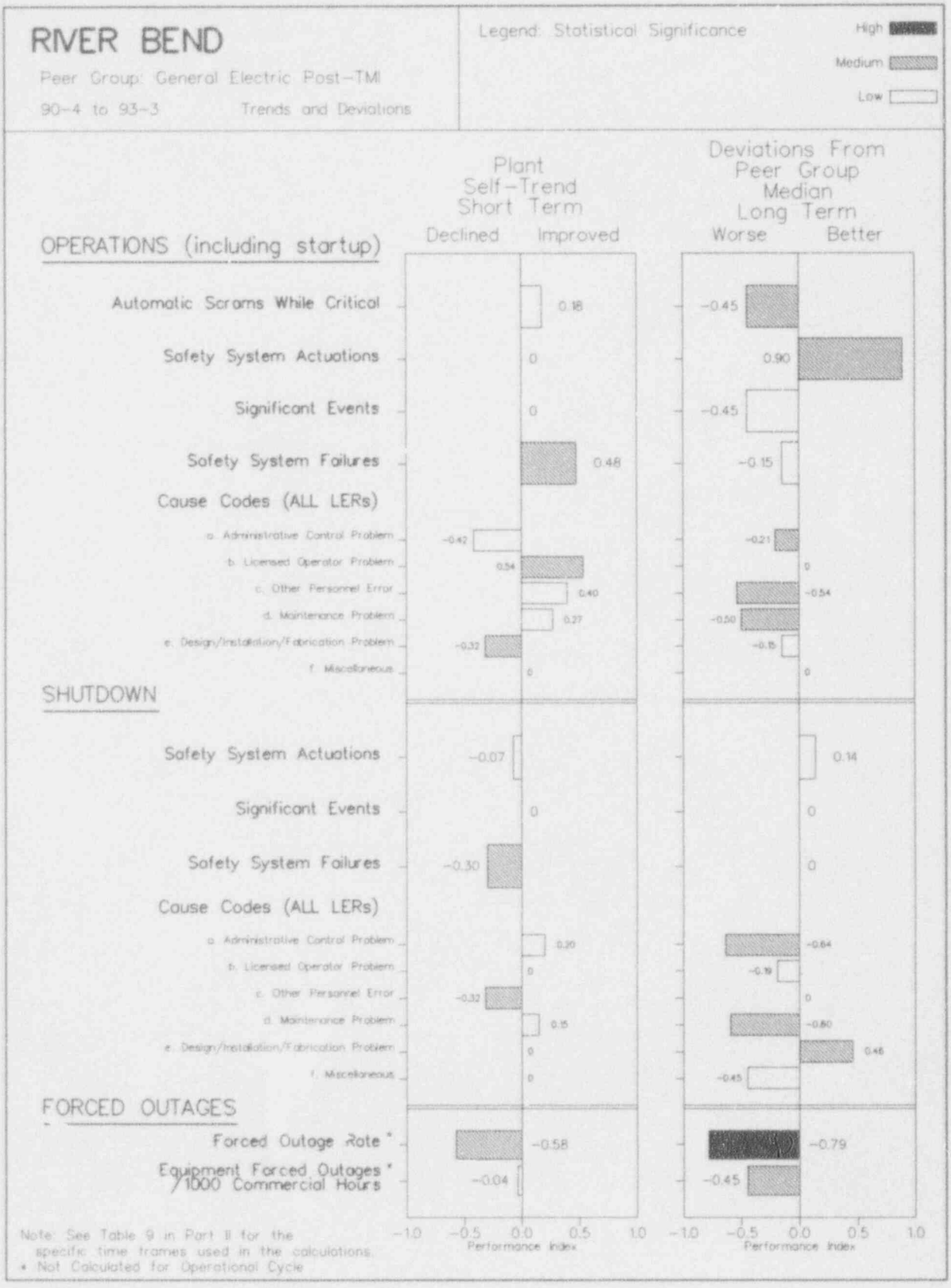

RIVER BEND
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Ope.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures
BWR Average
Forced Outage Rate (%)
Equipment Forced Outages/
1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM)
BWR Average
NA
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.81b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.82a

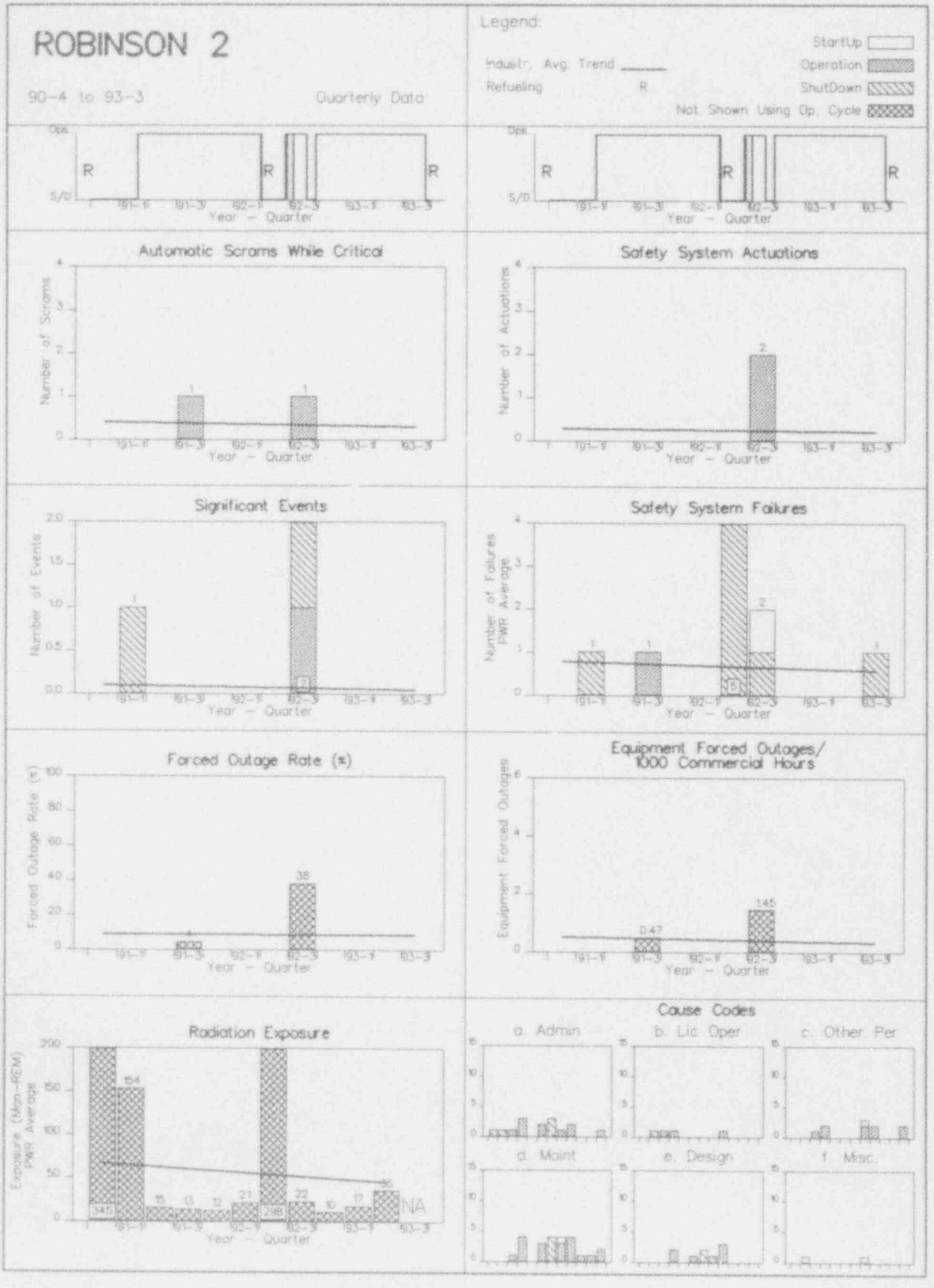
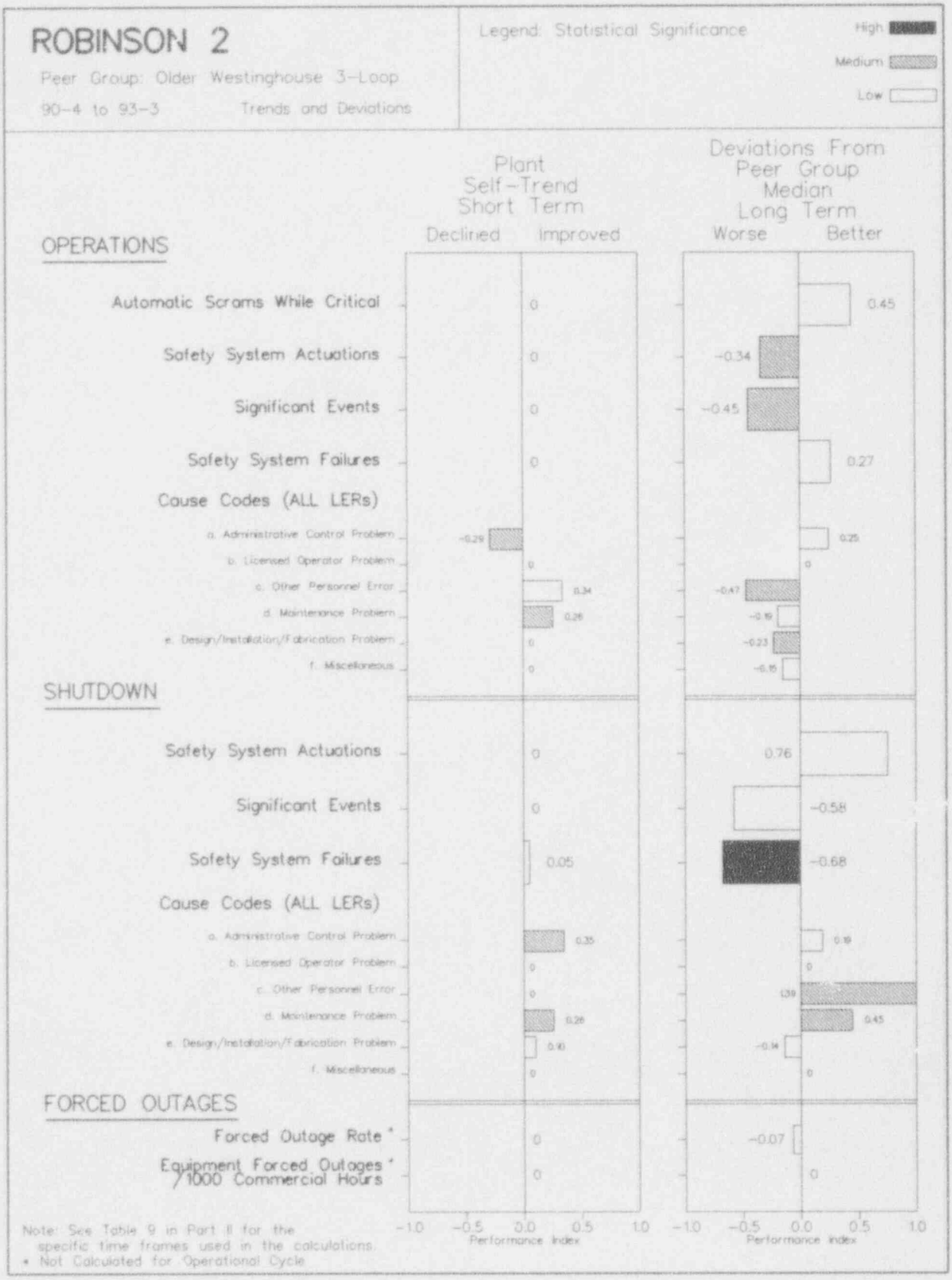

ROBINSON 2
90-4 to 93-3
Quarterly Data
Legend:
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Industry Avg. Trend
Refueling R
Ops
S/D
R
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
0.47
1.45
Radiation Exposure
Exposure (Man-REM) PWR Average
154
NA
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.82b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.83a

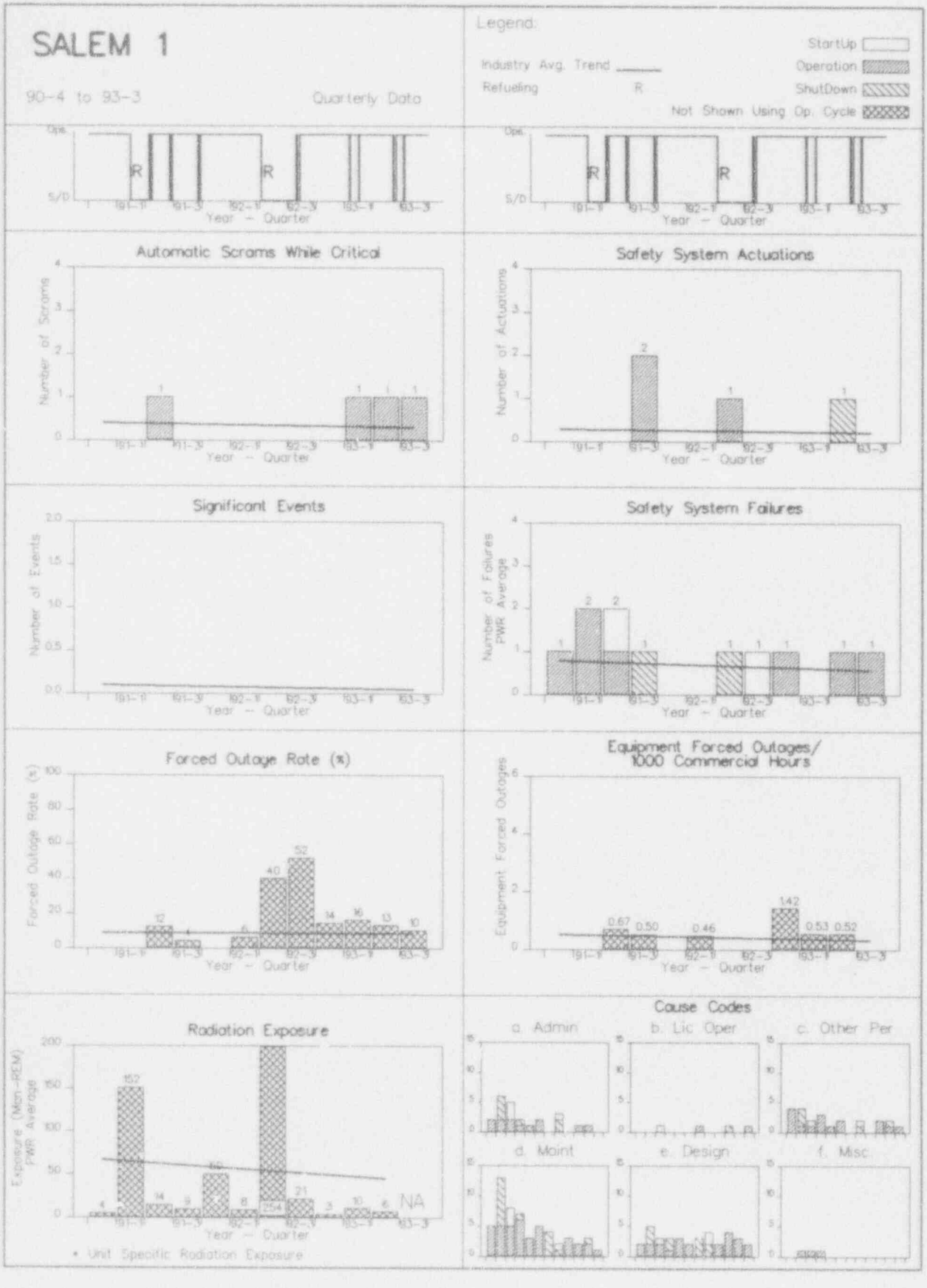

SALEM 1
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Opn.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures
PWR Average
Forced Outage Rate (%)
Forced Outage Rate (%)
Equipment Forced Outages/
1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM)
PWR Average
NA
* Unit Specific Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.8-6b

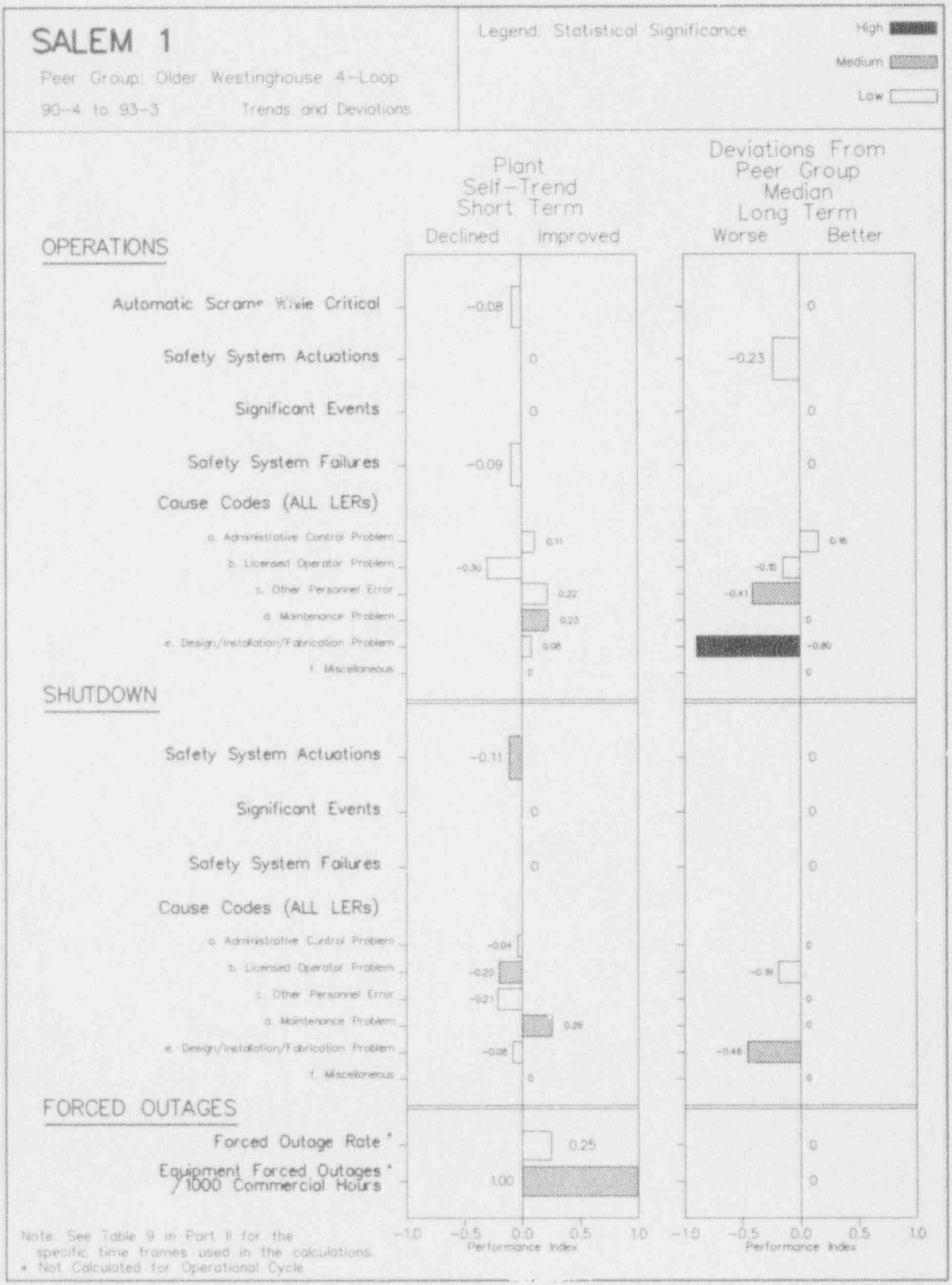

SALEM 1
Peer Group: Older Westinghouse 4-Loop
90-4 to 93-3 Trends and Deviations
Legend: Statistical Significance
High
Medium
Low
Plant Self-Trend Short Term
Declined Improved
Deviations From Peer Group Median Long Term
Worse Better
OPERATIONS
Automatic Scram While Critical
-0.08
0
Safety System Actuations
0
-0.23
Significant Events
0
0
Safety System Failures
-0.09
0
Cause Codes (ALL LERs)
a. Administrative Control Problem
0.11
0.16
b. Licensed Operator Problem
-0.30
-0.15
c. Other Personnel Error
0.22
-0.41
d. Maintenance Problem
0.23
0
e. Design/Installation/Fabrication Problem
0.08
-0.80
f. Miscellaneous
0
0
SHUTDOWN
Safety System Actuations
-0.11
0
Significant Events
0
0
Safety System Failures
0
0
Cause Codes (ALL LERs)
a. Administrative Control Problem
-0.04
0
b. Licensed Operator Problem
-0.20
-0.19
c. Other Personnel Error
-0.21
0
d. Maintenance Problem
0.28
0
e. Design/Installation/Fabrication Problem
-0.08
-0.46
f. Miscellaneous
0
0
FORCED OUTAGES
Forced Outage Rate *
0.25
0
Equipment Forced Outages * /1000 Commercial Hours
1.00
0
-1.0 -0.5 0.0 0.5 1.0
Performance Index
-1.0 -0.5 0.0 0.5 1.0
Performance Index
Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.84a

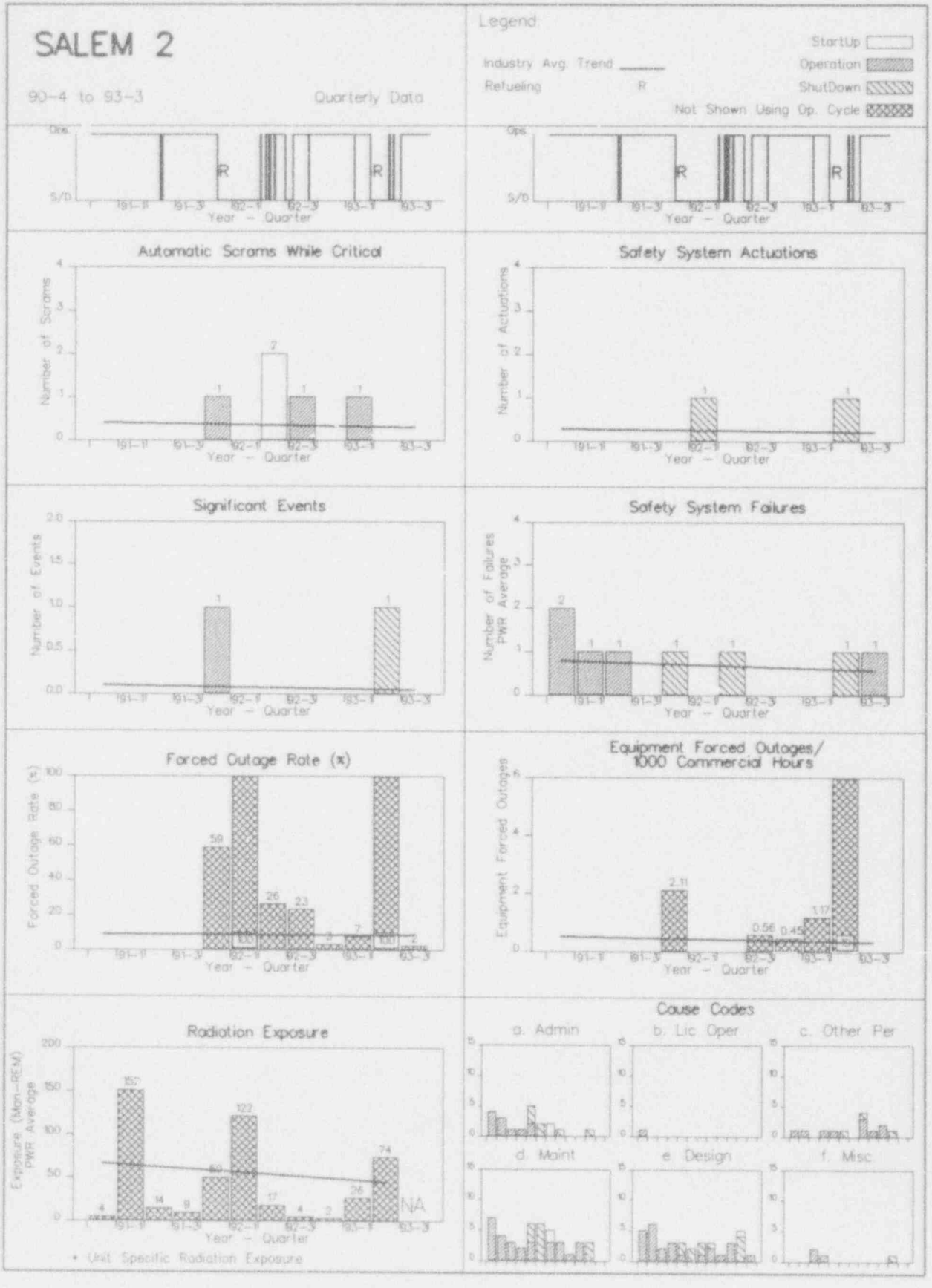

SALEM 2
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Ops.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures
PWR Average
Forced Outage Rate (%)
Equipment Forced Outages/
1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM)
PWR Average
NA
* Unit Specific Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc

FIGURE 7.84b

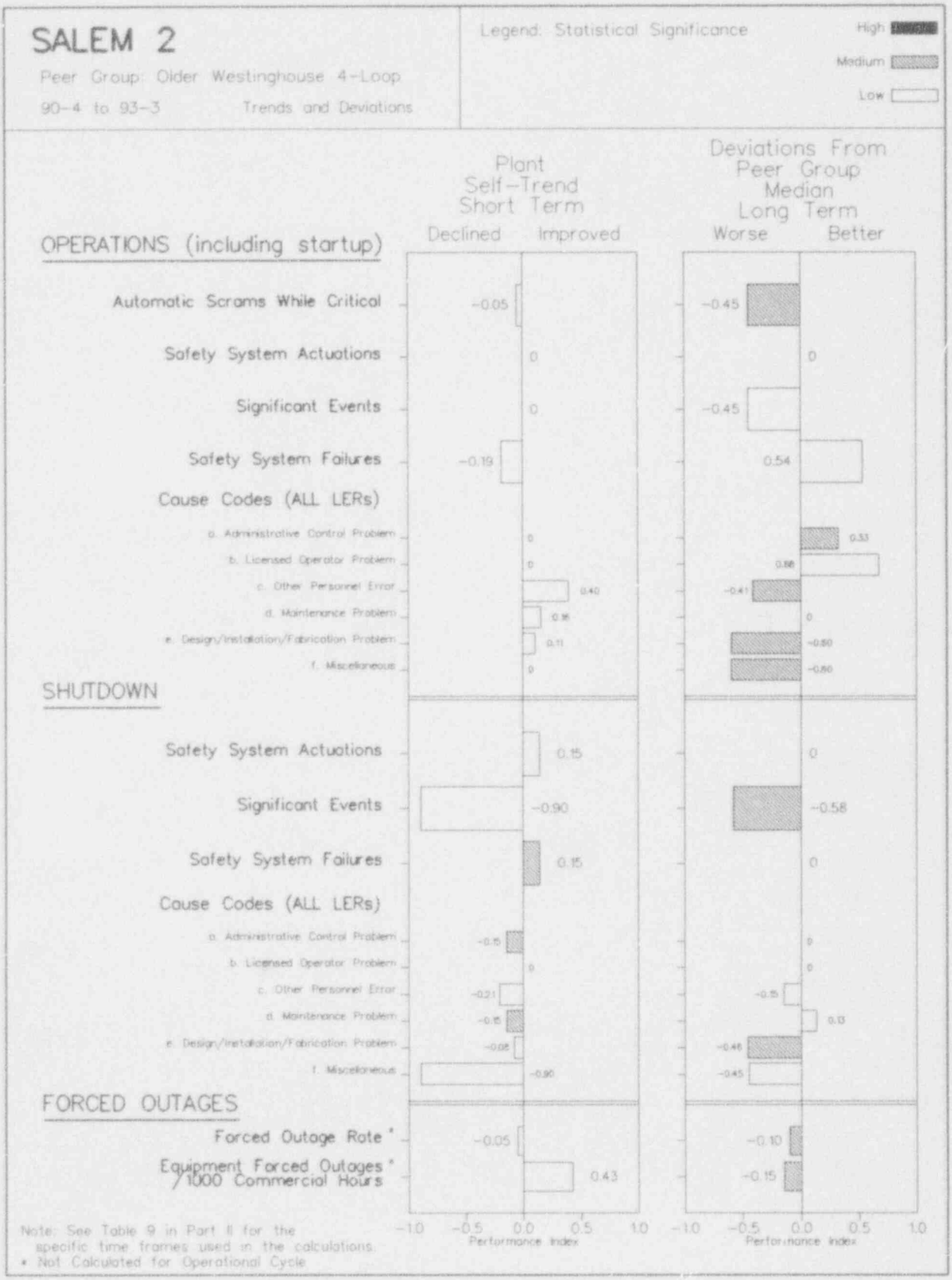

SALEM 2
Peer Group: Older Westinghouse 4-Loop
90-4 to 93-3 Trends and Deviations
Legend: Statistical Significance
High
Medium
Low
Plant Self-Trend Short Term
Declined
Improved
Deviations From Peer Group Median Long Term
Worse
Better
OPERATIONS (including startup)
Automatic Scrams While Critical
-0.05
-0.45
Safety System Actuations
0
0
Significant Events
0
-0.45
Safety System Failures
-0.19
0.54
Cause Codes (ALL LERs)
a. Administrative Control Problem
0
0.33
b. Licensed Operator Problem
0
0.88
c. Other Personnel Error
0.40
-0.41
d. Maintenance Problem
0.16
0
e. Design/Installation/Fabrication Problem
0.11
-0.50
f. Miscellaneous
0
-0.50
SHUTDOWN
Safety System Actuations
0.15
0
Significant Events
-0.90
-0.58
Safety System Failures
0.15
0
Cause Codes (ALL LERs)
a. Administrative Control Problem
-0.15
0
b. Licensed Operator Problem
0
0
c. Other Personnel Error
-0.21
-0.15
d. Maintenance Problem
-0.15
0.13
e. Design/Installation/Fabrication Problem
-0.05
-0.46
f. Miscellaneous
-0.90
-0.45
FORCED OUTAGES
Forced Outage Rate *
-0.05
-0.10
Equipment Forced Outages * /1000 Commercial Hours
0.43
-0.15
-1.0 -0.5 0.0 0.5 1.0
Performance Index
-1.0 -0.5 0.0 0.5 1.0
Performance Index
Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.85a

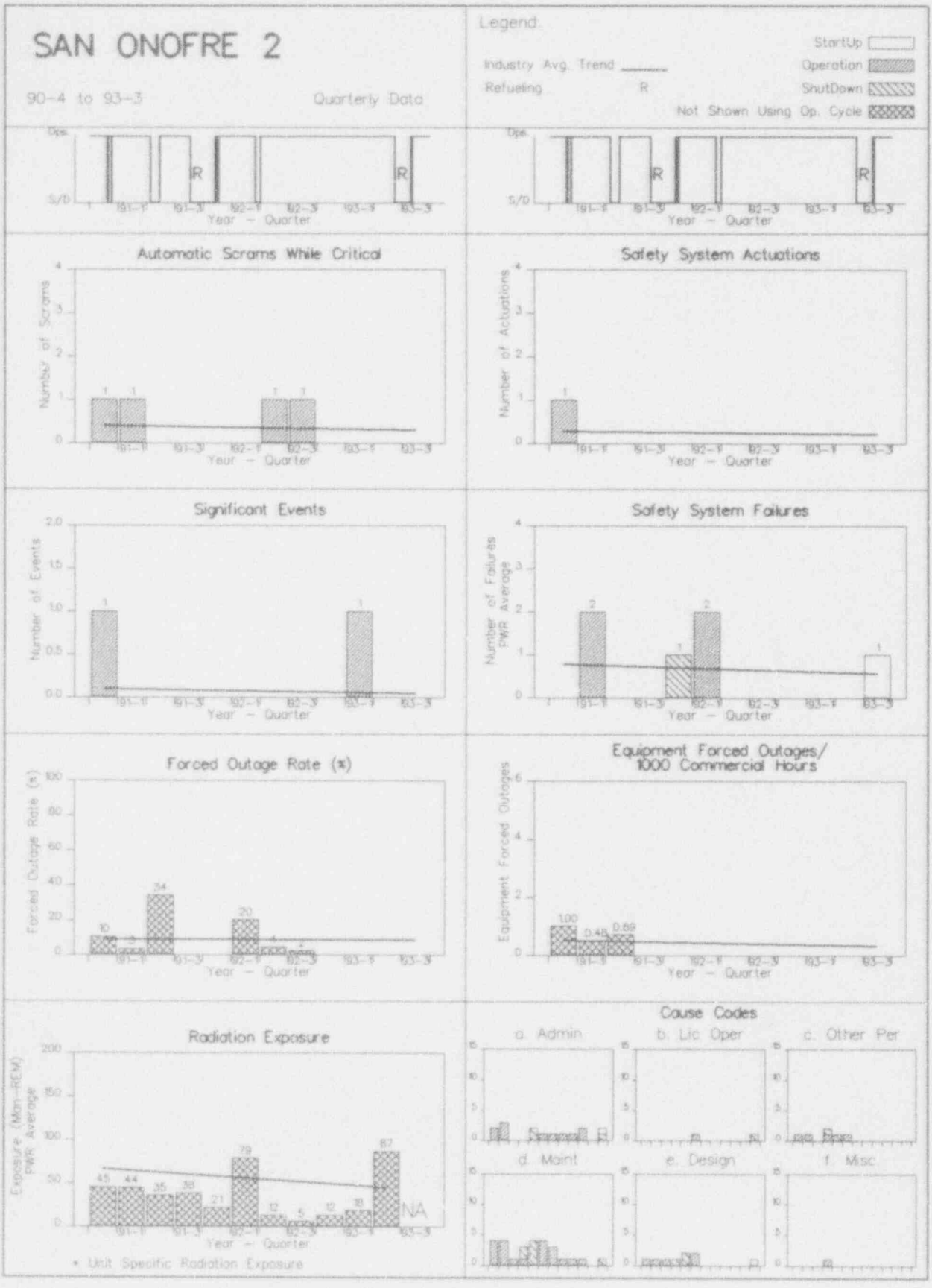
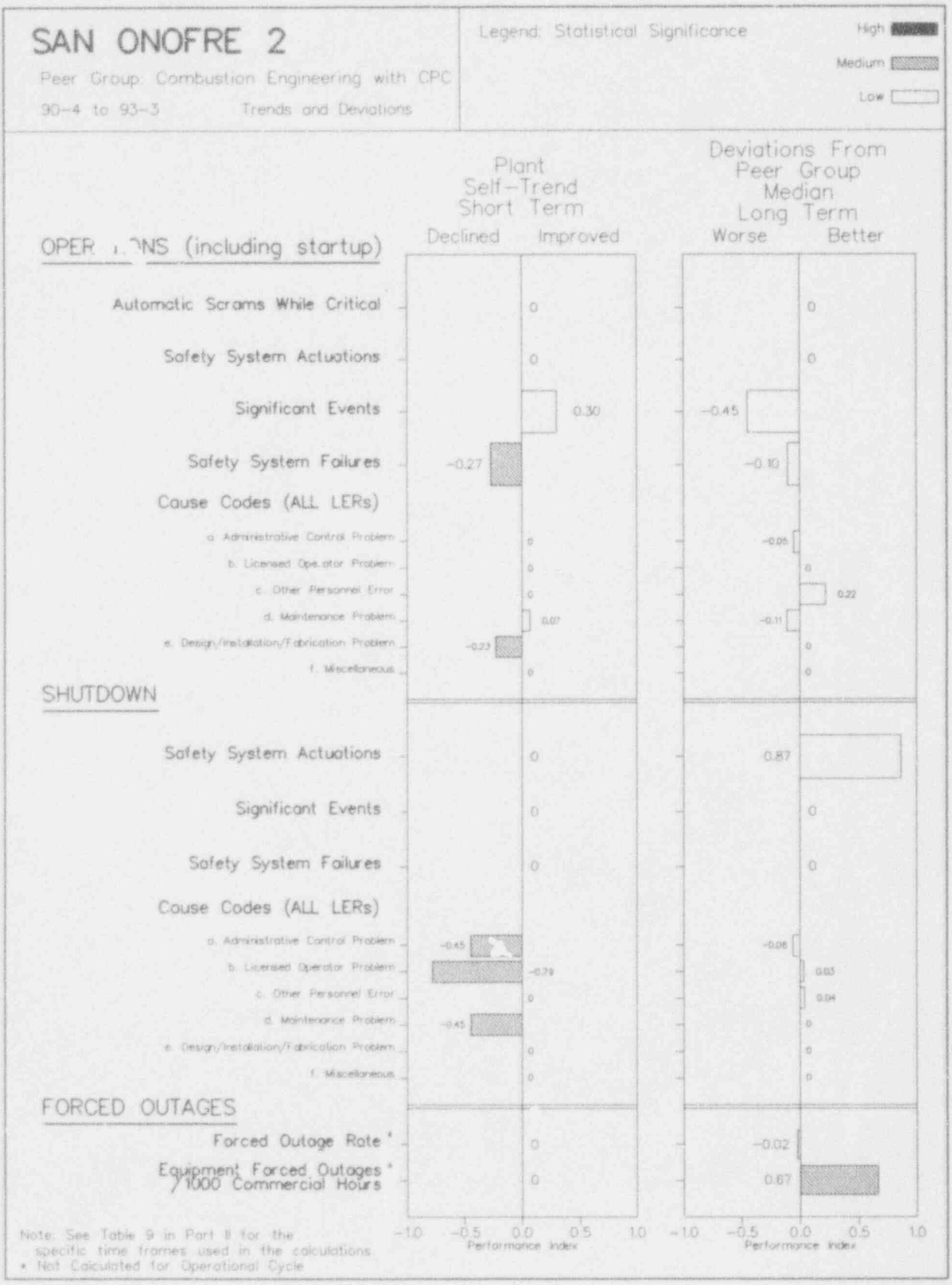

SAN ONOFRE 2
90-4 to 93-3
Quarterly Data
Legend:
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Industry Avg. Trend
Refueling R
Dps.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM) PWR Average
NA
* Unit Specific Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc

FIGURE 7.85b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.86a

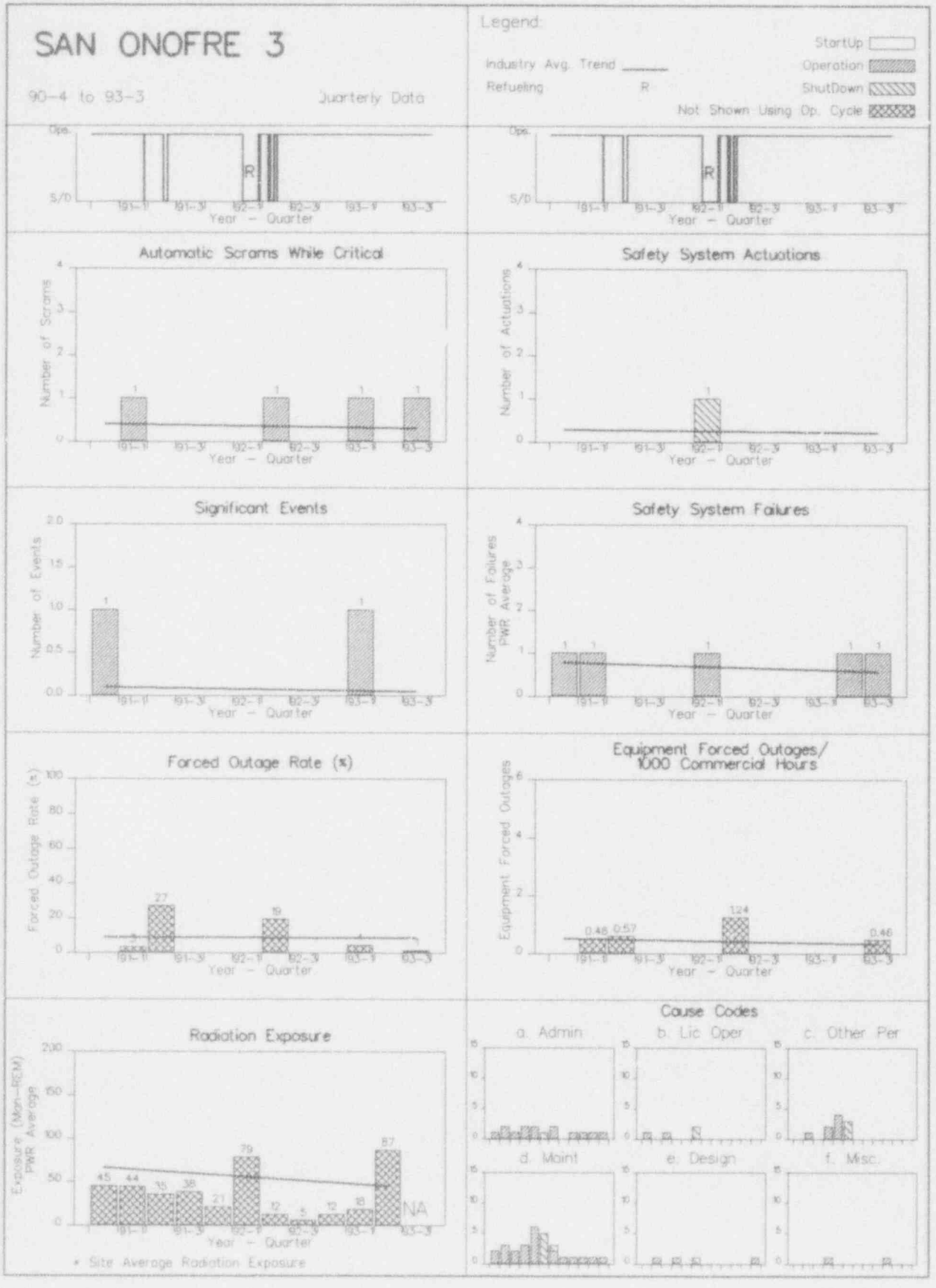

SAN ONOFRE 3
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Ops.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
0.48
0.57
124
0.46
Radiation Exposure
Exposure (Man-REM) PWR Average
45
44
35
38
27
79
12
5
12
18
87
NA
* Site Average Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.86b

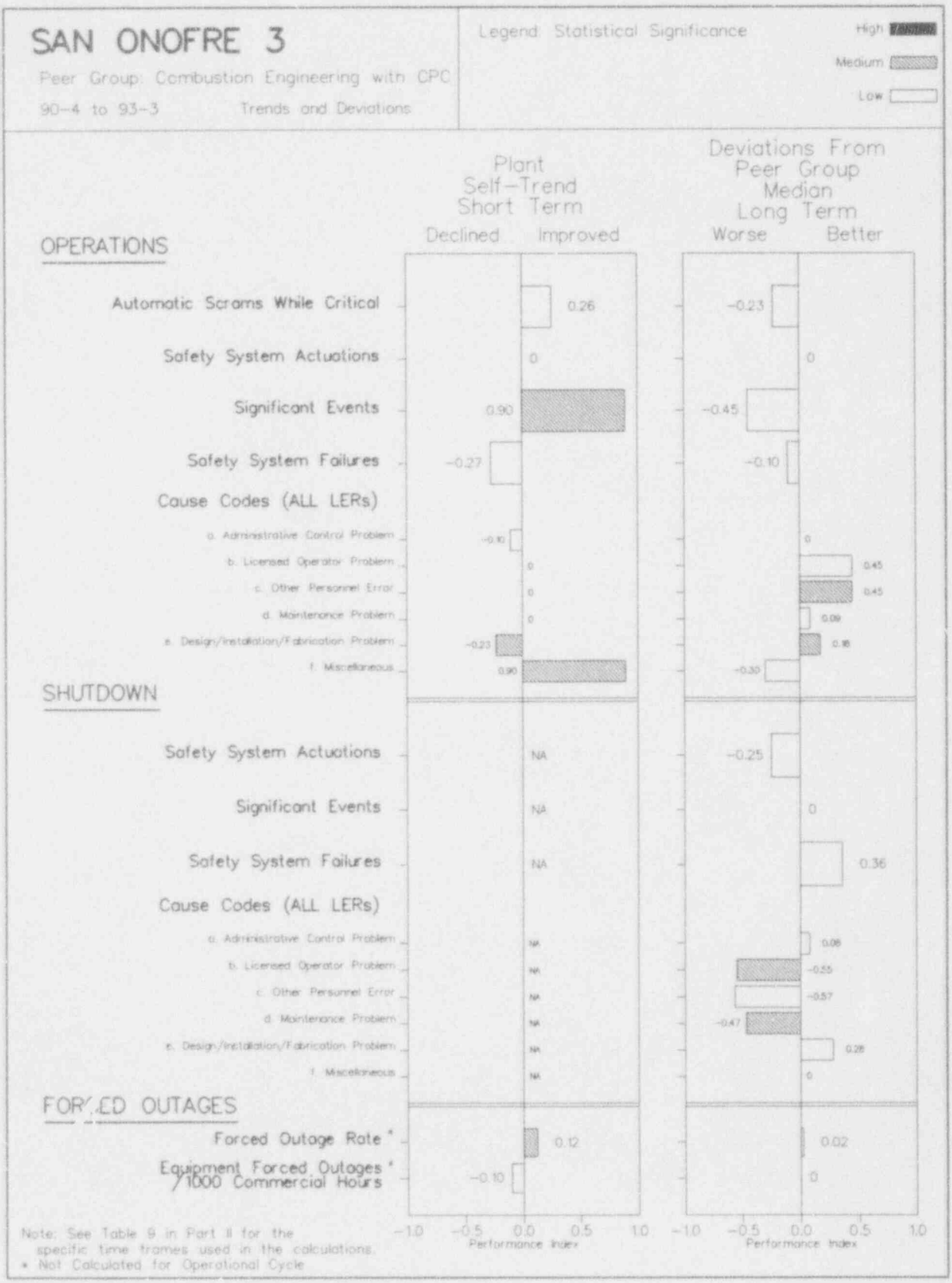

SAN ONOFRE 3
Peer Group: Combustion Engineering with CPC
90-4 to 93-3 Trends and Deviations
Legend: Statistical Significance
High
Medium
Low
Plant Self-Trend Short Term
Declined Improved
Deviations From Peer Group Median Long Term
Worse Better
OPERATIONS
Automatic Scrams While Critical
0.26
-0.23
Safety System Actuations
0
0
Significant Events
0.90
-0.45
Safety System Failures
-0.27
-0.10
Cause Codes (ALL LERs)
a. Administrative Control Problem
-0.10
0
b. Licensed Operator Problem
0
0.45
c. Other Personnel Error
0
0.45
d. Maintenance Problem
0
0.09
e. Design/Installation/Fabrication Problem
-0.23
0.18
f. Miscellaneous
0.90
-0.30
SHUTDOWN
Safety System Actuations
NA
-0.25
Significant Events
NA
0
Safety System Failures
NA
0.36
Cause Codes (ALL LERs)
a. Administrative Control Problem
NA
0.08
b. Licensed Operator Problem
NA
-0.55
c. Other Personnel Error
NA
-0.57
d. Maintenance Problem
NA
-0.47
e. Design/Installation/Fabrication Problem
NA
0.28
f. Miscellaneous
NA
0
FORCED OUTAGES
Forced Outage Rate *
0.12
0.02
Equipment Forced Outages * /1000 Commercial Hours
-0.10
0
-1.0 -0.5 0.0 0.5 1.0
Performance Index
-1.0 -0.5 0.0 0.5 1.0
Performance Index
Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.87a

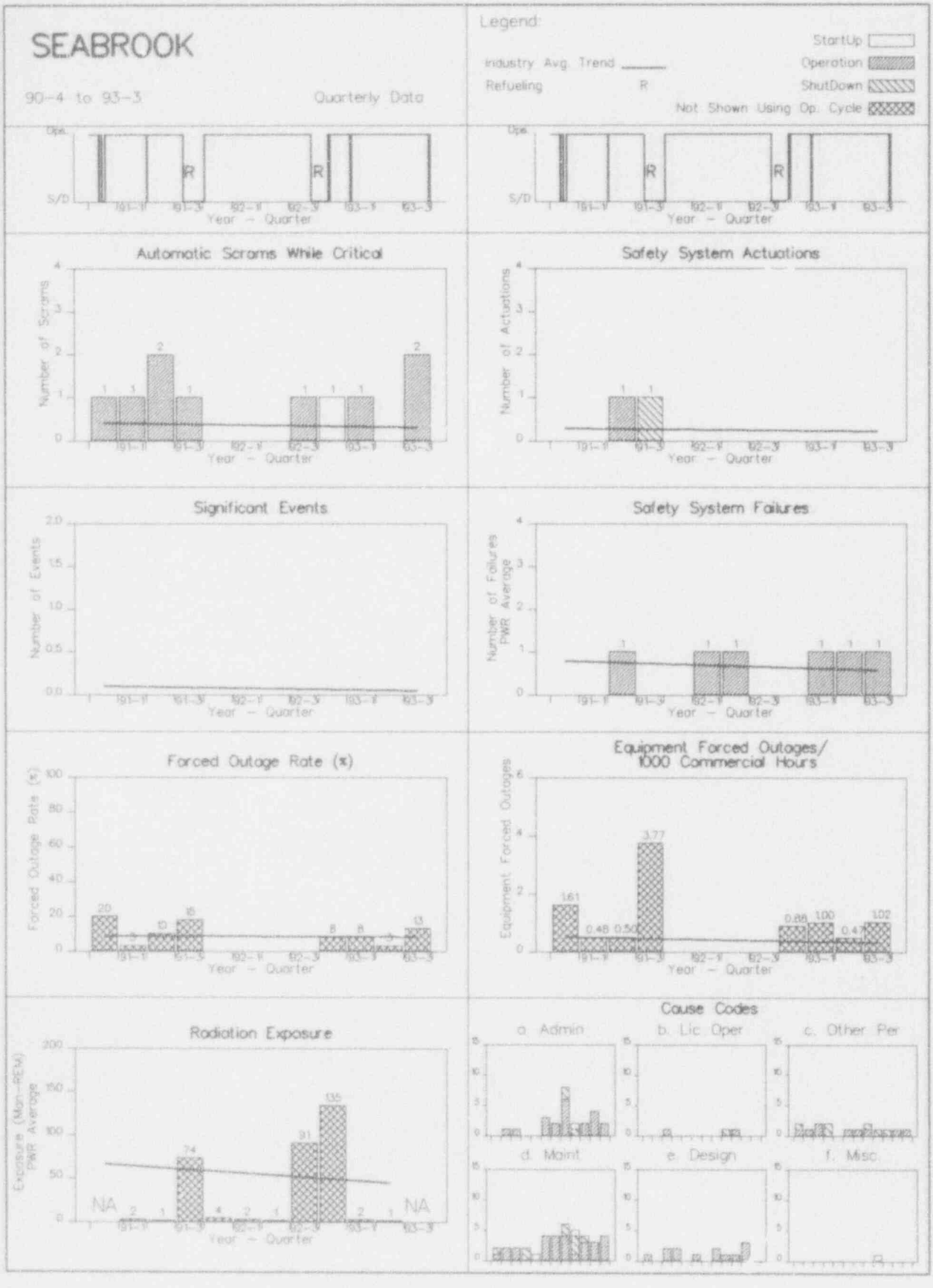
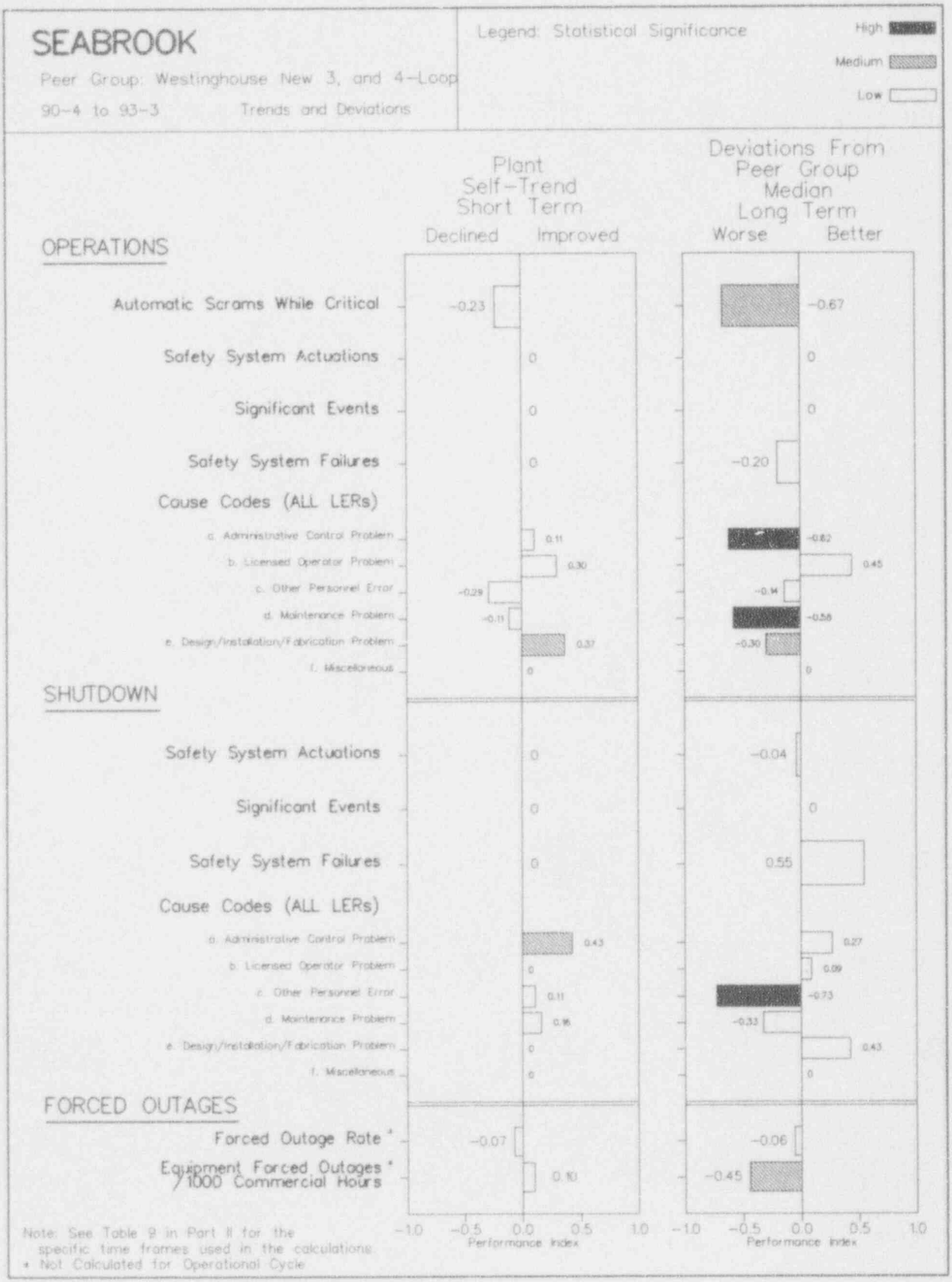

SEABROOK
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Ops.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM) PWR Average
NA
Cause Codes
a. Admin
b. Lic. Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.87b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.88a

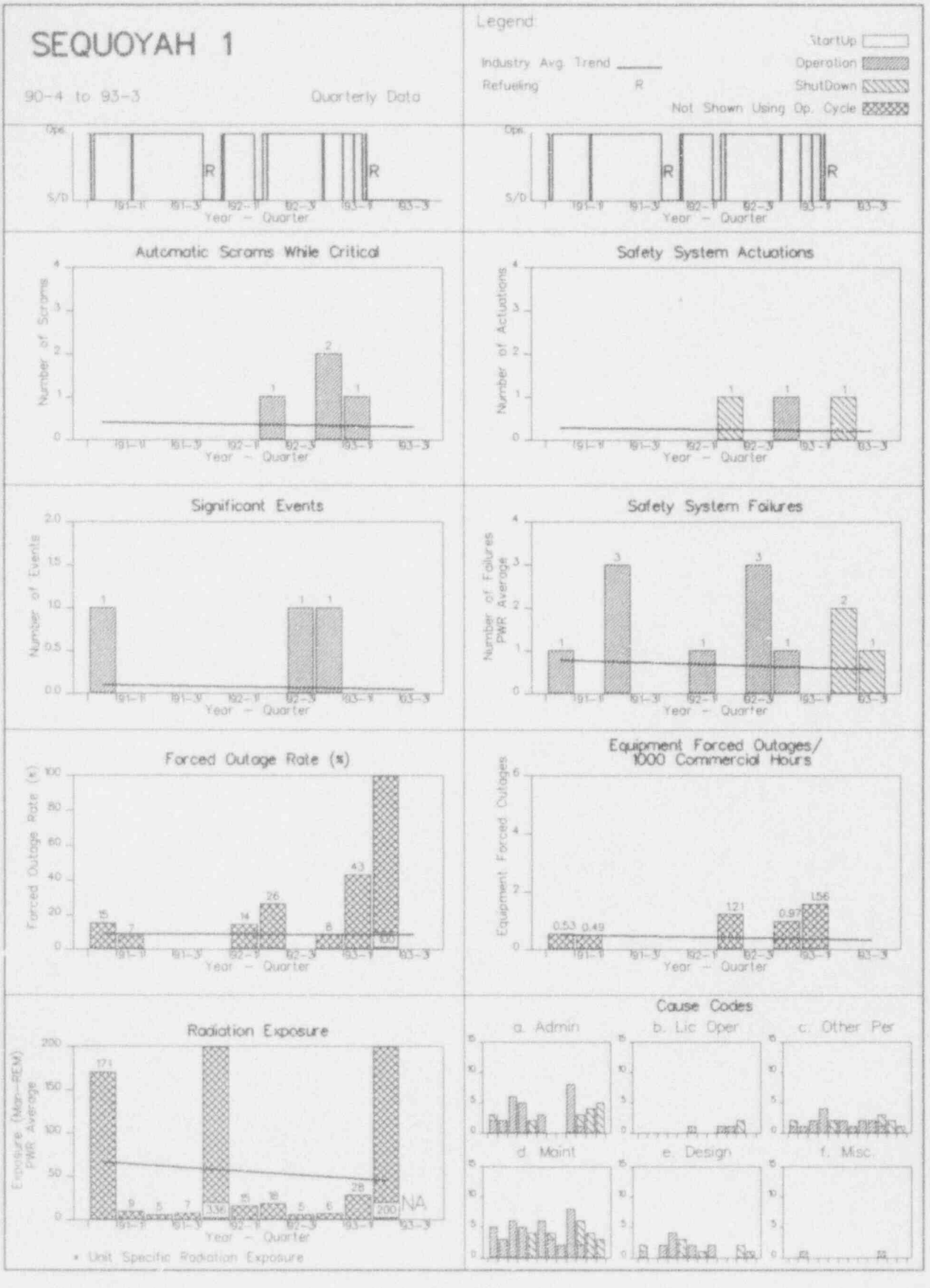
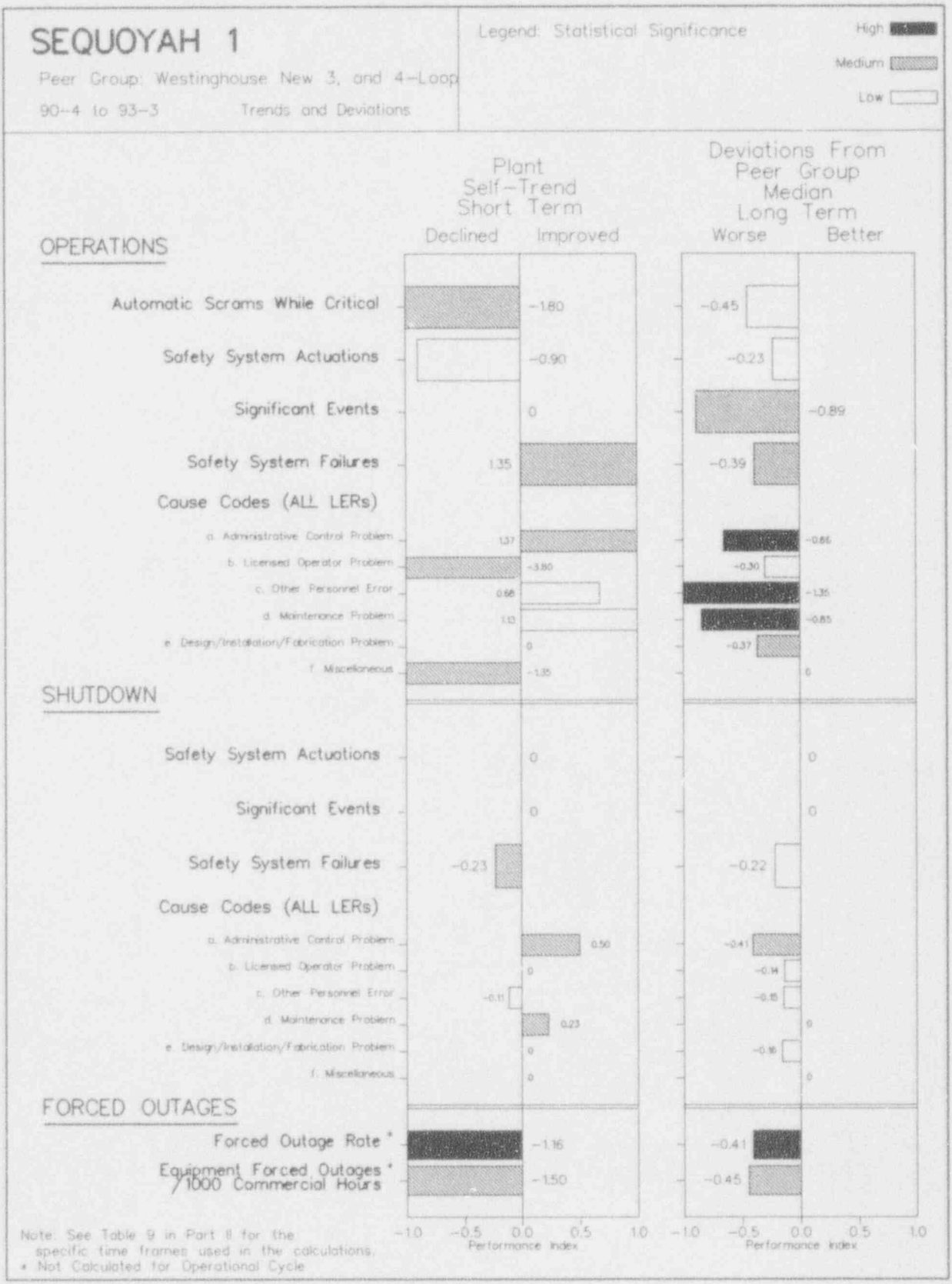

SEQUOYAH 1
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Opn.
S/D
R
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM) PWR Average
NA
* Unit Specific Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.88b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.89a

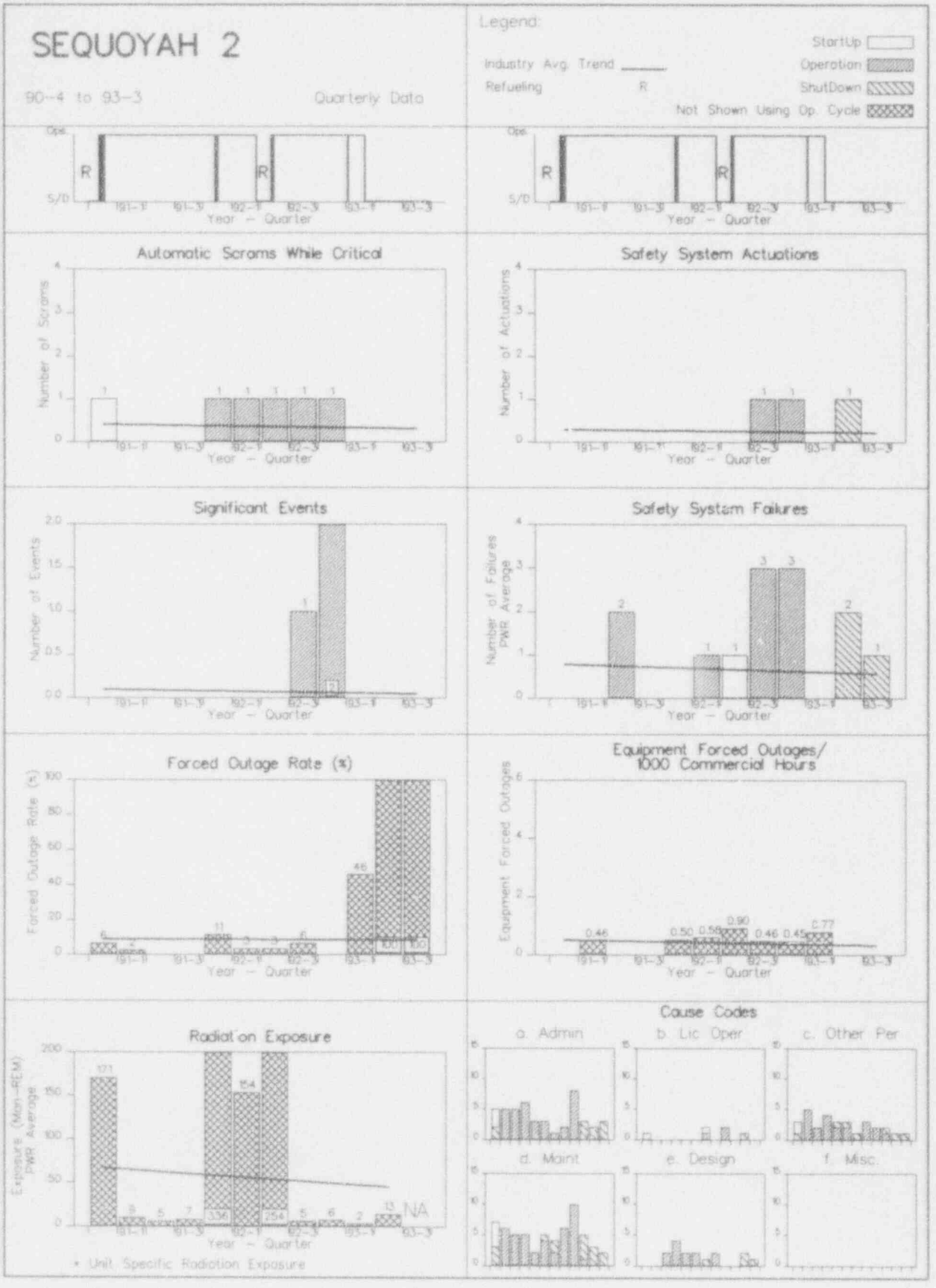

SEQUOYAH 2
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Opn.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM) PWR Average
* Unit Specific Radiation Exposure
Cause Codes
a. Admin
b. Lic. Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.89b

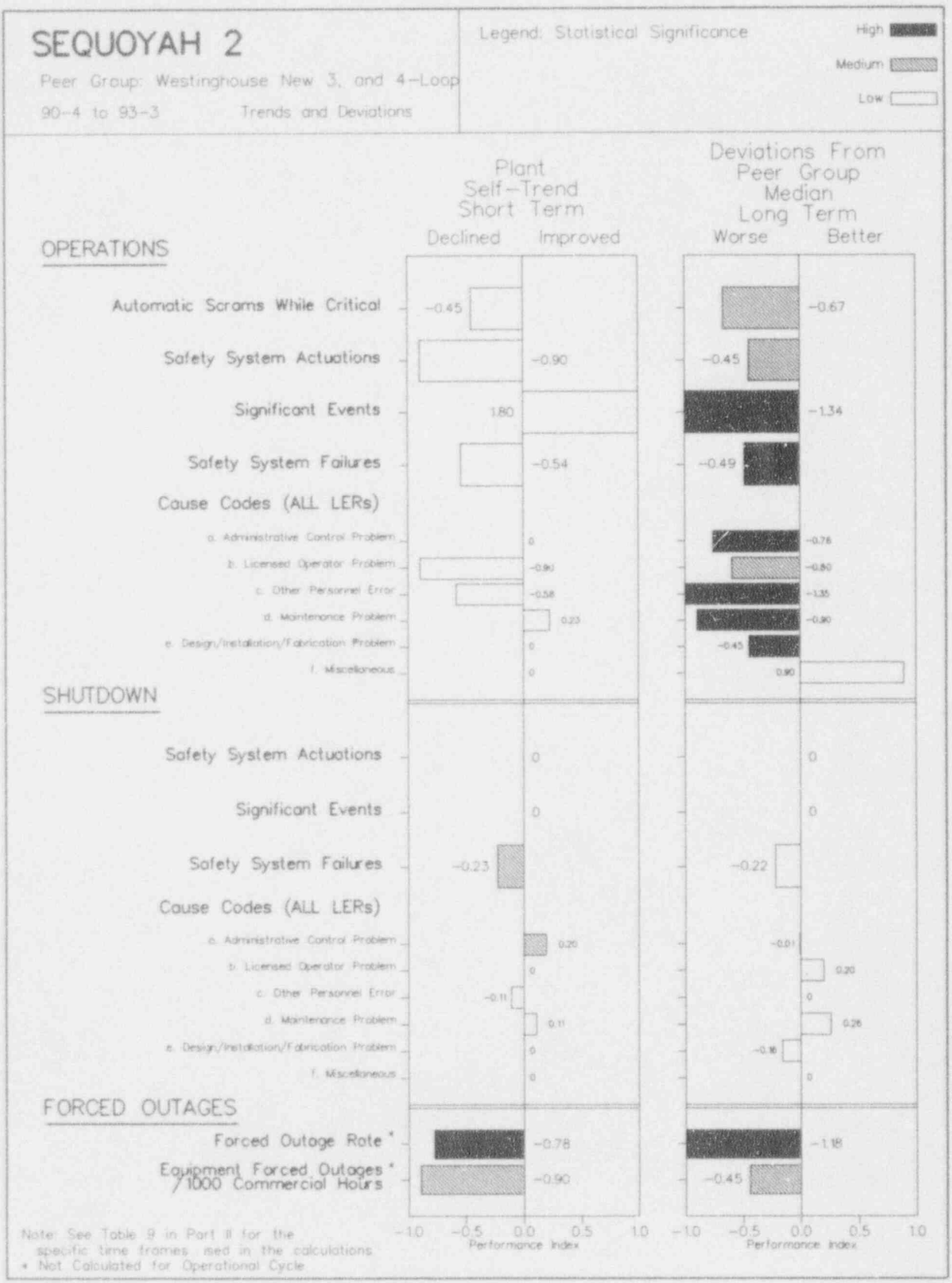

SEQUOYAH 2
Peer Group: Westinghouse New 3, and 4-Loop
90-4 to 93-3 Trends and Deviations
Legend: Statistical Significance
High
Medium
Low
Plant Self-Trend Short Term
Deviations From Peer Group Median Long Term
Declined
Improved
Worse
Better
OPERATIONS
Automatic Scrams While Critical
-0.45
-0.67
Safety System Actuations
-0.90
-0.45
Significant Events
1.80
-1.34
Safety System Failures
-0.54
-0.49
Cause Codes (ALL LERs)
a. Administrative Control Problem
0
-0.78
b. Licensed Operator Problem
-0.90
-0.80
c. Other Personnel Error
-0.58
-1.35
d. Maintenance Problem
0.23
-0.90
e. Design/Installation/Fabrication Problem
0
-0.45
f. Miscellaneous
0
0.90
SHUTDOWN
Safety System Actuations
0
0
Significant Events
0
0
Safety System Failures
-0.23
-0.22
Cause Codes (ALL LERs)
a. Administrative Control Problem
0.20
-0.01
b. Licensed Operator Problem
0
0.20
c. Other Personnel Error
-0.11
0
d. Maintenance Problem
0.11
0.26
e. Design/Installation/Fabrication Problem
0
-0.16
f. Miscellaneous
0
0
FORCED OUTAGES
Forced Outage Rate *
-0.78
-1.18
Equipment Forced Outages * /1000 Commercial Hours
-0.90
-0.45
-1.0 -0.5 0.0 0.5 1.0
Performance Index
-1.0 -0.5 0.0 0.5 1.0
Performance Index
Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.90a

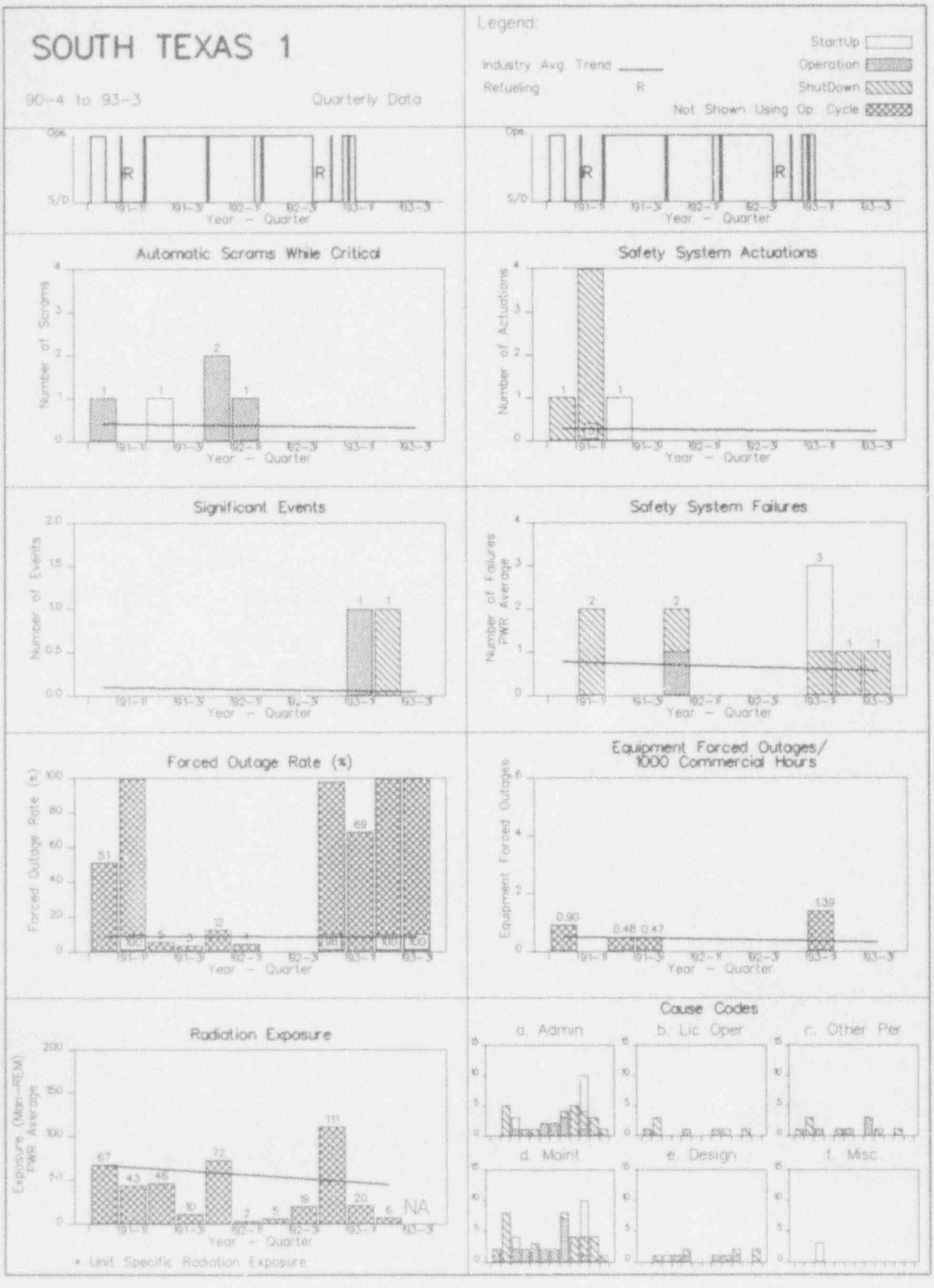

SOUTH TEXAS 1
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Ops
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures
PWR Average
Forced Outage Rate (%)
Equipment Forced Outages/
1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM)
PWR Average
* Unit Specific Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc

FIGURE 7.90b

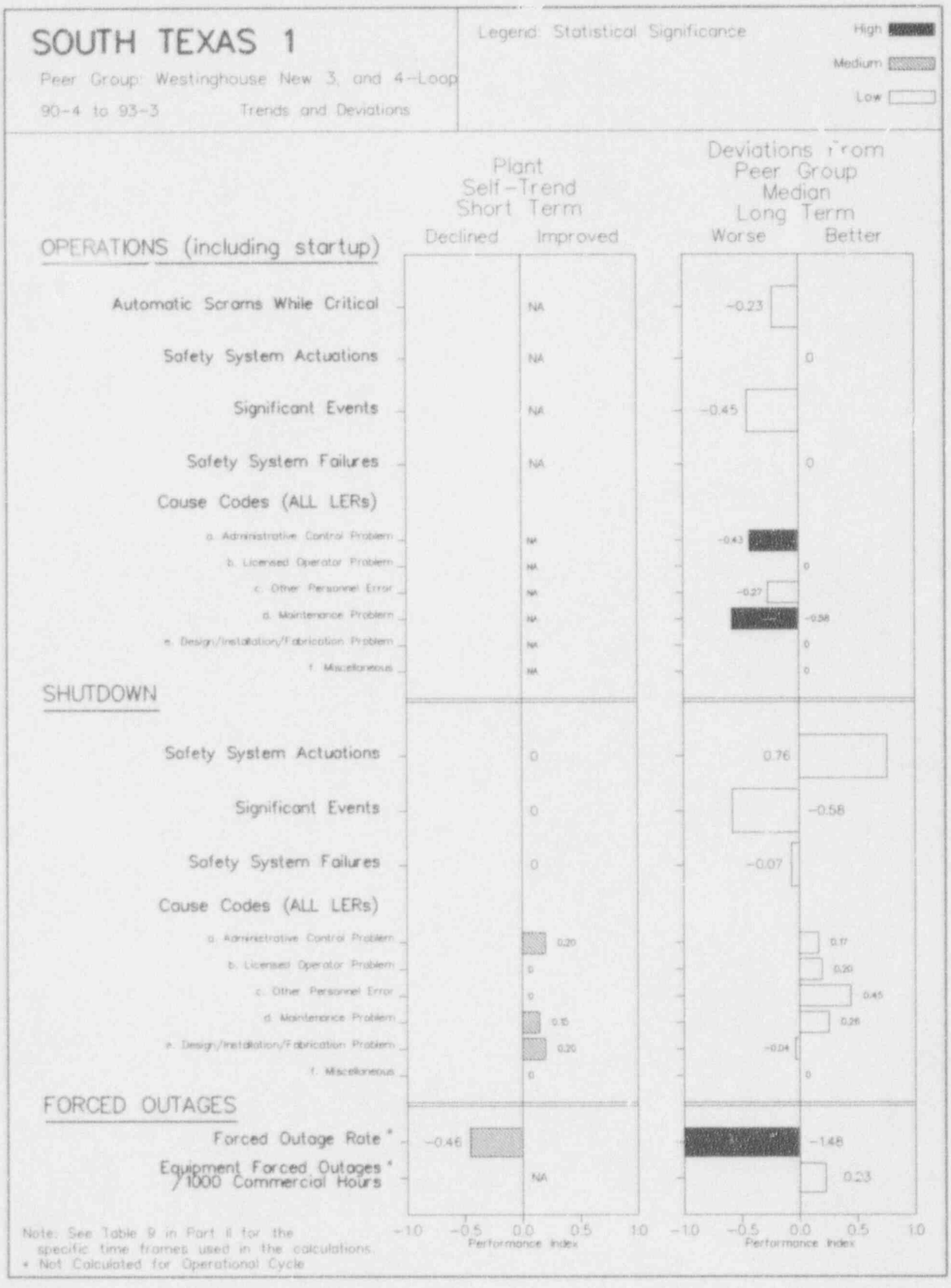

SOUTH TEXAS 1
Peer Group: Westinghouse New 3, and 4-Loop
90-4 to 93-3 Trends and Deviations
Legend: Statistical Significance
High
Medium
Low
Plant Self-Trend Short Term
Declined
Improved
Deviations from Peer Group Median Long Term
Worse
Better
OPERATIONS (including startup)
Automatic Scrams While Critical
Safety System Actuations
Significant Events
Safety System Failures
Cause Codes (ALL LERs)
a. Administrative Control Problem
b. Licensed Operator Problem
c. Other Personnel Error
d. Maintenance Problem
e. Design/Installation/Fabrication Problem
f. Miscellaneous
SHUTDOWN
Safety System Actuations
Significant Events
Safety System Failures
Cause Codes (ALL LERs)
a. Administrative Control Problem
b. Licensed Operator Problem
c. Other Personnel Error
d. Maintenance Problem
e. Design/Installation/Fabrication Problem
f. Miscellaneous
FORCED OUTAGES
Forced Outage Rate *
Equipment Forced Outages * /1000 Commercial Hours
NA
-0.23
0
-0.45
0
-0.43
0
-0.27
-0.58
0
0
0.76
-0.58
-0.07
0.20
0
0
0.15
0.20
0
0.17
0.20
0.45
0.26
-0.04
0
-0.46
-1.48
0.23
-1.0
-0.5
0.0
0.5
1.0
Performance Index
Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.91a

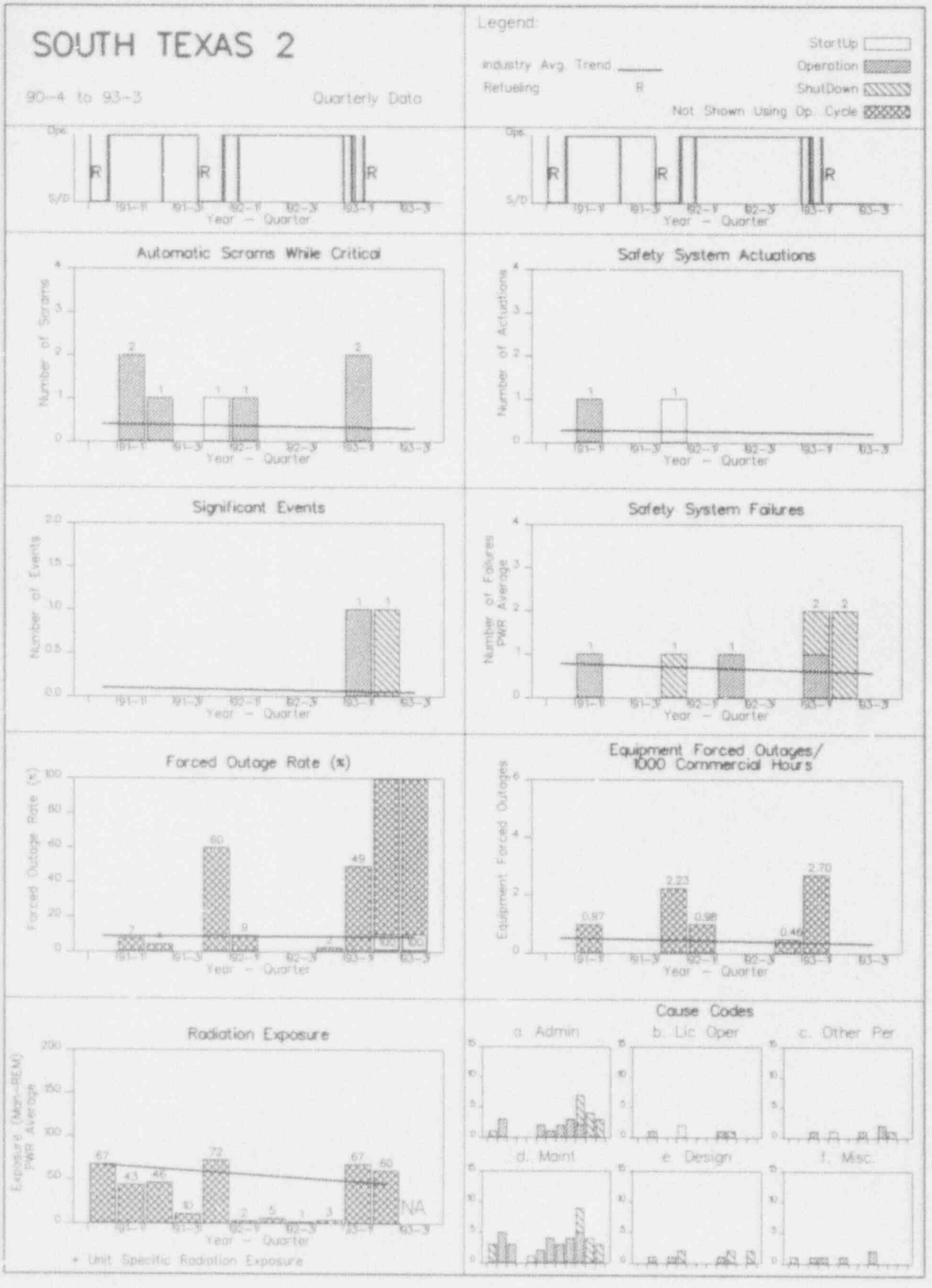
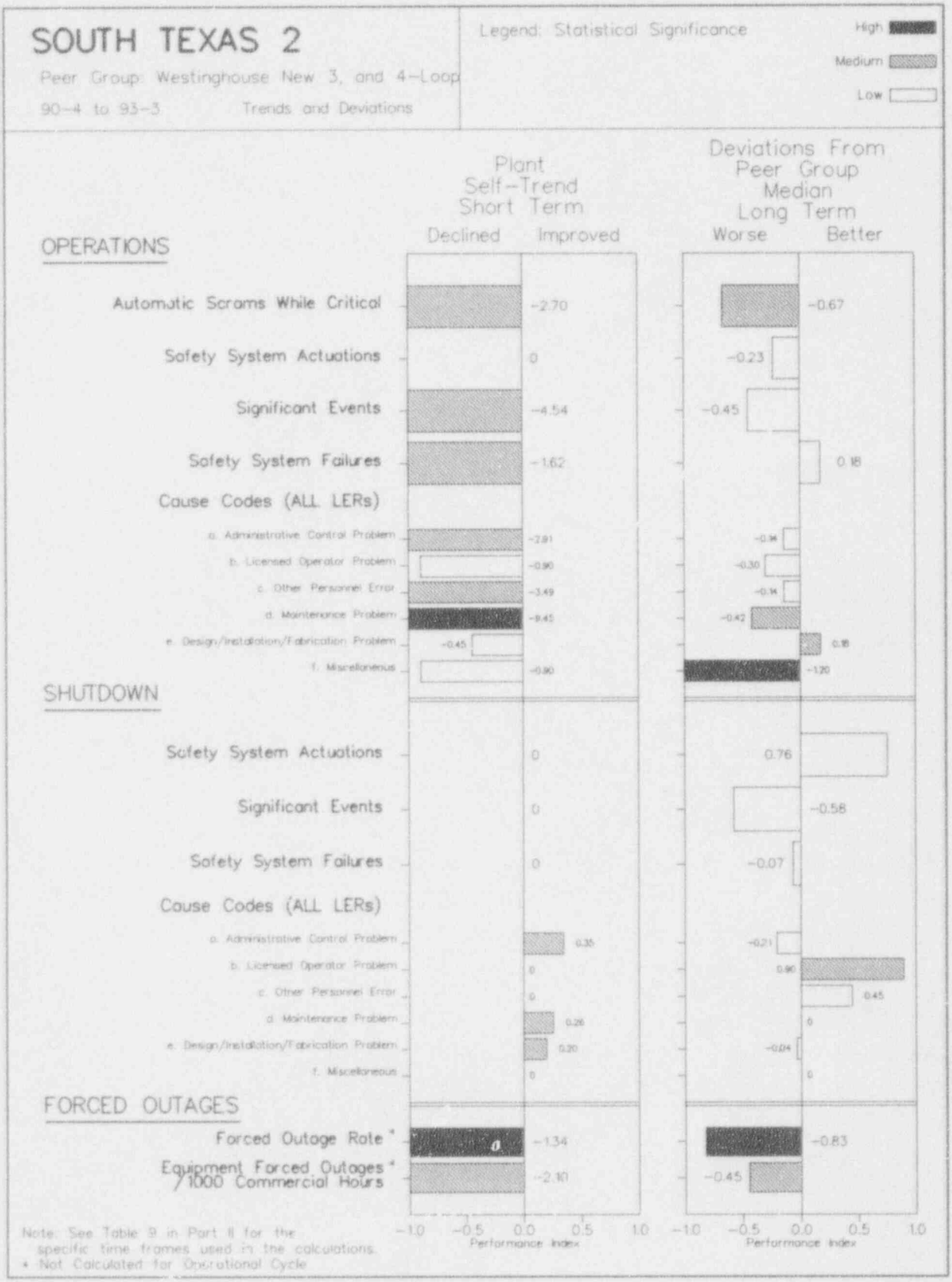

SOUTH TEXAS 2
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Ope.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM) PWR Average
NA
* Unit Specific Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.91b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.92a

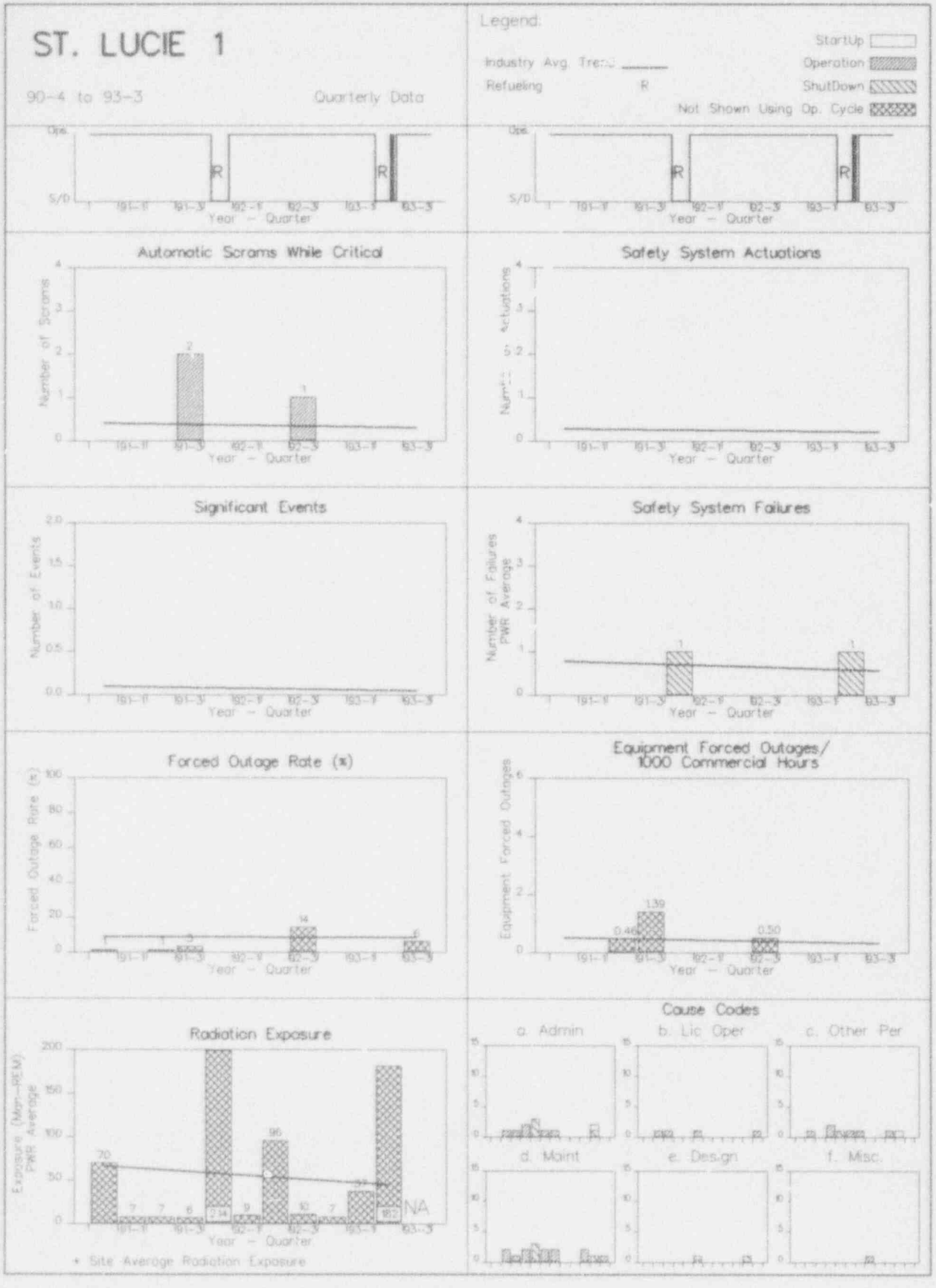
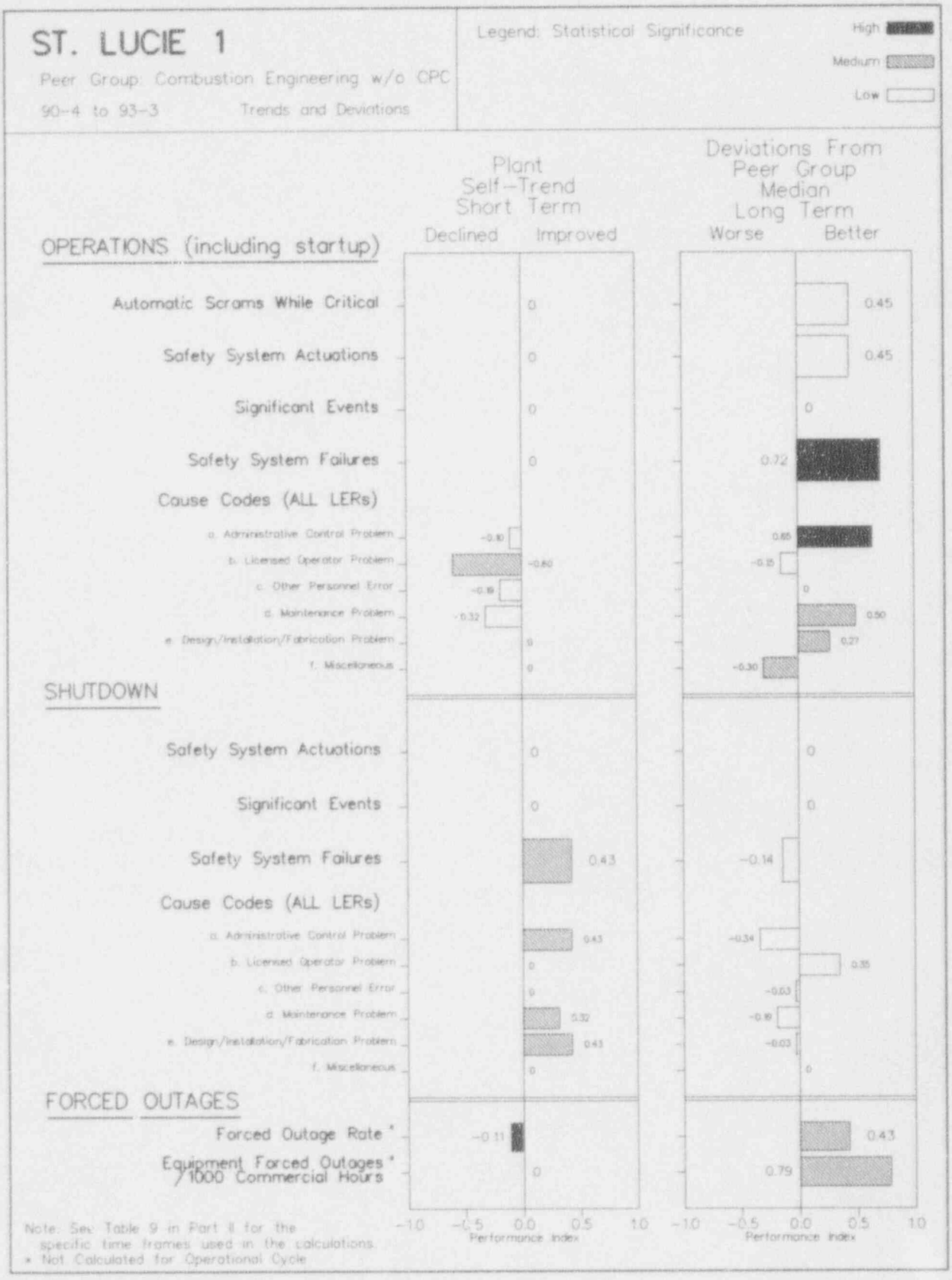

ST. LUCIE 1
90-4 to 93-3
Quarterly Data
Legend:
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Industry Avg. Trend
Refueling R
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM) PWR Average
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.
Year - Quarter
+ Site Average Radiation Exposure

FIGURE 7.92b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.93a

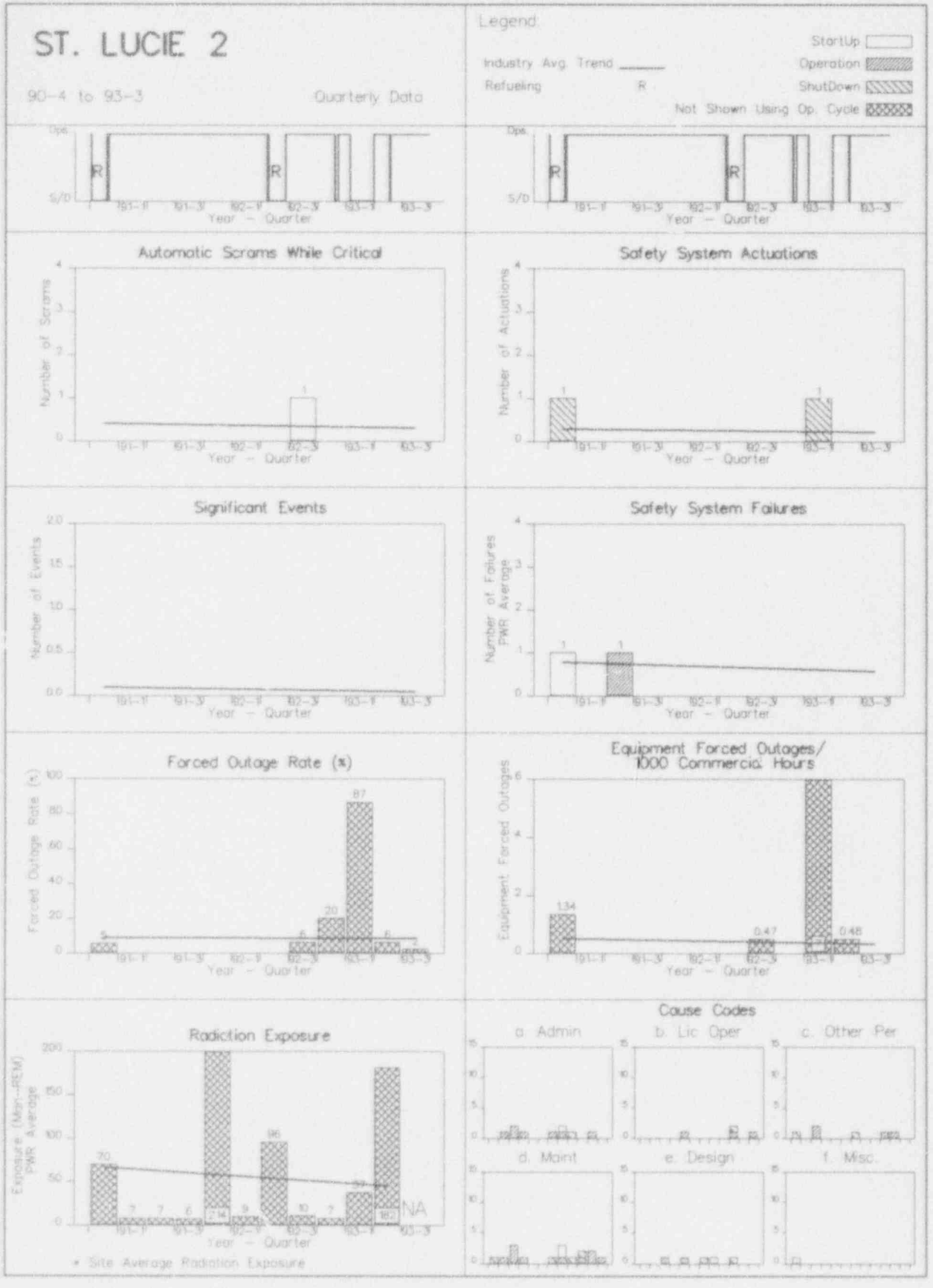
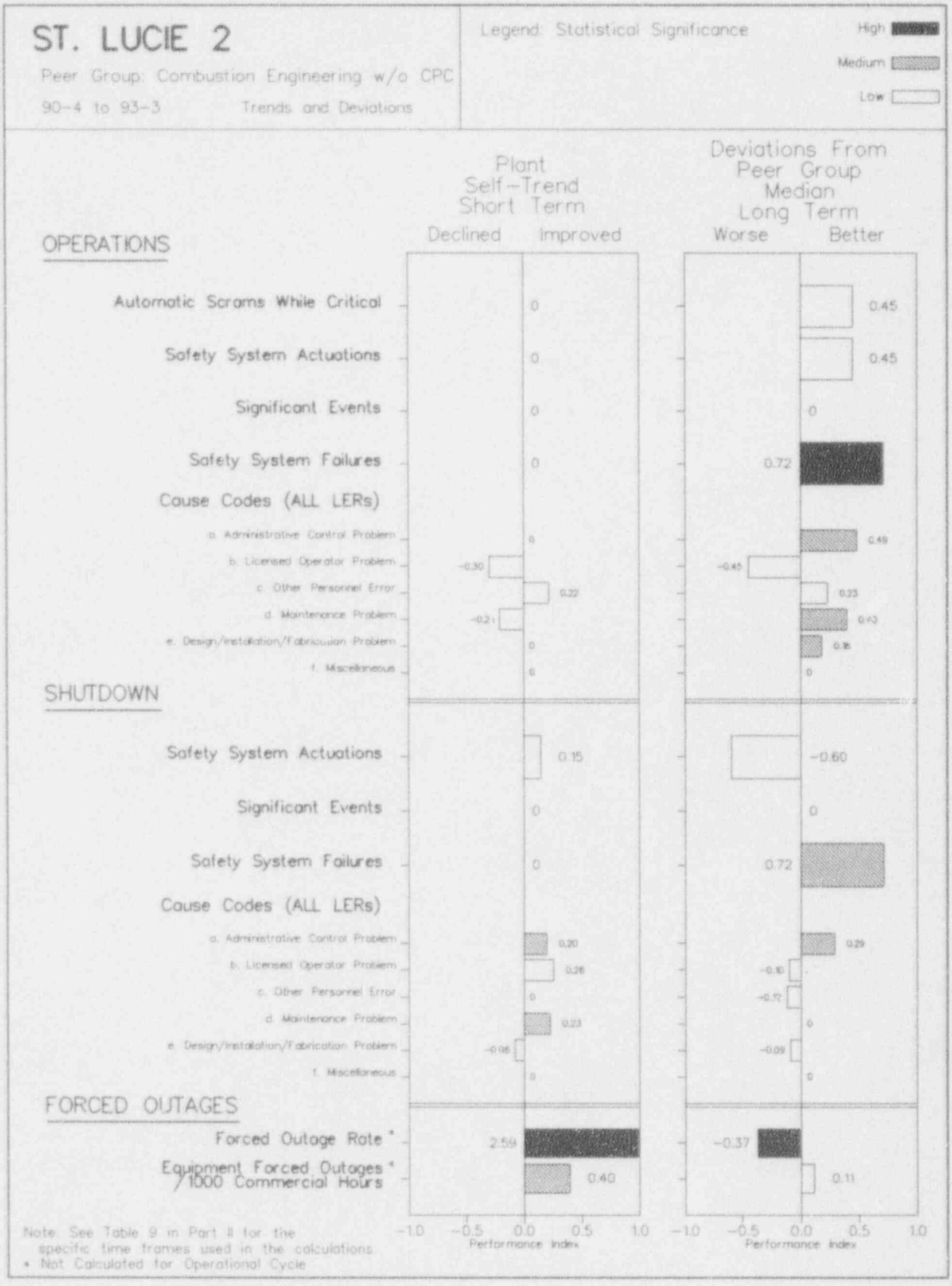

ST. LUCIE 2
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Dps.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM) PWR Average
NA
* Site Average Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.93b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.94a

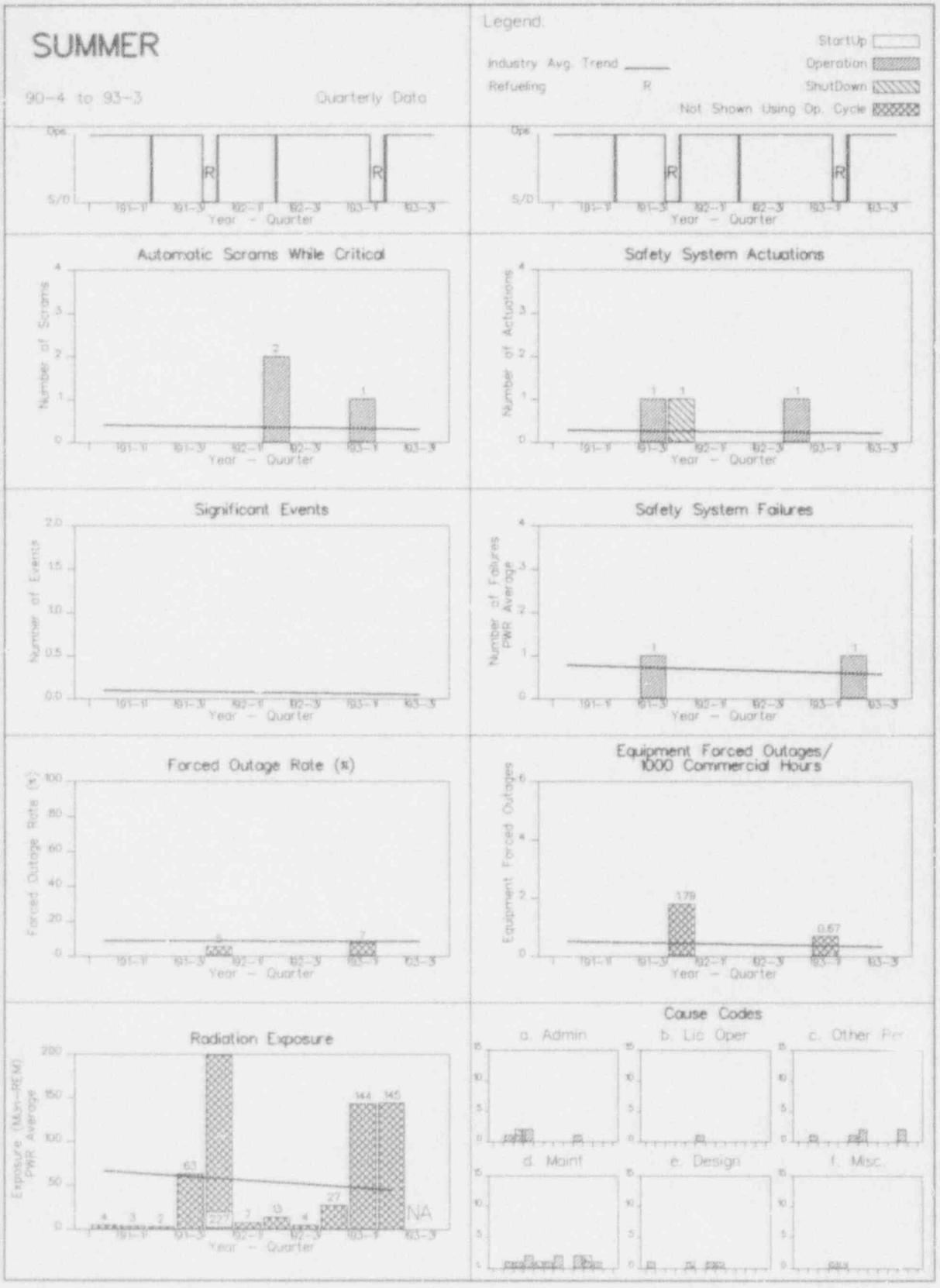

SUMMER
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Ops.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
1.79
0.67
Radiation Exposure
Exposure (Man-REM) PWR Average
NA
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.94b

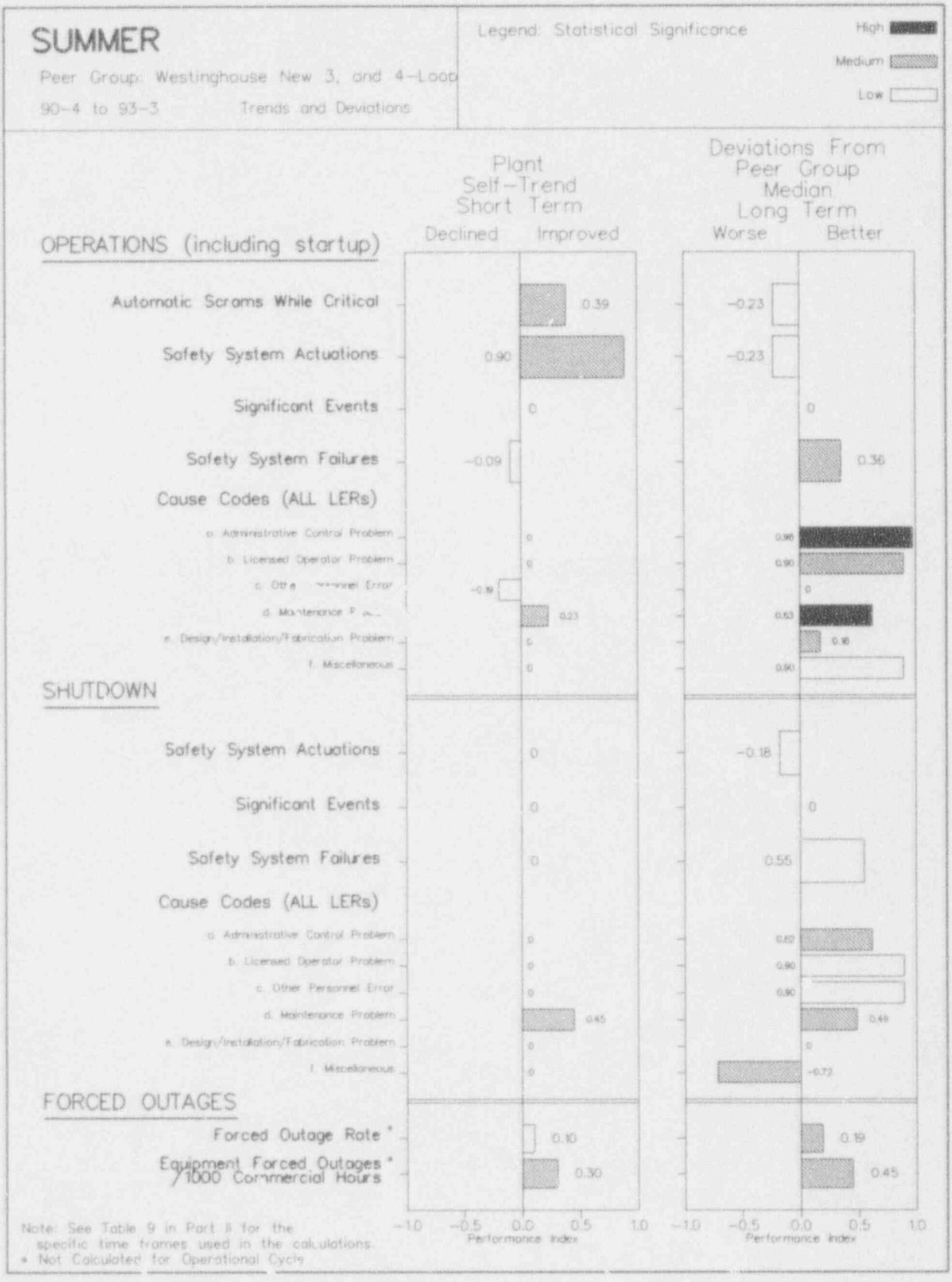

SUMMER
Peer Group: Westinghouse New 3, and 4-Loop
90-4 to 93-3 Trends and Deviations
Legend: Statistical Significance
High
Medium
Low
Plant Self-Trend Short Term
Declined Improved
Deviations From Peer Group Median Long Term
Worse Better
OPERATIONS (including startup)
Automatic Scrams While Critical
0.39
-0.23
Safety System Actuations
0.90
-0.23
Significant Events
0
0
Safety System Failures
-0.09
0.36
Cause Codes (ALL LERs)
a. Administrative Control Problem
0
0.98
b. Licensed Operator Problem
0
0.90
c. Other Personnel Error
-0.19
0
d. Maintenance Problem
0.23
0.63
e. Design/Installation/Fabrication Problem
0
0.18
f. Miscellaneous
0
0.90
SHUTDOWN
Safety System Actuations
0
-0.18
Significant Events
0
0
Safety System Failures
0
0.55
Cause Codes (ALL LERs)
a. Administrative Control Problem
0
0.82
b. Licensed Operator Problem
0
0.90
c. Other Personnel Error
0
0.90
d. Maintenance Problem
0.45
0.49
e. Design/Installation/Fabrication Problem
0
0
f. Miscellaneous
0
-0.72
FORCED OUTAGES
Forced Outage Rate *
0.10
0.19
Equipment Forced Outages * /1000 Commercial Hours
0.30
0.45
-1.0 -0.5 0.0 0.5 1.0
Performance Index
-1.0 -0.5 0.0 0.5 1.0
Performance Index
Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.95a

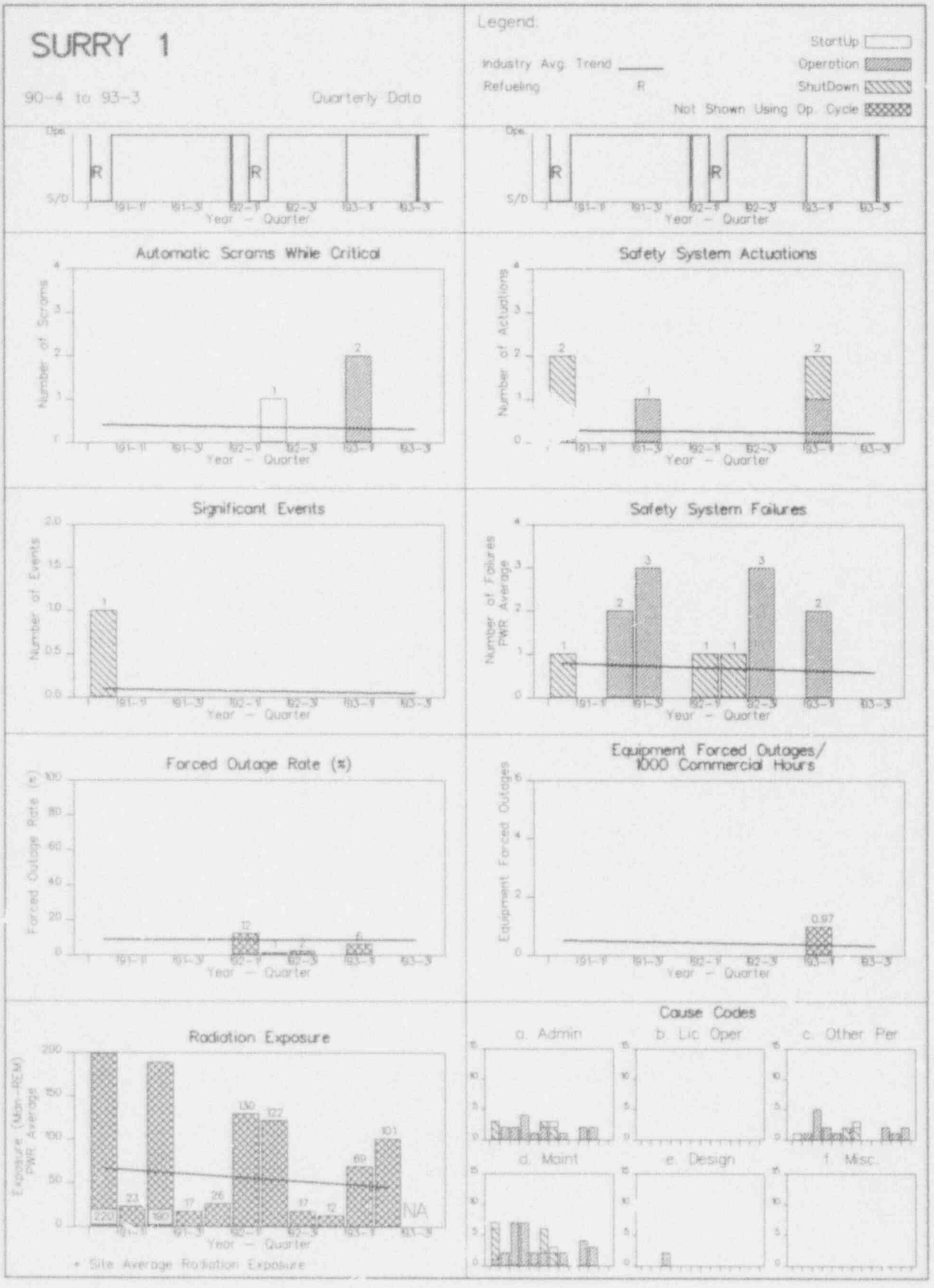

SURRY 1
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Ops.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM) PWR Average
NA
* Site Average Radiation Exposure
Cause Codes
a. Admin
b. Lic. Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.95b

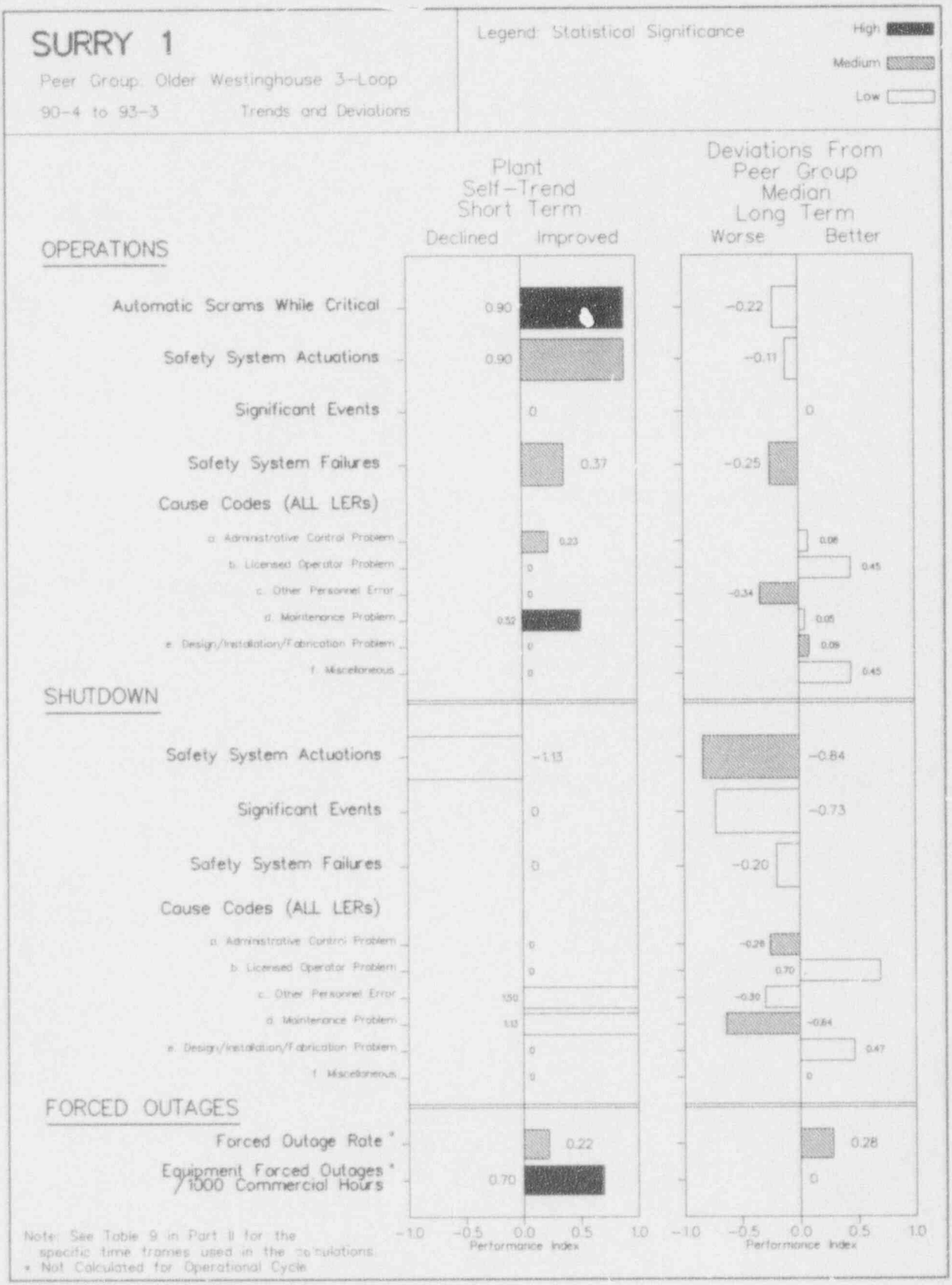

SURRY 1
Peer Group: Older Westinghouse 3-Loop
90-4 to 93-3 Trends and Deviations
Legend: Statistical Significance
High
Medium
Low
Plant Self-Trend Short Term
Declined Improved
Deviations From Peer Group Median Long Term
Worse Better
OPERATIONS
Automatic Scrams While Critical
0.90
-0.22
Safety System Actuations
0.90
-0.11
Significant Events
0
0
Safety System Failures
0.37
-0.25
Cause Codes (ALL LERs)
a. Administrative Control Problem
0.23
0.08
b. Licensed Operator Problem
0
0.45
c. Other Personnel Error
0
-0.34
d. Maintenance Problem
0.52
0.05
e. Design/Installation/Fabrication Problem
0
0.09
f. Miscellaneous
0
0.45
SHUTDOWN
Safety System Actuations
-1.13
-0.84
Significant Events
0
-0.73
Safety System Failures
0
-0.20
Cause Codes (ALL LERs)
a. Administrative Control Problem
0
-0.28
b. Licensed Operator Problem
0
0.70
c. Other Personnel Error
1.50
-0.30
d. Maintenance Problem
1.13
-0.84
e. Design/Installation/Fabrication Problem
0
0.47
f. Miscellaneous
0
0
FORCED OUTAGES
Forced Outage Rate *
0.22
0.28
Equipment Forced Outages * /1000 Commercial Hours
0.70
0
-1.0 -0.5 0.0 0.5 1.0
Performance Index
-1.0 -0.5 0.0 0.5 1.0
Performance Index
Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.96a

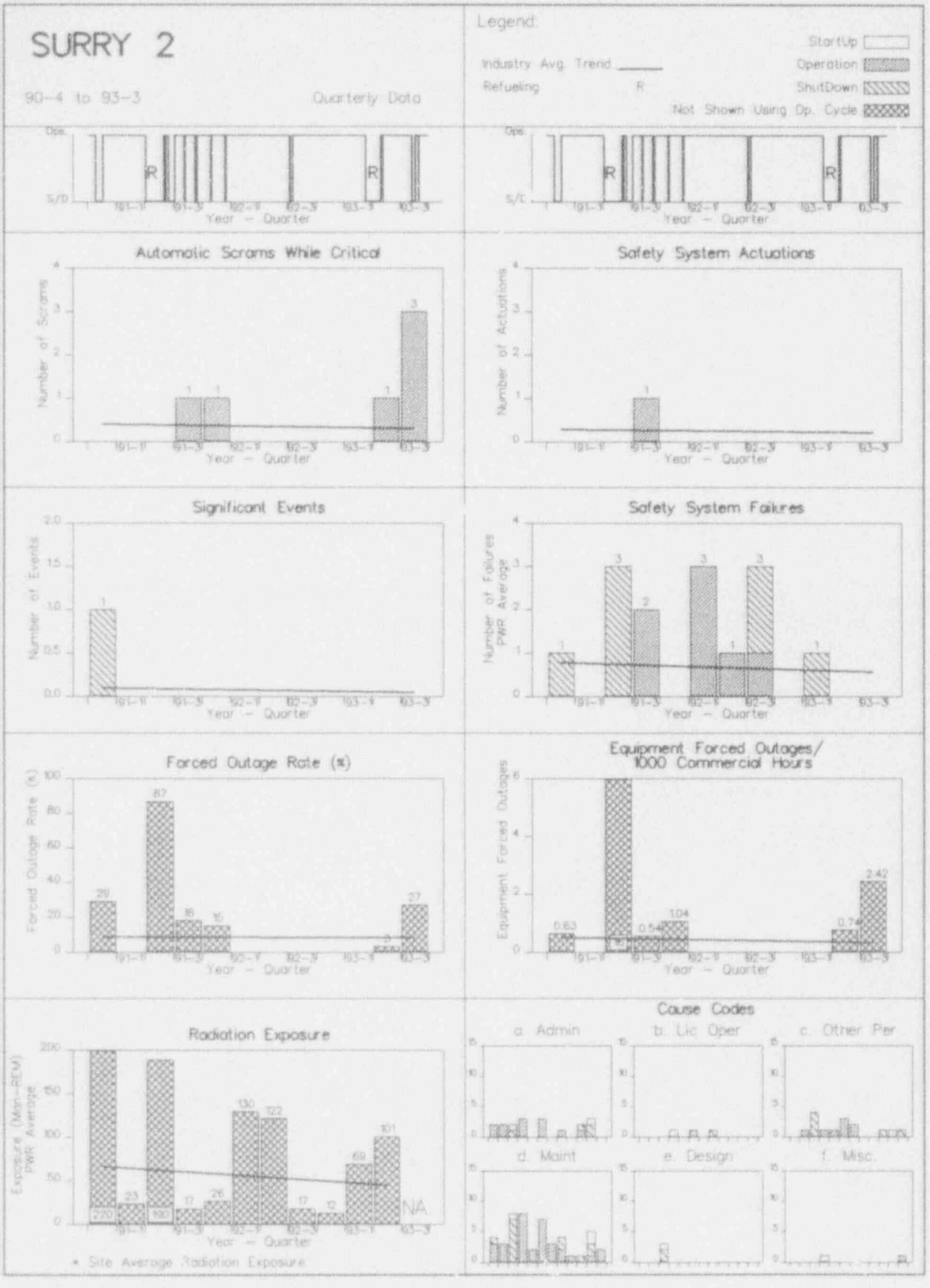

SURRY 2
90-4 to 93-3
Quarterly Data
Legend:
StartUp
Industry Avg. Trend
Operation
Refueling
R
ShutDown
Not Shown Using Op. Cycle
Ops.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures
PWR Average
Forced Outage Rate (%)
Forced Outage Rate (%)
Equipment Forced Outages/
1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM)
PWR Average
NA
* Site Average Radiation Exposure
Cause Codes
a. Admin
b. Lic. Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.96b

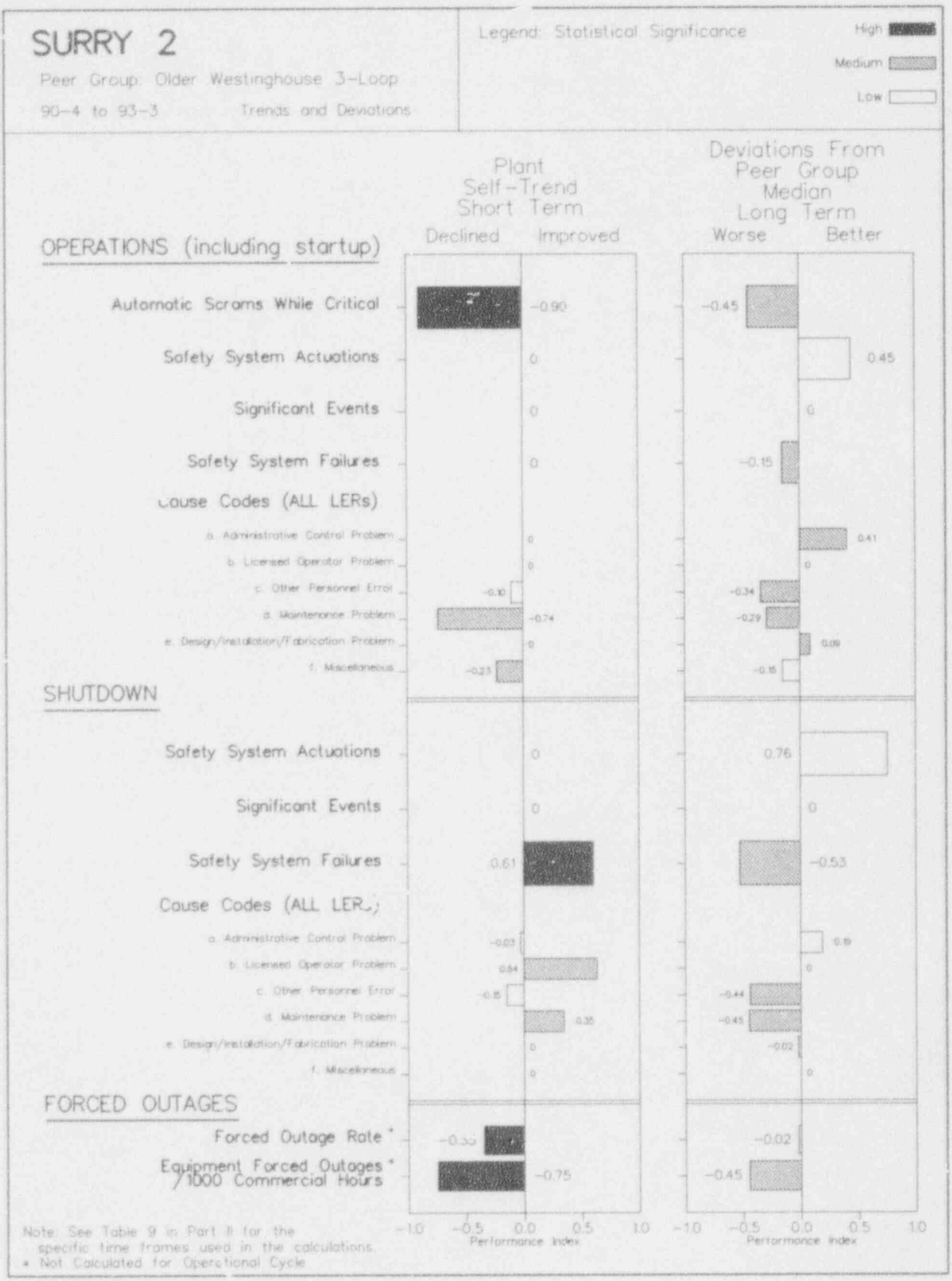

SURRY 2
Peer Group: Older Westinghouse 3-Loop
90-4 to 93-3 Trends and Deviations
Legend: Statistical Significance
High
Medium
Low
Plant Self-Trend Short Term
Deviations From Peer Group Median Long Term
Declined
Improved
Worse
Better
OPERATIONS (including startup)
Automatic Scrams While Critical
-0.90
-0.45
Safety System Actuations
0
0.45
Significant Events
0
0
Safety System Failures
0
-0.15
Cause Codes (ALL LERs)
a. Administrative Control Problem
0
0.41
b. Licensed Operator Problem
0
0
c. Other Personnel Error
-0.10
-0.34
d. Maintenance Problem
-0.74
-0.29
e. Design/Installation/Fabrication Problem
0
0.09
f. Miscellaneous
-0.23
-0.15
SHUTDOWN
Safety System Actuations
0
0.76
Significant Events
0
0
Safety System Failures
0.61
-0.53
Cause Codes (ALL LERs)
a. Administrative Control Problem
-0.03
0.19
b. Licensed Operator Problem
0.64
0
c. Other Personnel Error
-0.15
-0.44
d. Maintenance Problem
0.35
-0.45
e. Design/Installation/Fabrication Problem
0
-0.02
f. Miscellaneous
0
0
FORCED OUTAGES
Forced Outage Rate *
-0.30
-0.02
Equipment Forced Outages * /1000 Commercial Hours
-0.75
-0.45
-1.0 -0.5 0.0 0.5 1.0
Performance Index
-1.0 -0.5 0.0 0.5 1.0
Performance Index
Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.97a

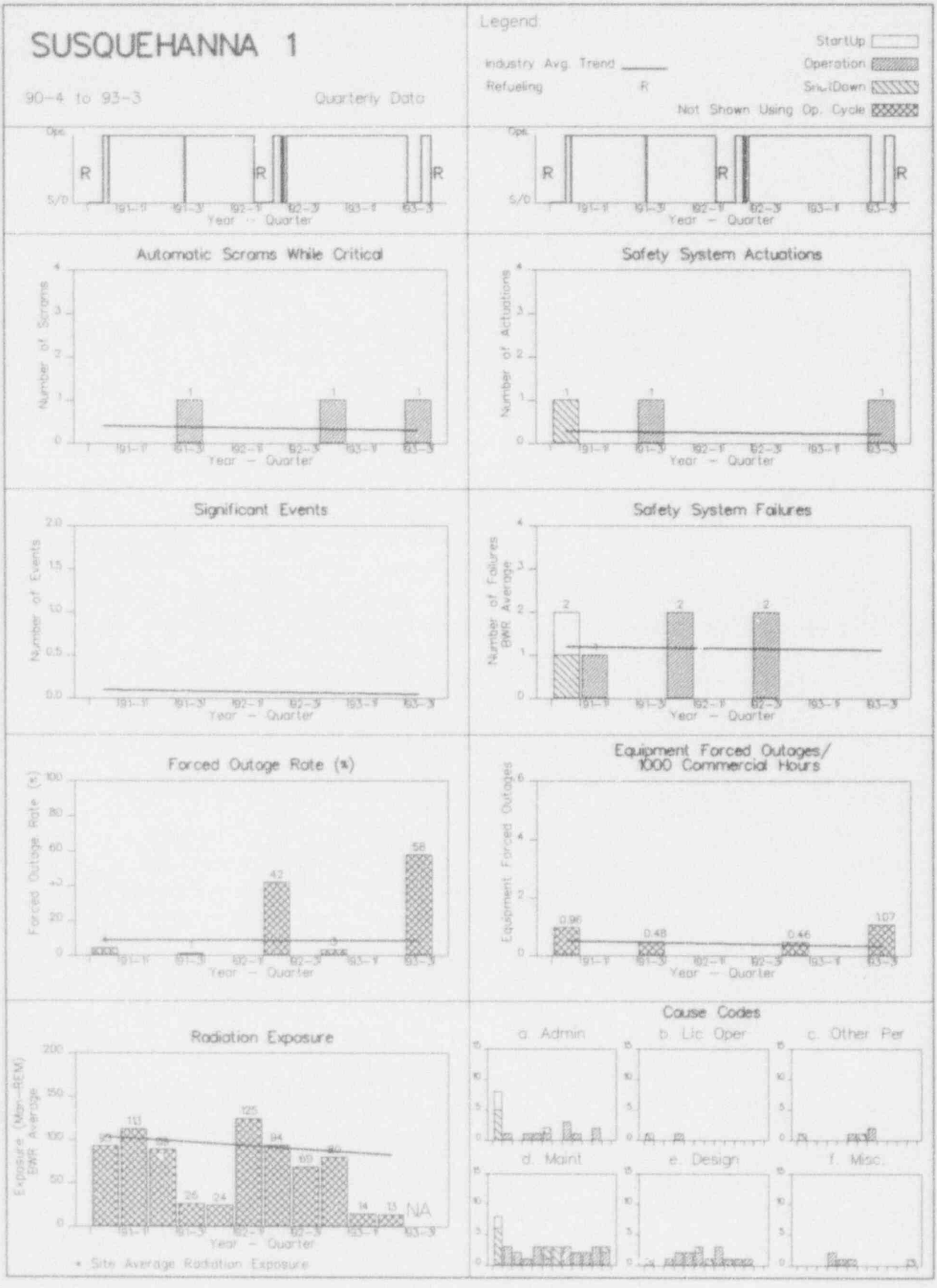

SUSQUEHANNA 1
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling
R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Opn.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures
BWR Average
Forced Outage Rate (%)
Forced Outage Rate (%)
Equipment Forced Outages/
1000 Commercial Hours
Equipment Forced Outages
0.96
0.48
0.46
1.07
Radiation Exposure
Exposure (Man-REM)
BWR Average
NA
* Site Average Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.97b

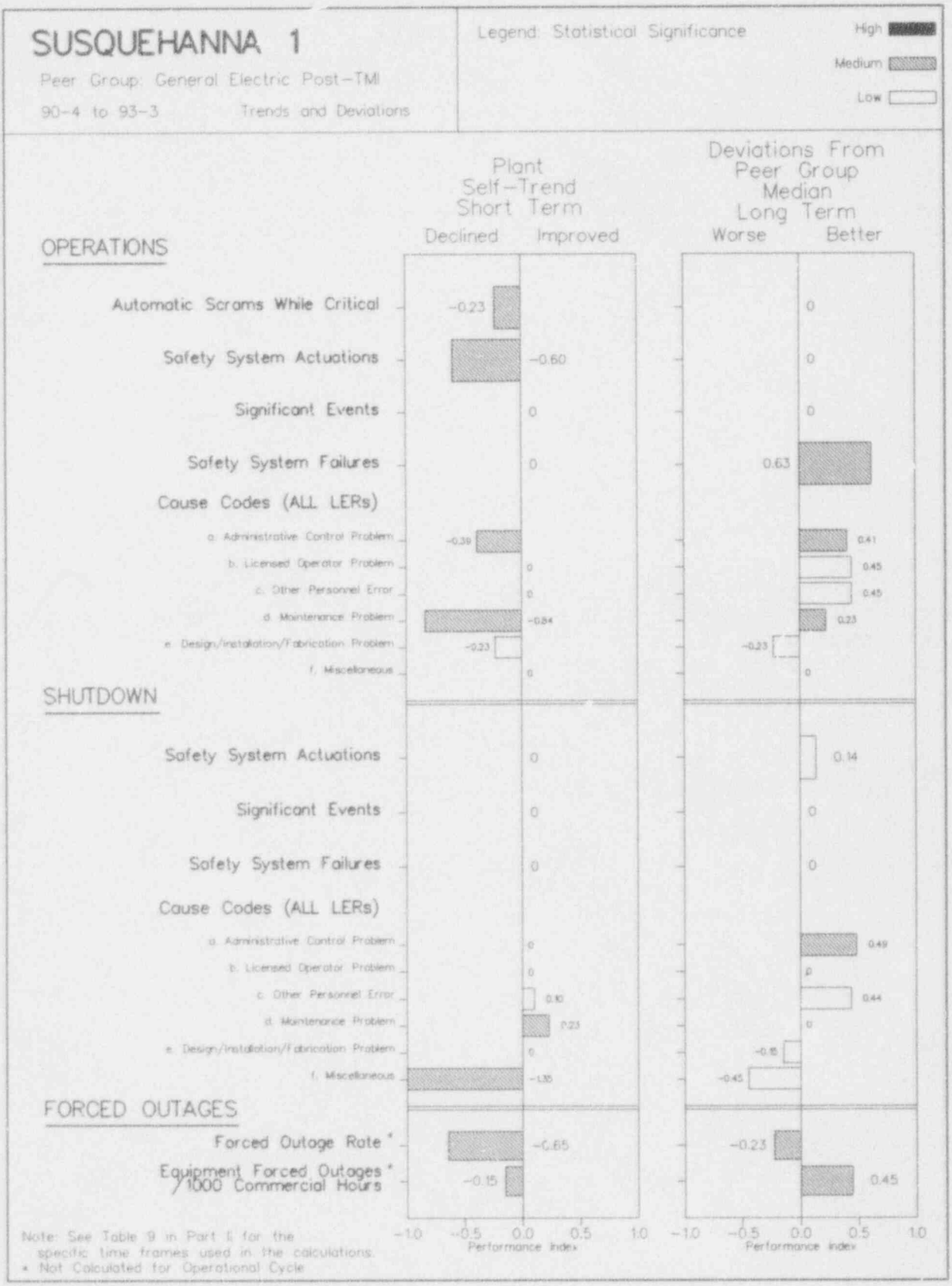

SUSQUEHANNA 1
Peer Group: General Electric Post-TMI
90-4 to 93-3 Trends and Deviations
Legend: Statistical Significance
High
Medium
Low
Plant Self-Trend Short Term
Declined Improved
Deviations From Peer Group Median Long Term
Worse Better
OPERATIONS
Automatic Scrams While Critical
-0.23
0
Safety System Actuations
-0.60
0
Significant Events
0
0
Safety System Failures
0
0.63
Cause Codes (ALL LERs)
a. Administrative Control Problem
-0.39
0.41
b. Licensed Operator Problem
0
0.45
c. Other Personnel Error
0
0.45
d. Maintenance Problem
-0.84
0.23
e. Design/Installation/Fabrication Problem
-0.23
-0.23
f. Miscellaneous
0
0
SHUTDOWN
Safety System Actuations
0
0.14
Significant Events
0
0
Safety System Failures
0
0
Cause Codes (ALL LERs)
a. Administrative Control Problem
0
0.49
b. Licensed Operator Problem
0
0
c. Other Personnel Error
0.10
0.44
d. Maintenance Problem
0.23
0
e. Design/Installation/Fabrication Problem
0
-0.15
f. Miscellaneous
-1.35
-0.45
FORCED OUTAGES
Forced Outage Rate *
-0.65
-0.23
Equipment Forced Outages * /1000 Commercial Hours
-0.15
0.45
-1.0 -0.5 0.0 0.5 1.0
Performance Index
-1.0 -0.5 0.0 0.5 1.0
Performance Index
Note: See Table 9 in Part I for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.98a

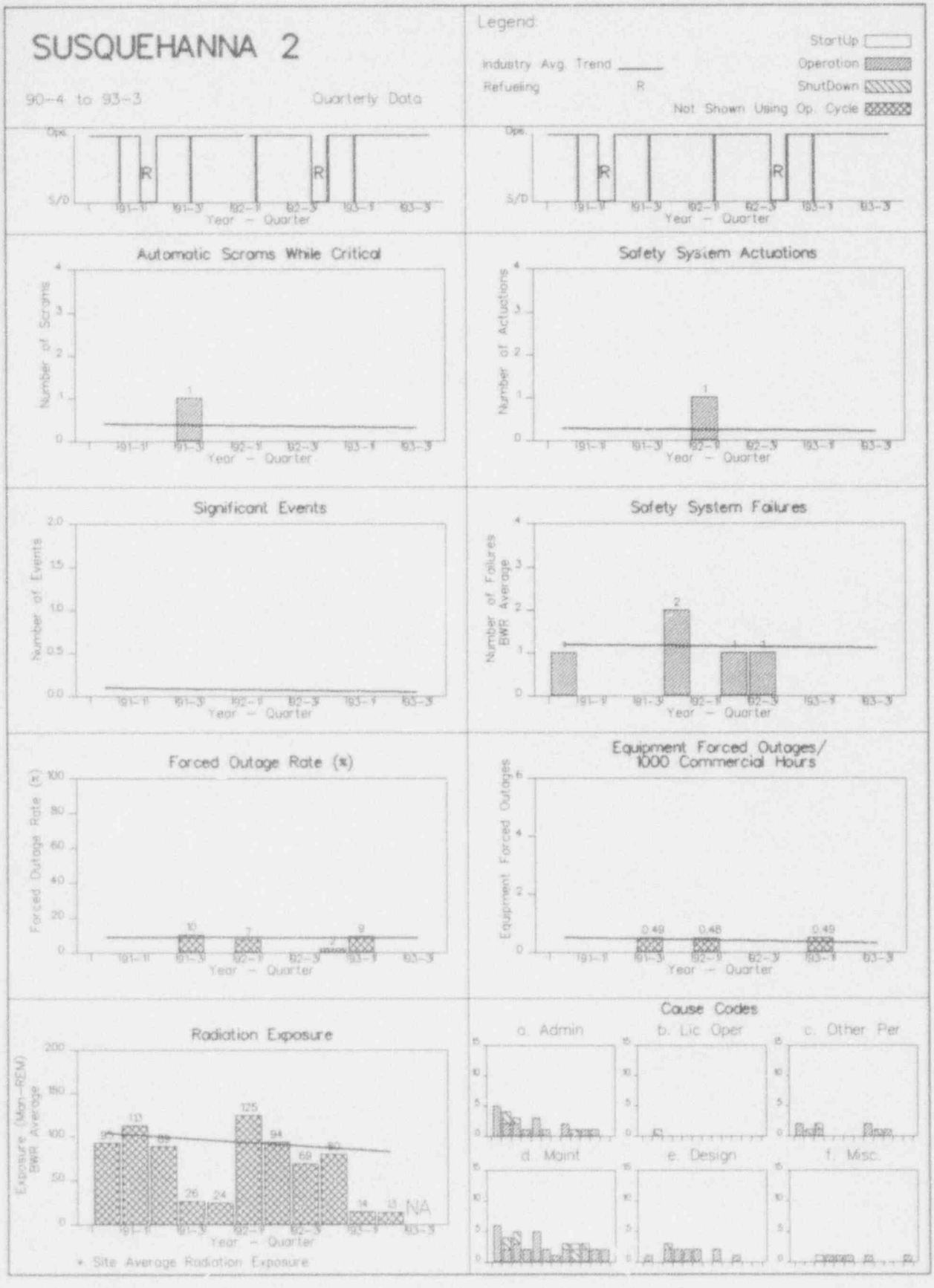

SUSQUEHANNA 2
90-4 to 93-3
Quarterly Data
Legend:
StartUp
Industry Avg. Trend
Operation
Refueling
R
ShutDown
Not Shown Using Op. Cycle
Ope.
S/D
R
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures
BWR Average
Forced Outage Rate (%)
Equipment Forced Outages/
1000 Commercial Hours
Equipment Forced Outages
Radiation Exposure
Exposure (Man-REM)
BWR Average
NA
* Site Average Radiation Exposure
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.98b

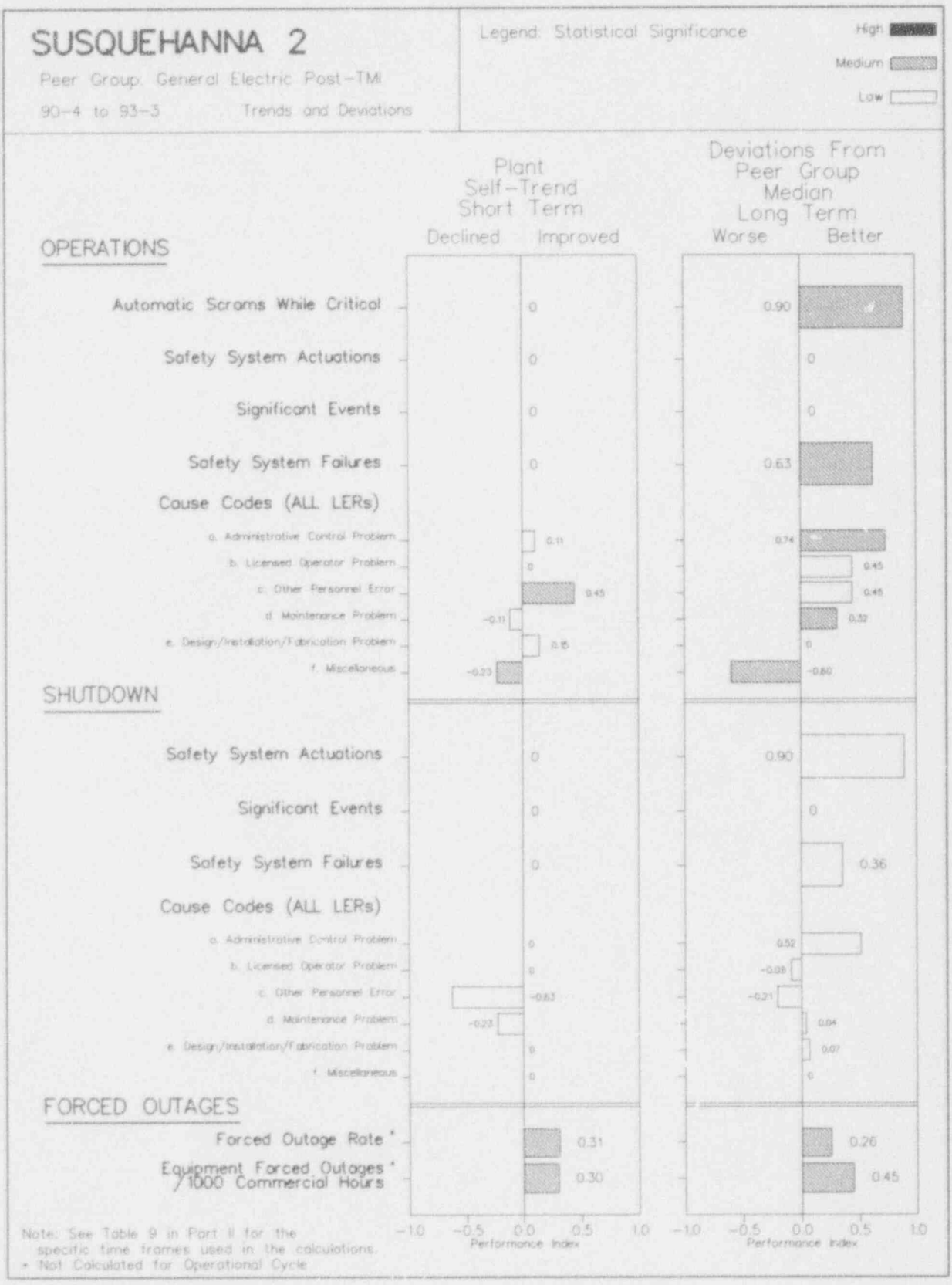

SUSQUEHANNA 2
Peer Group: General Electric Post-TMI
90-4 to 93-3 Trends and Deviations
Legend: Statistical Significance
High
Medium
Low
Plant Self-Trend Short Term
Declined
Improved
Deviations From Peer Group Median Long Term
Worse
Better
OPERATIONS
Automatic Scrams While Critical
Safety System Actuations
Significant Events
Safety System Failures
Cause Codes (ALL LERs)
a. Administrative Control Problem
b. Licensed Operator Problem
c. Other Personnel Error
d. Maintenance Problem
e. Design/Installation/Fabrication Problem
f. Miscellaneous
SHUTDOWN
Safety System Actuations
Significant Events
Safety System Failures
Cause Codes (ALL LERs)
a. Administrative Control Problem
b. Licensed Operator Problem
c. Other Personnel Error
d. Maintenance Problem
e. Design/Installation/Fabrication Problem
f. Miscellaneous
FORCED OUTAGES
Forced Outage Rate *
Equipment Forced Outages * /1000 Commercial Hours
0
0.90
0.63
0.11
0.74
0.45
0.45
0.32
0.15
-0.11
-0.23
-0.80
0.36
0.52
-0.08
-0.63
-0.21
-0.23
0.04
0.07
0.31
0.26
0.30
0.45
-1.0
-0.5
0.0
0.5
1.0
Performance Index
Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.99a

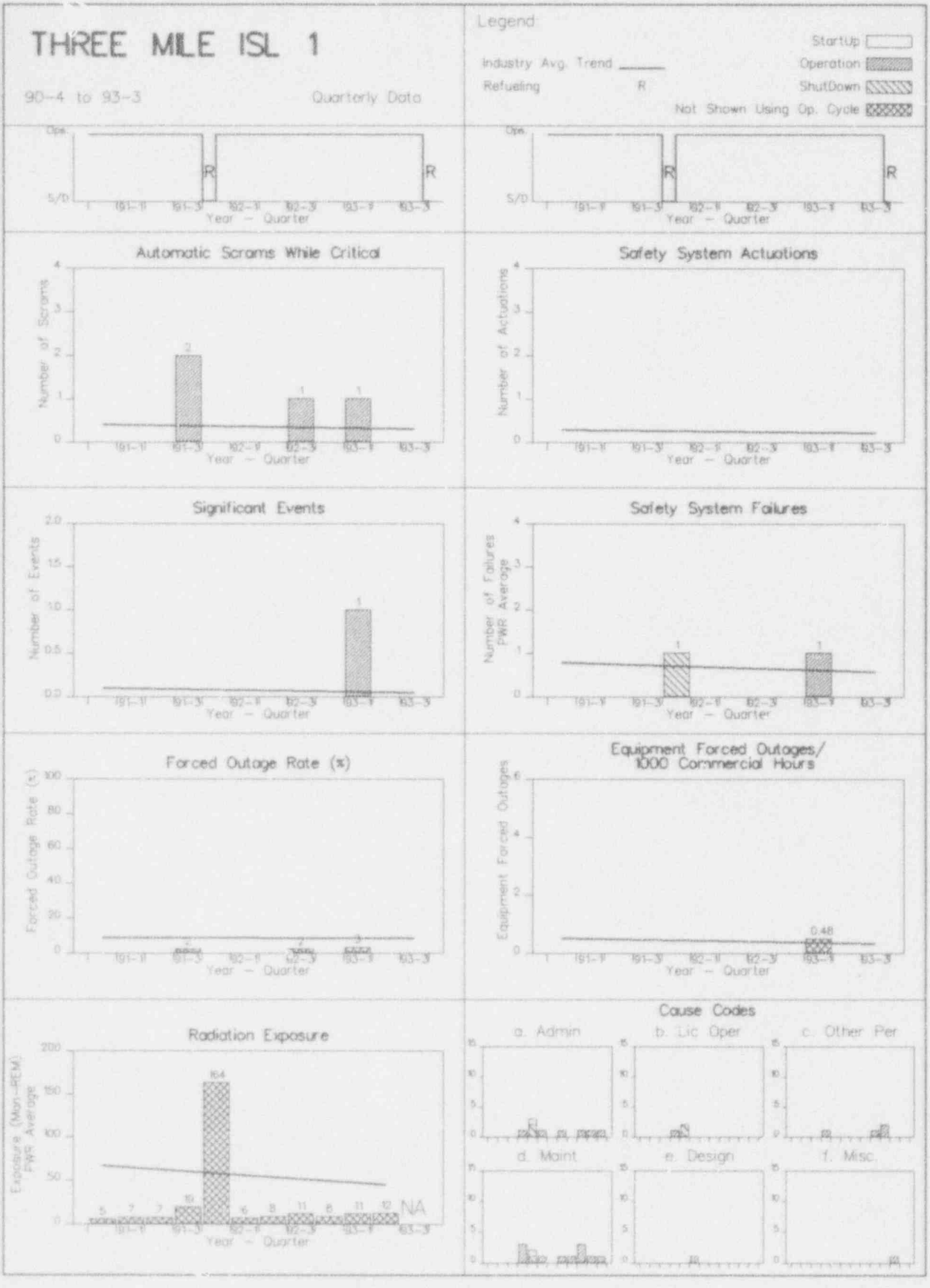

THREE MILE ISL 1
90-4 to 93-3
Quarterly Data
Legend:
Industry Avg. Trend
Refueling R
StartUp
Operation
ShutDown
Not Shown Using Op. Cycle
Ops.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
0.48
Radiation Exposure
Exposure (Man-REM) PWR Average
164
NA
Cause Codes
a. Admin
b. Lic Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.99b

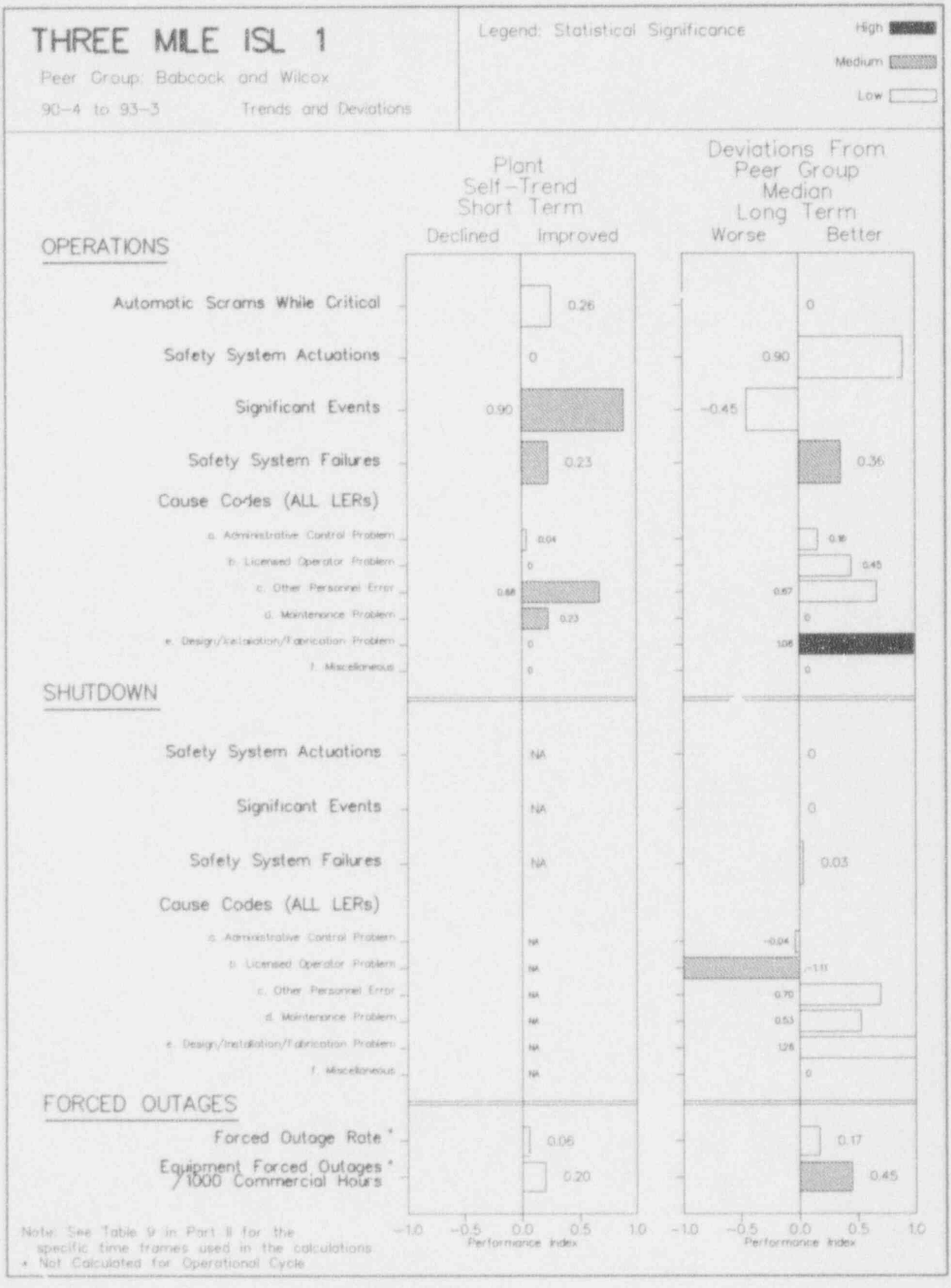

THREE MILE ISL 1
Peer Group: Babcock and Wilcox
90-4 to 93-3 Trends and Deviations
Legend: Statistical Significance
High
Medium
Low
Plant Self-Trend Short Term
Declined
Improved
Deviations From Peer Group Median Long Term
Worse
Better
OPERATIONS
Automatic Scrams While Critical
0.26
0
Safety System Actuations
0
0.90
Significant Events
0.90
-0.45
Safety System Failures
0.23
0.36
Cause Codes (ALL LERs)
a. Administrative Control Problem
0.04
0.18
b. Licensed Operator Problem
0
0.45
c. Other Personnel Error
0.68
0.67
d. Maintenance Problem
0.23
0
e. Design/Installation/Fabrication Problem
0
1.08
f. Miscellaneous
0
0
SHUTDOWN
Safety System Actuations
NA
0
Significant Events
NA
0
Safety System Failures
NA
0.03
Cause Codes (ALL LERs)
a. Administrative Control Problem
NA
-0.04
b. Licensed Operator Problem
NA
-1.11
c. Other Personnel Error
NA
0.70
d. Maintenance Problem
NA
0.53
e. Design/Installation/Fabrication Problem
NA
1.26
f. Miscellaneous
NA
0
FORCED OUTAGES
Forced Outage Rate *
0.06
0.17
Equipment Forced Outages * /1000 Commercial Hours
0.20
0.45
-1.0 -0.5 0.0 0.5 1.0
Performance Index
-1.0 -0.5 0.0 0.5 1.0
Performance Index
Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.100a

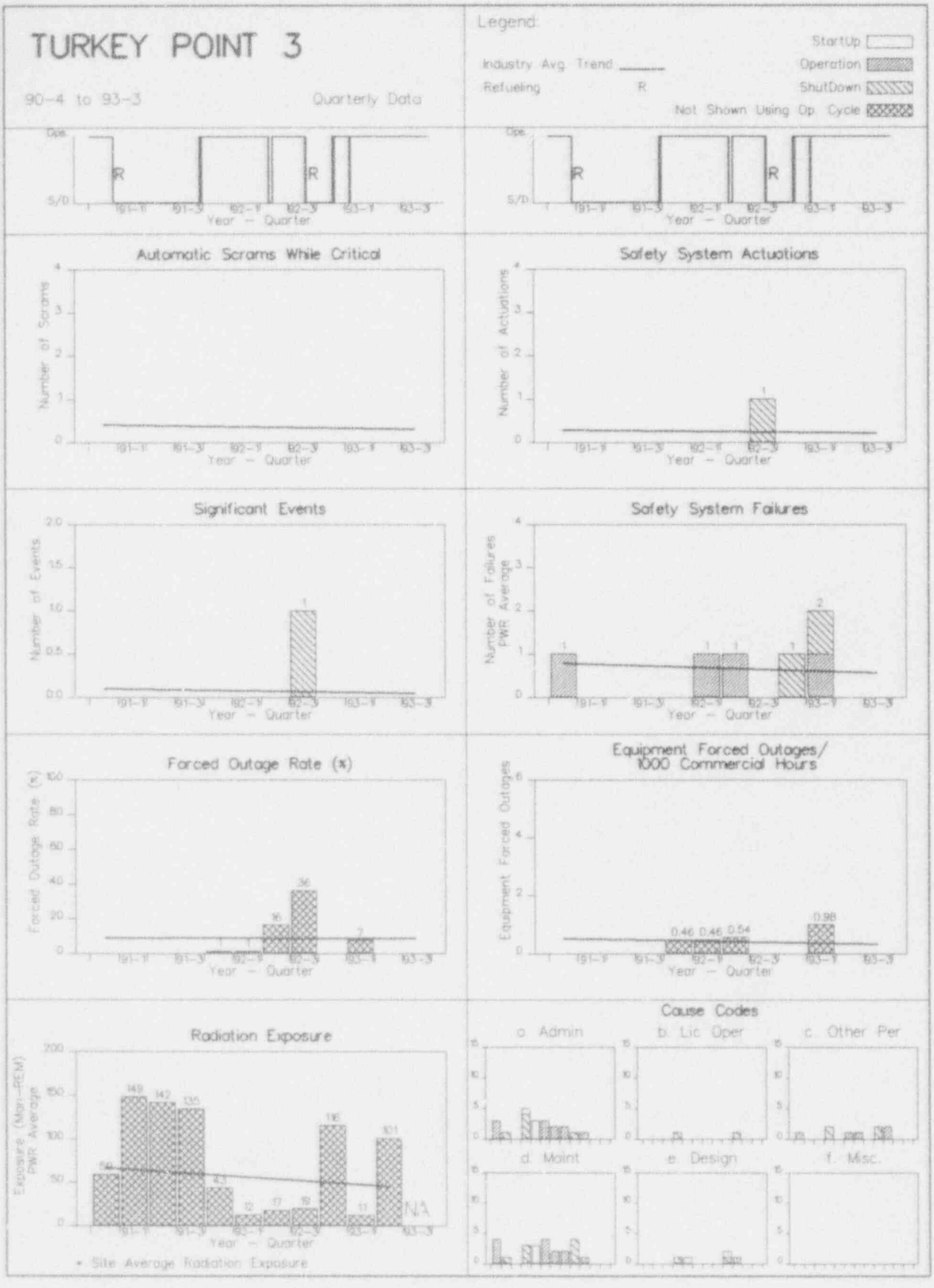
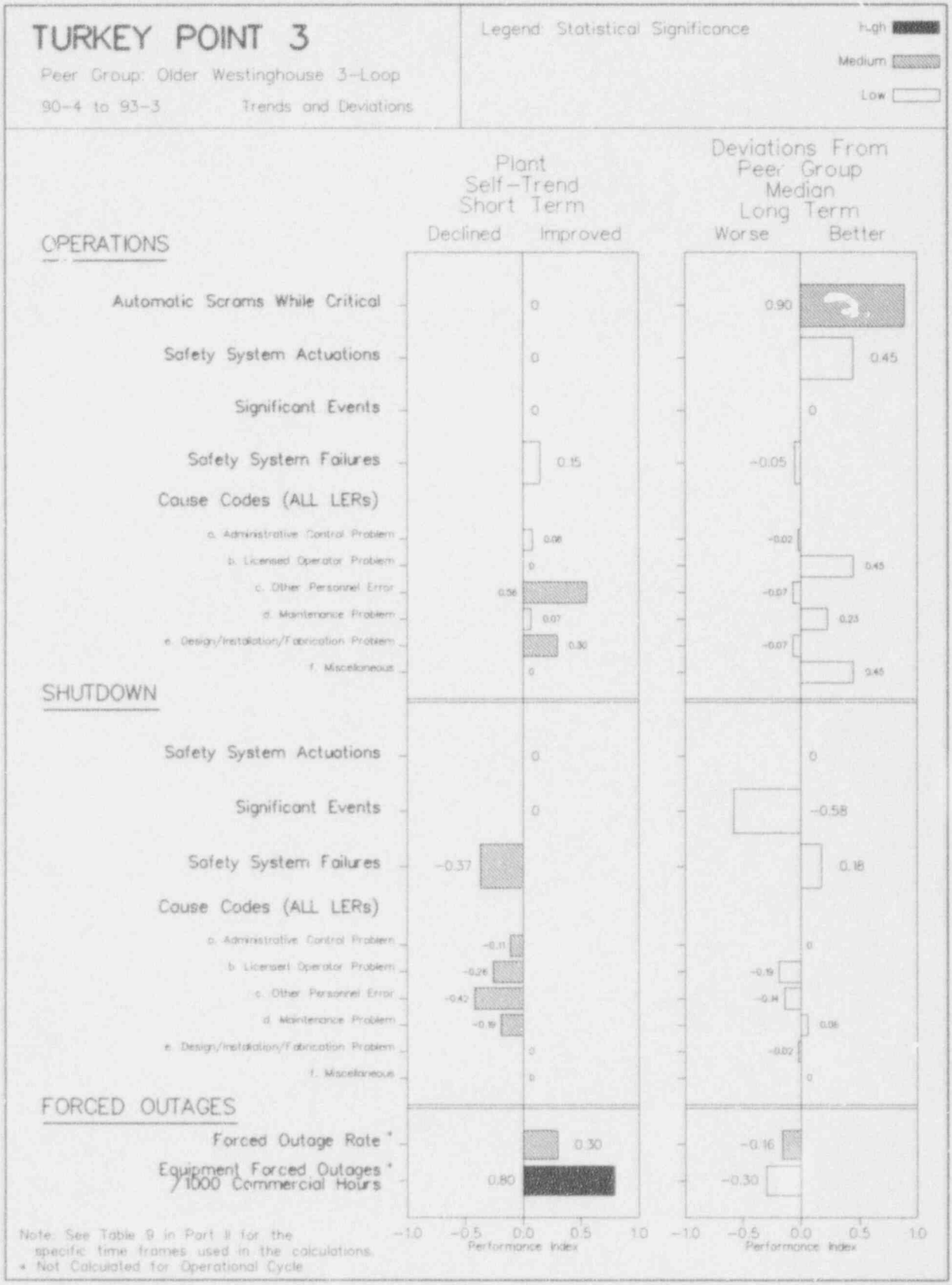


FIGURE 7.100b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.101a

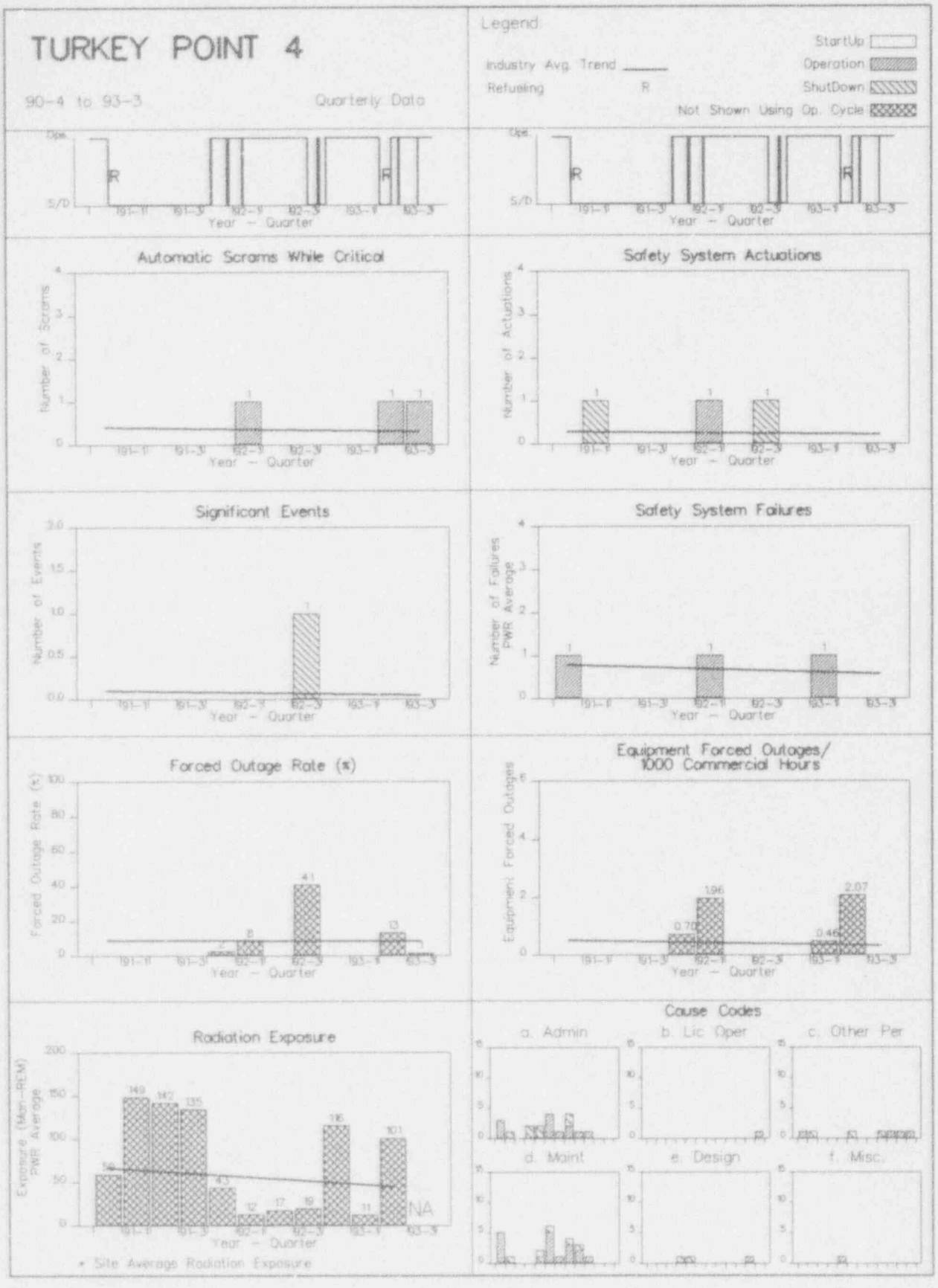
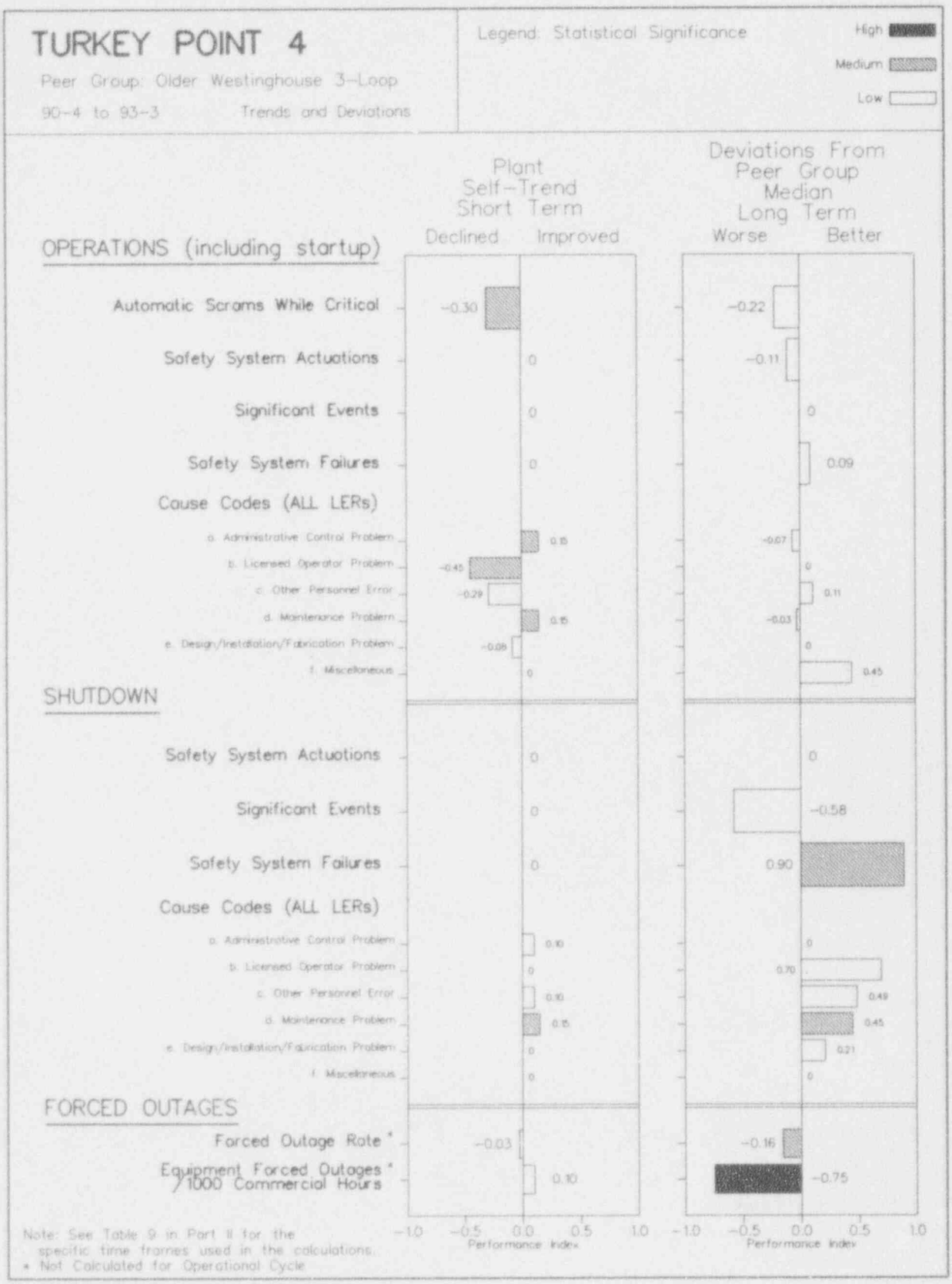


FIGURE 7.101b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.102a

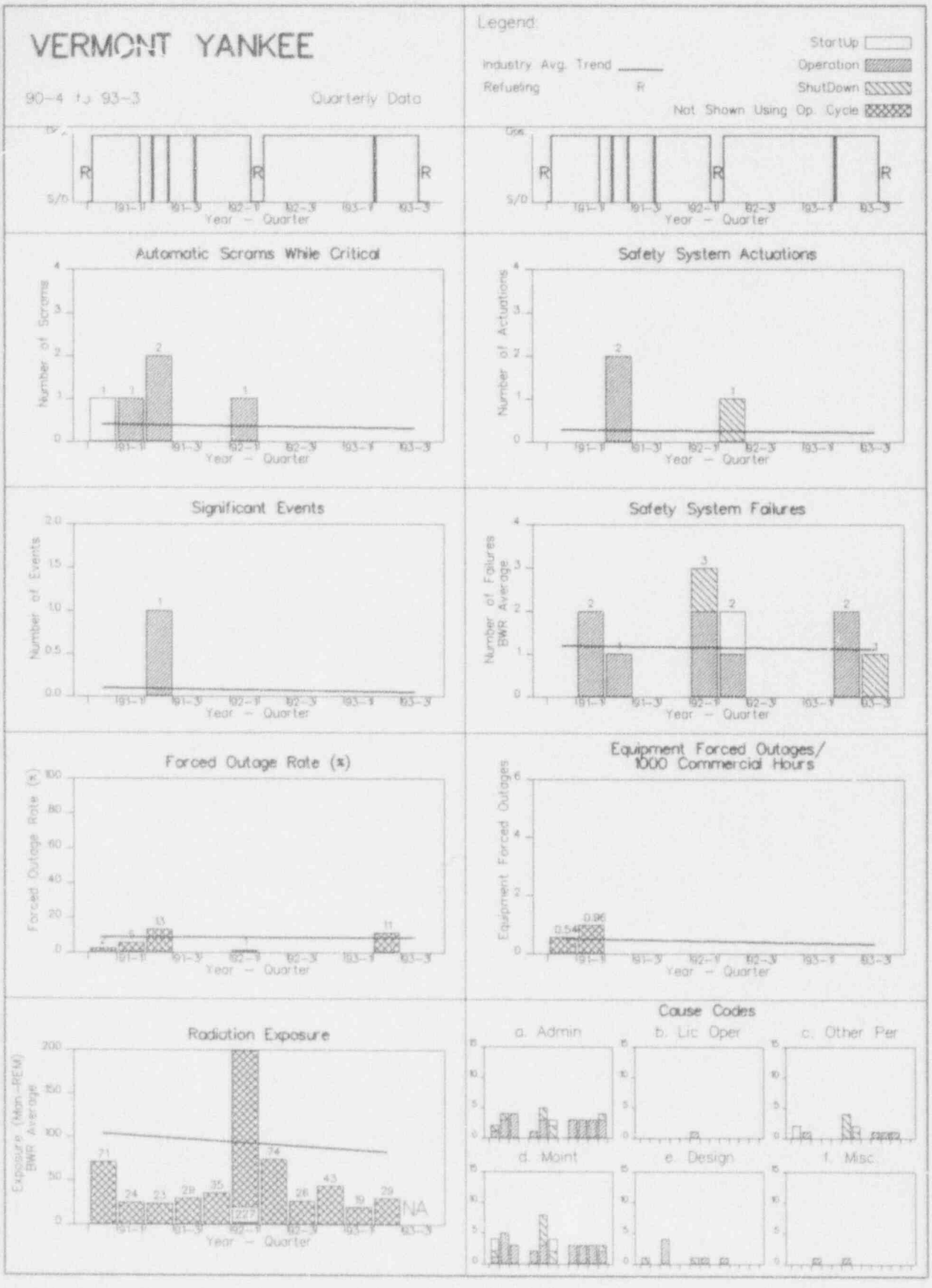


FIGURE 7.102b

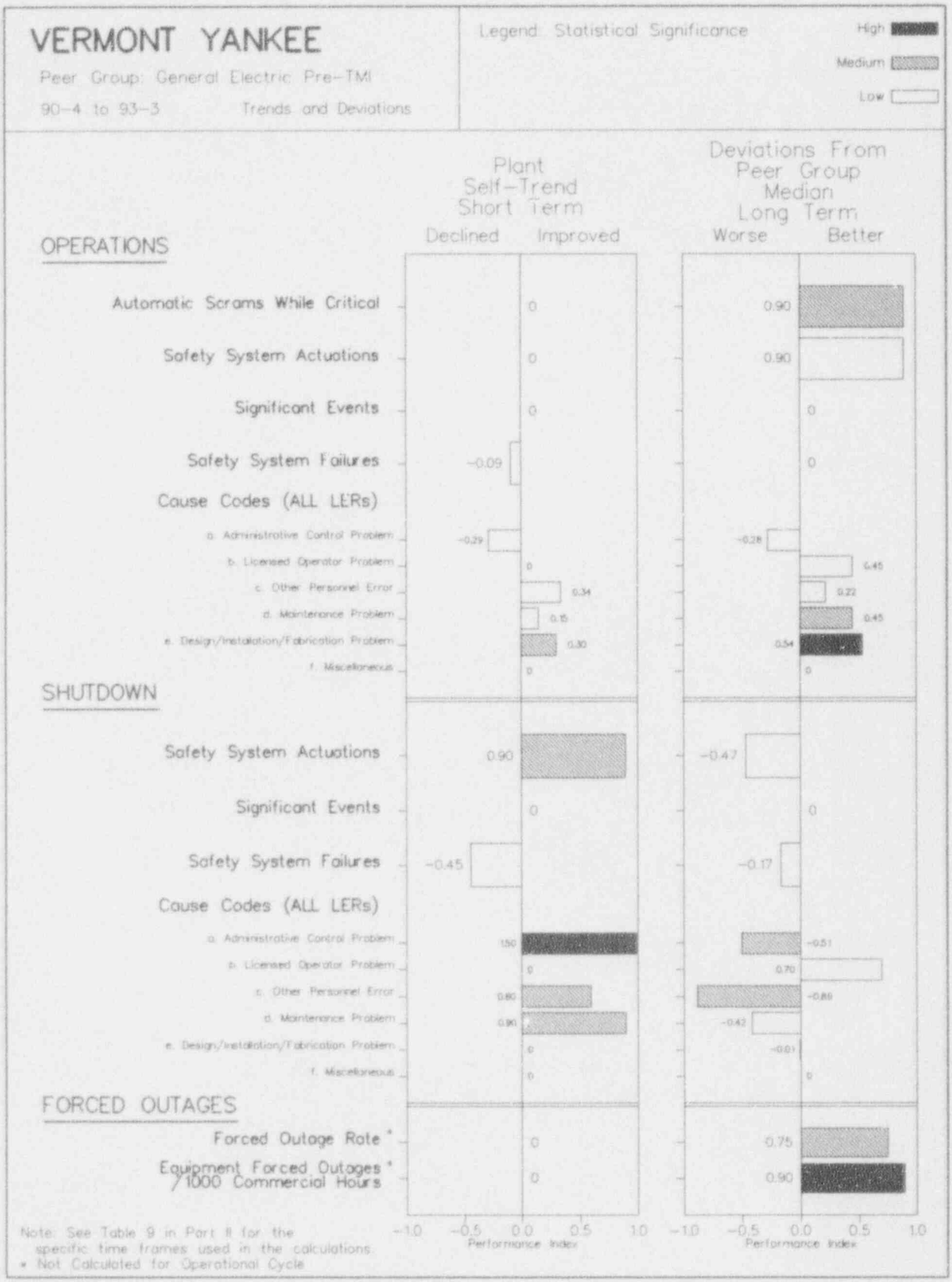


FIGURE 7.103a

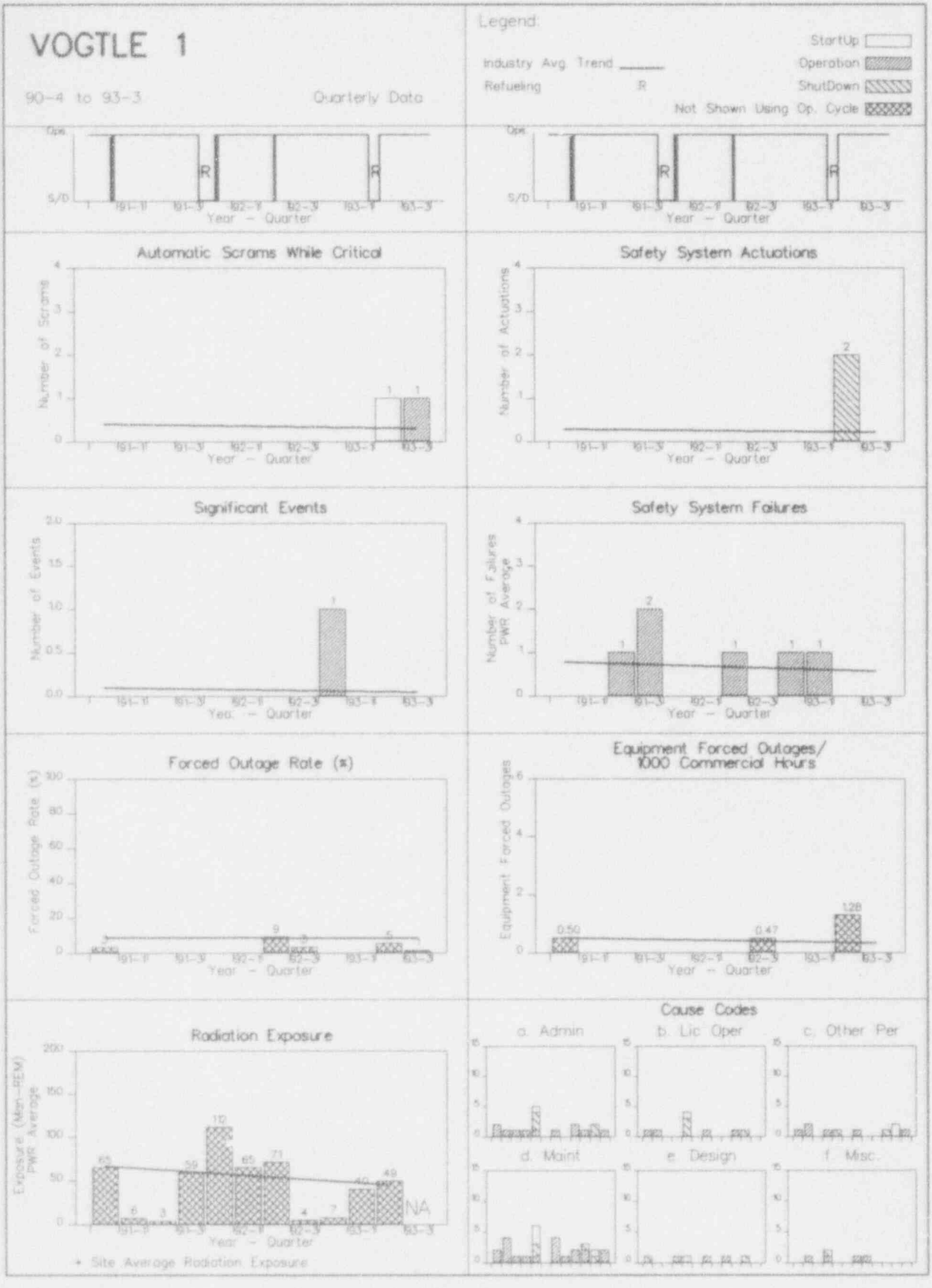


FIGURE 7.103b

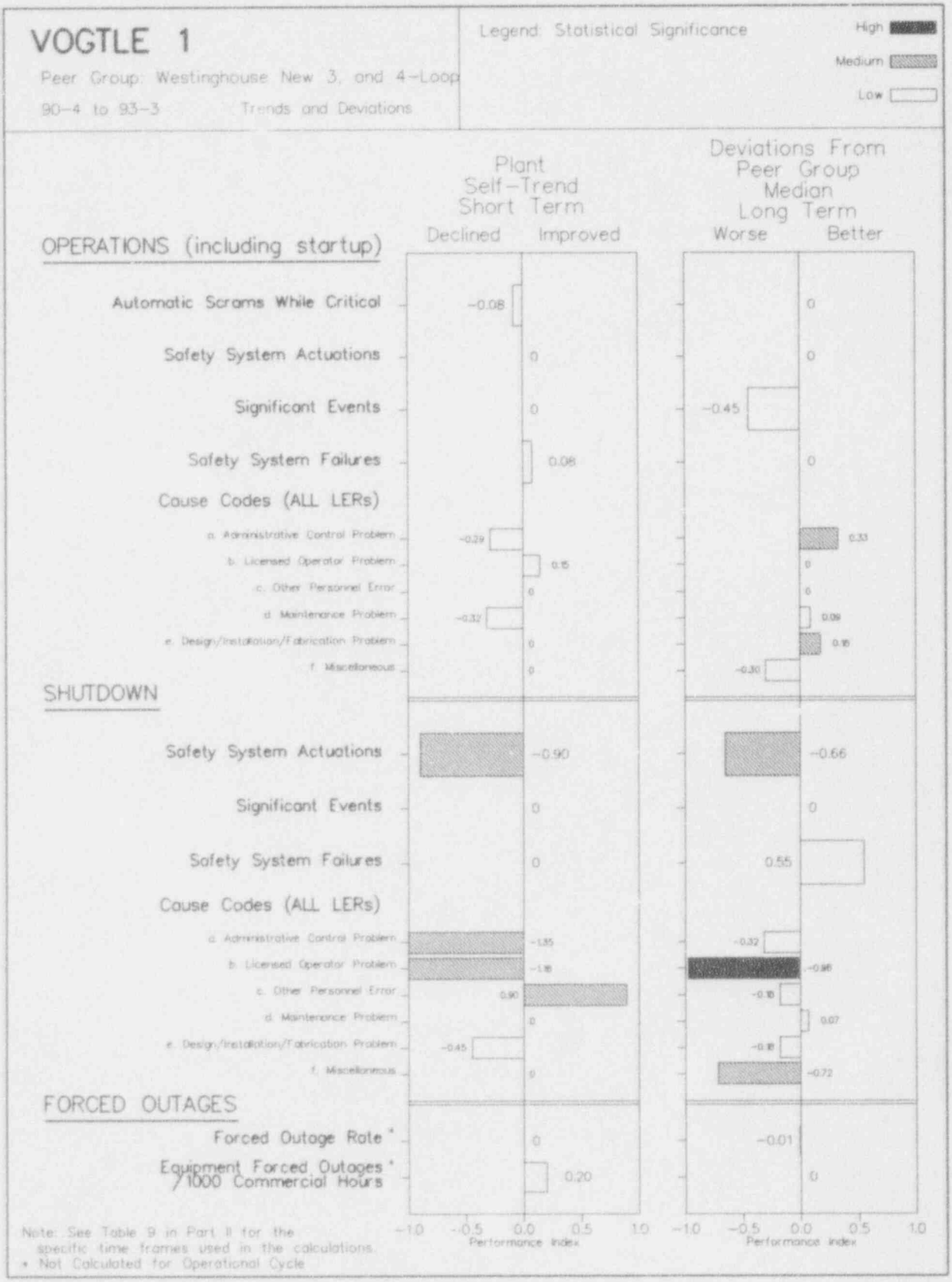


FIGURE 7.104a

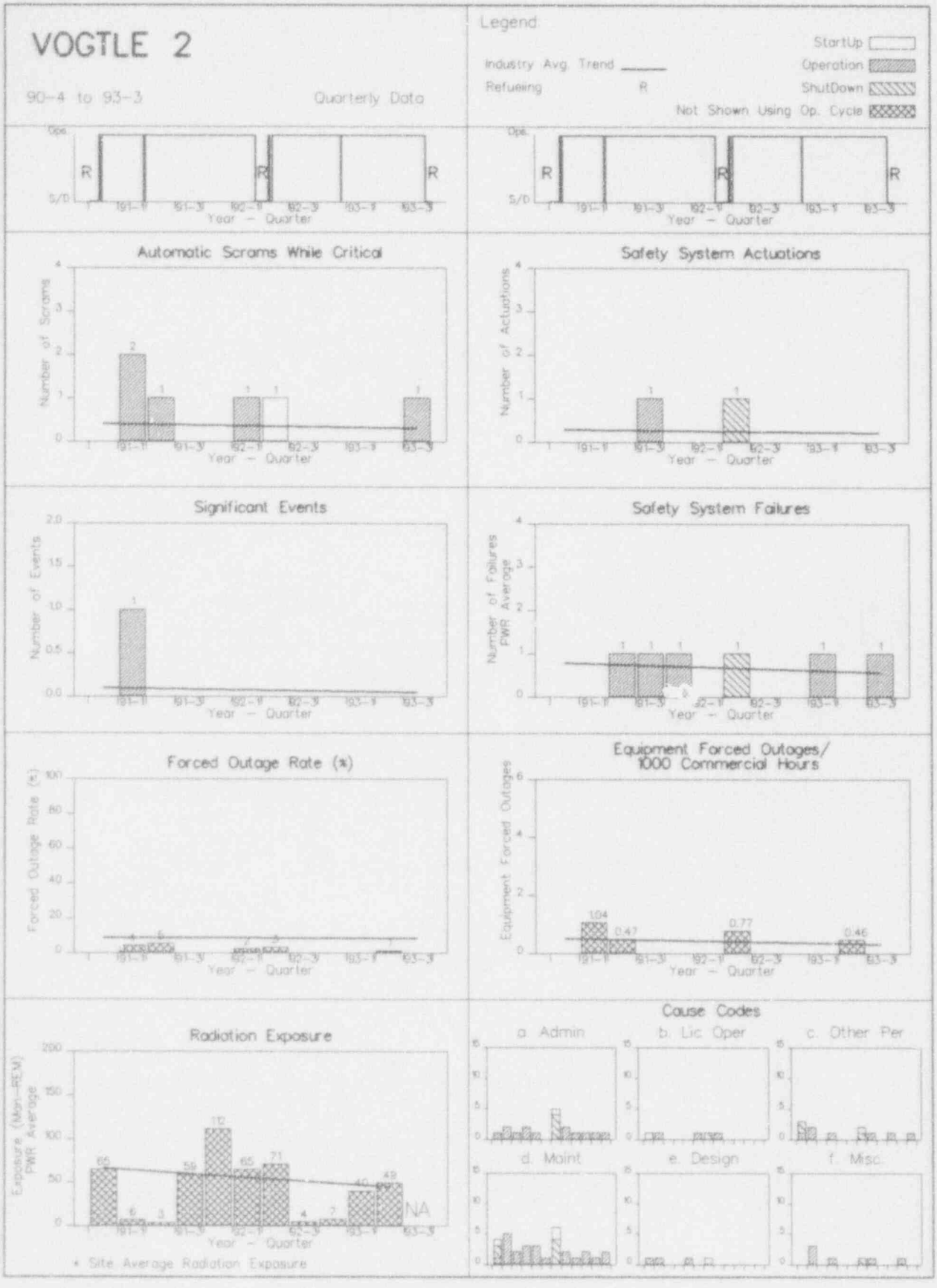


FIGURE 7.104b

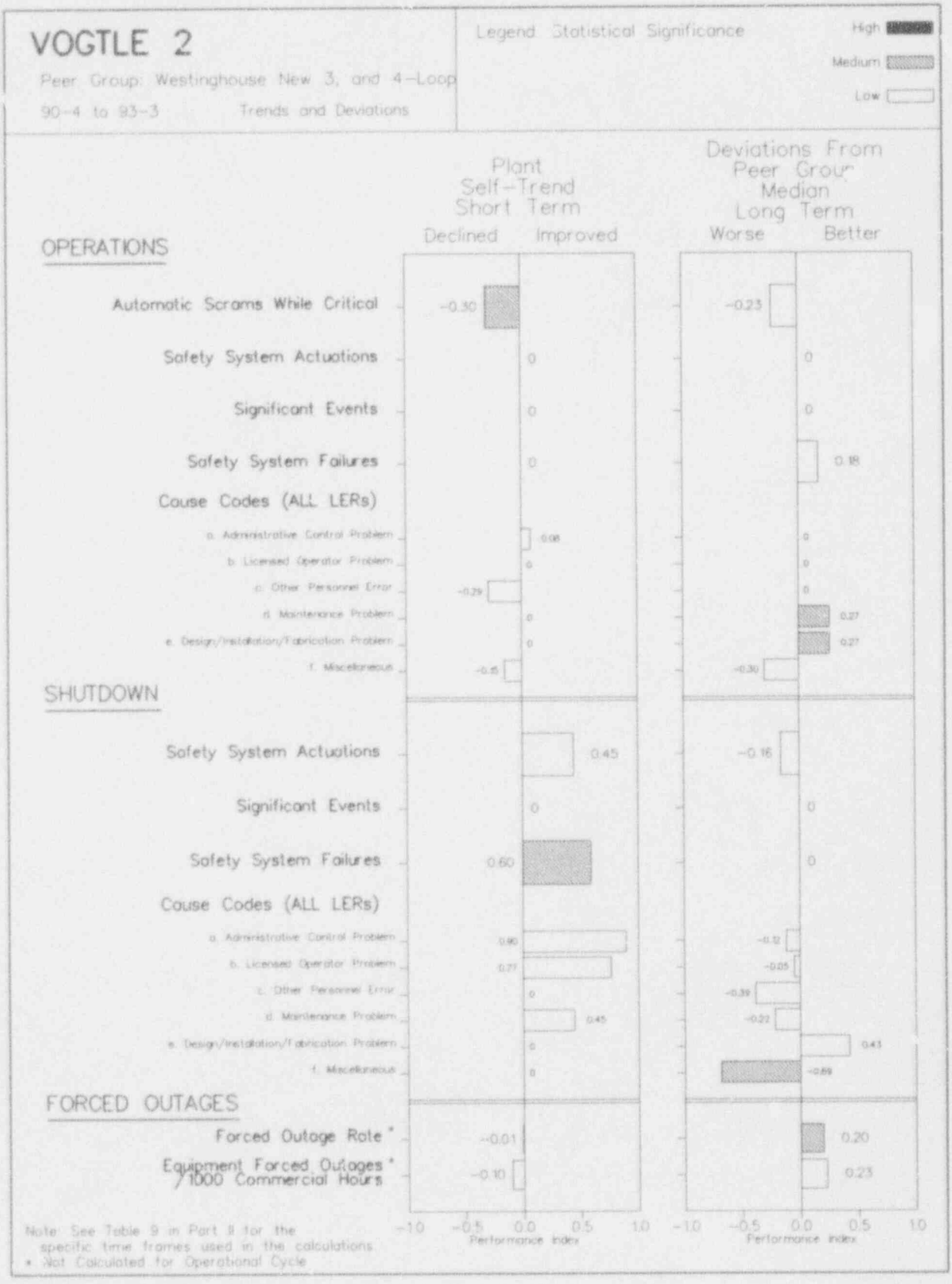


FIGURE 7.105a

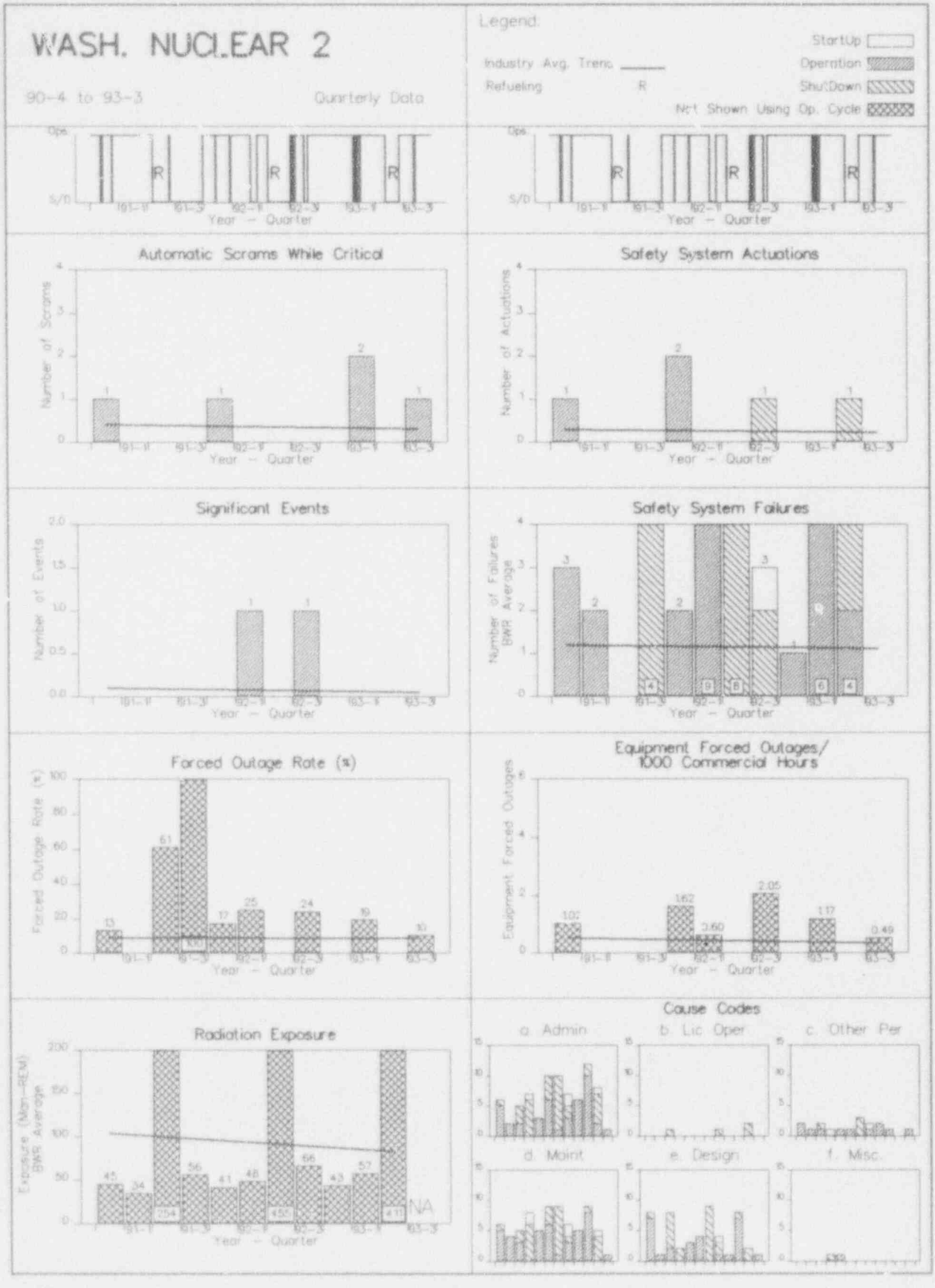
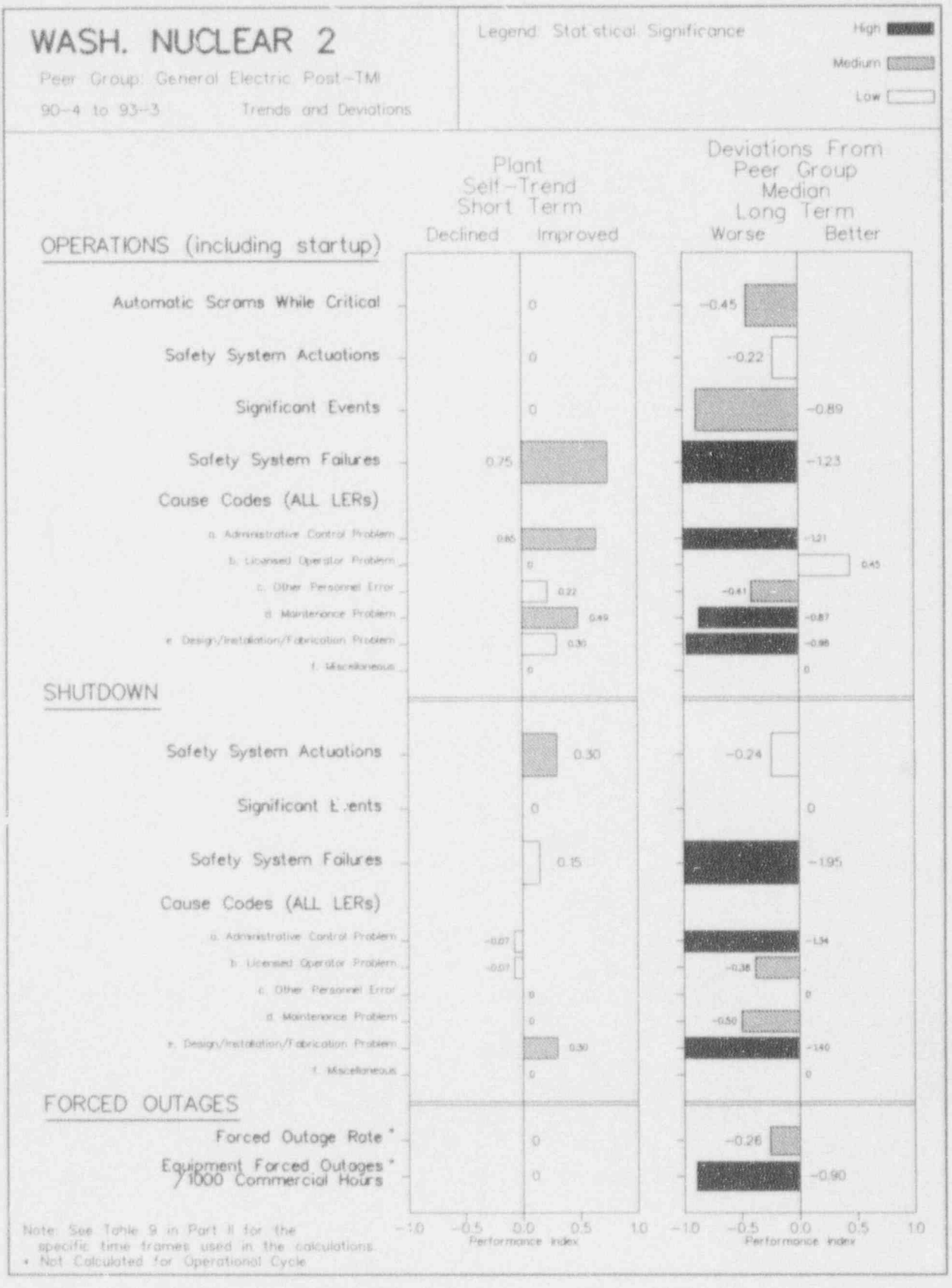


FIGURE 7.105b



Note: See Table 9 in Part II for the specific time frames used in the calculations.
* Not Calculated for Operational Cycle

FIGURE 7.1.6a

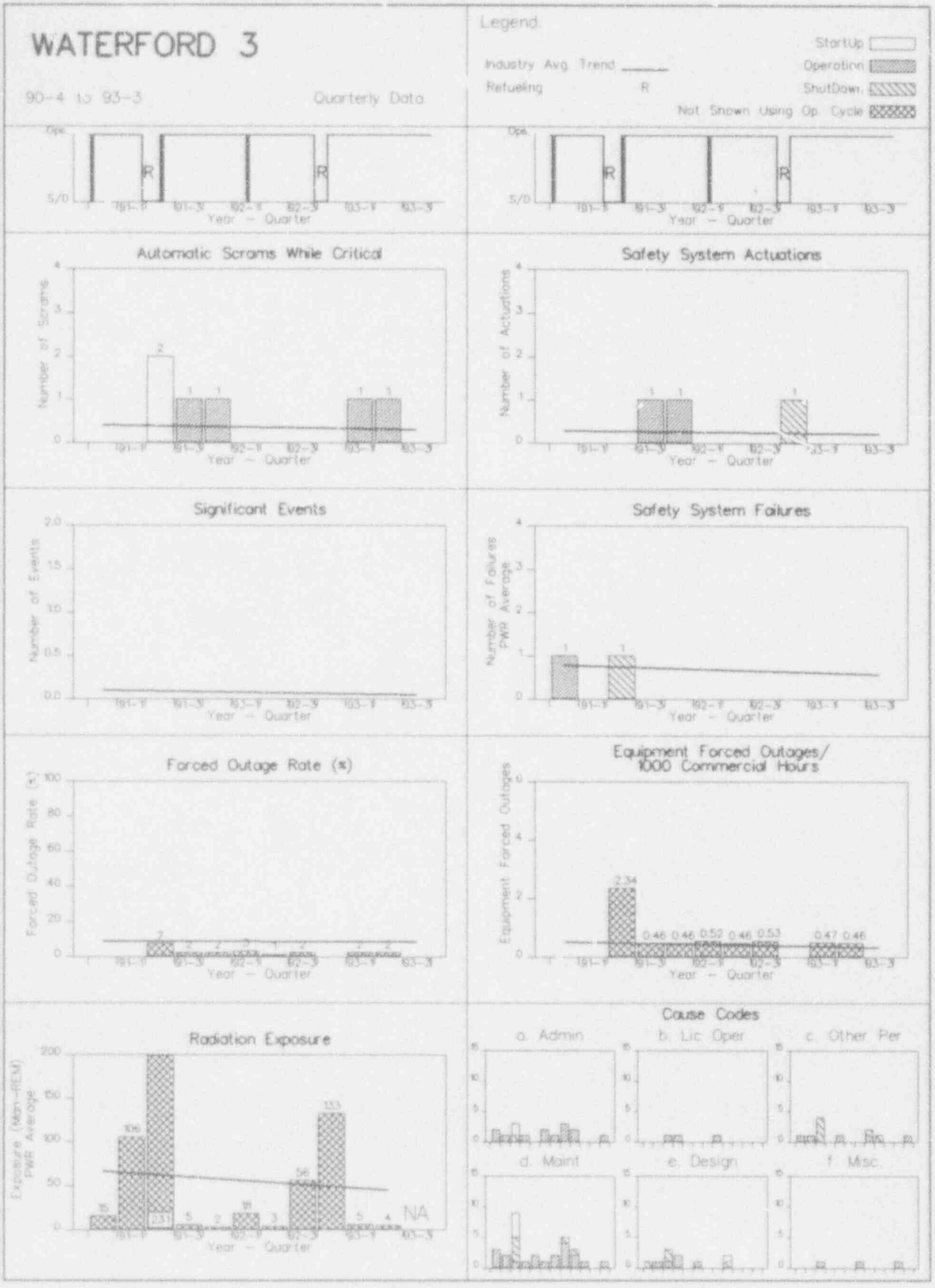

WATERFORD 3
90-4 to 93-3
Quarterly Data
Legend:
StartUp
Industry Avg. Trend
Operation
Refueling
R
ShutDown
Not Shown Using Op. Cycle
Opn.
S/D
Year - Quarter
Automatic Scrams While Critical
Number of Scrams
Safety System Actuations
Number of Actuations
Significant Events
Number of Events
Safety System Failures
Number of Failures PWR Average
Forced Outage Rate (%)
Forced Outage Rate (%)
Equipment Forced Outages/ 1000 Commercial Hours
Equipment Forced Outages
2.34
0.46 0.46 0.52 0.46 0.53
0.47 0.46
Radiation Exposure
Exposure (Man-REM) PWR Average
106
233
56
133
NA
Cause Codes
a. Admin
b. Lic. Oper
c. Other Per
d. Maint
e. Design
f. Misc.

FIGURE 7.106b

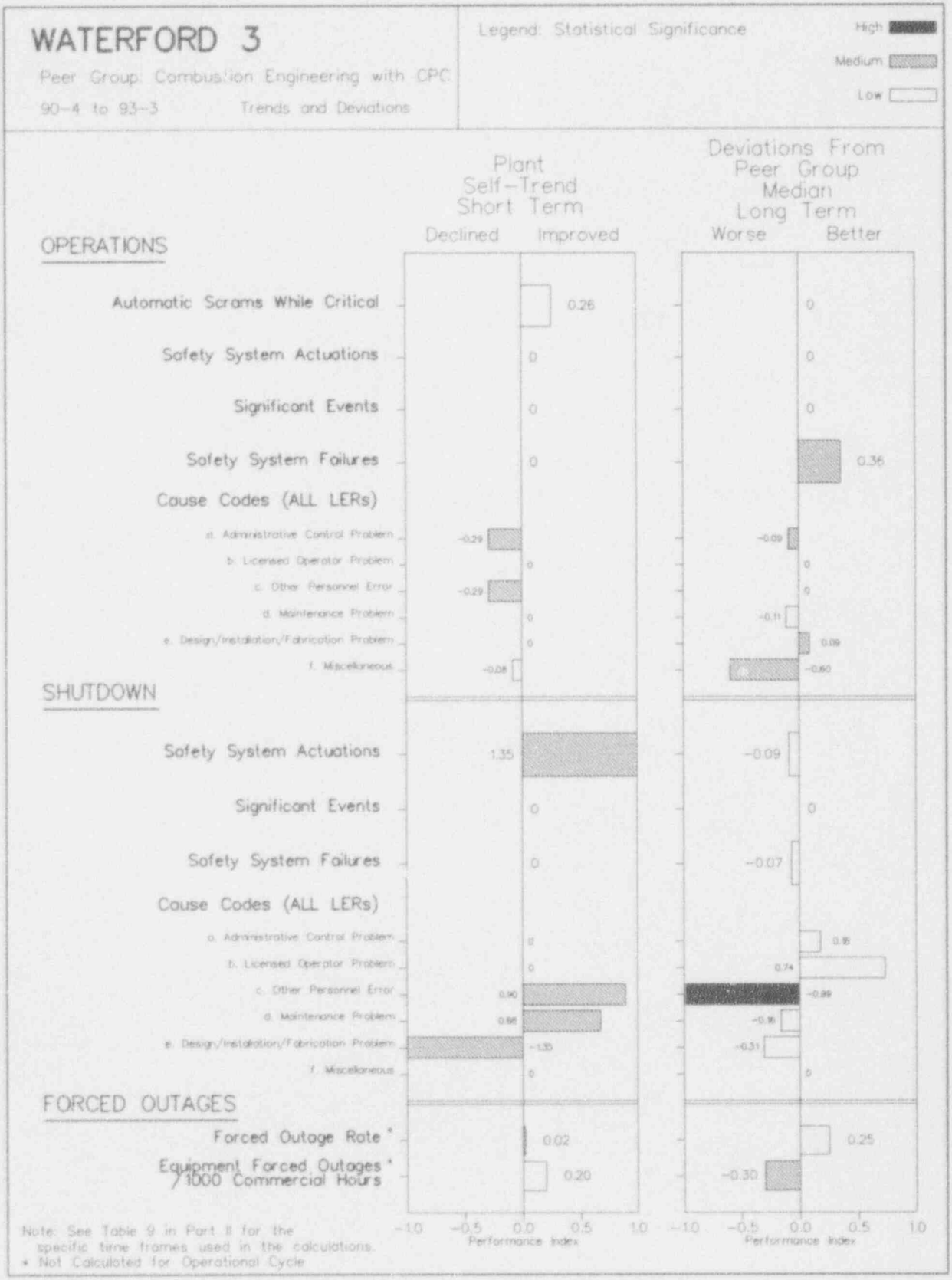


FIGURE 7.107a

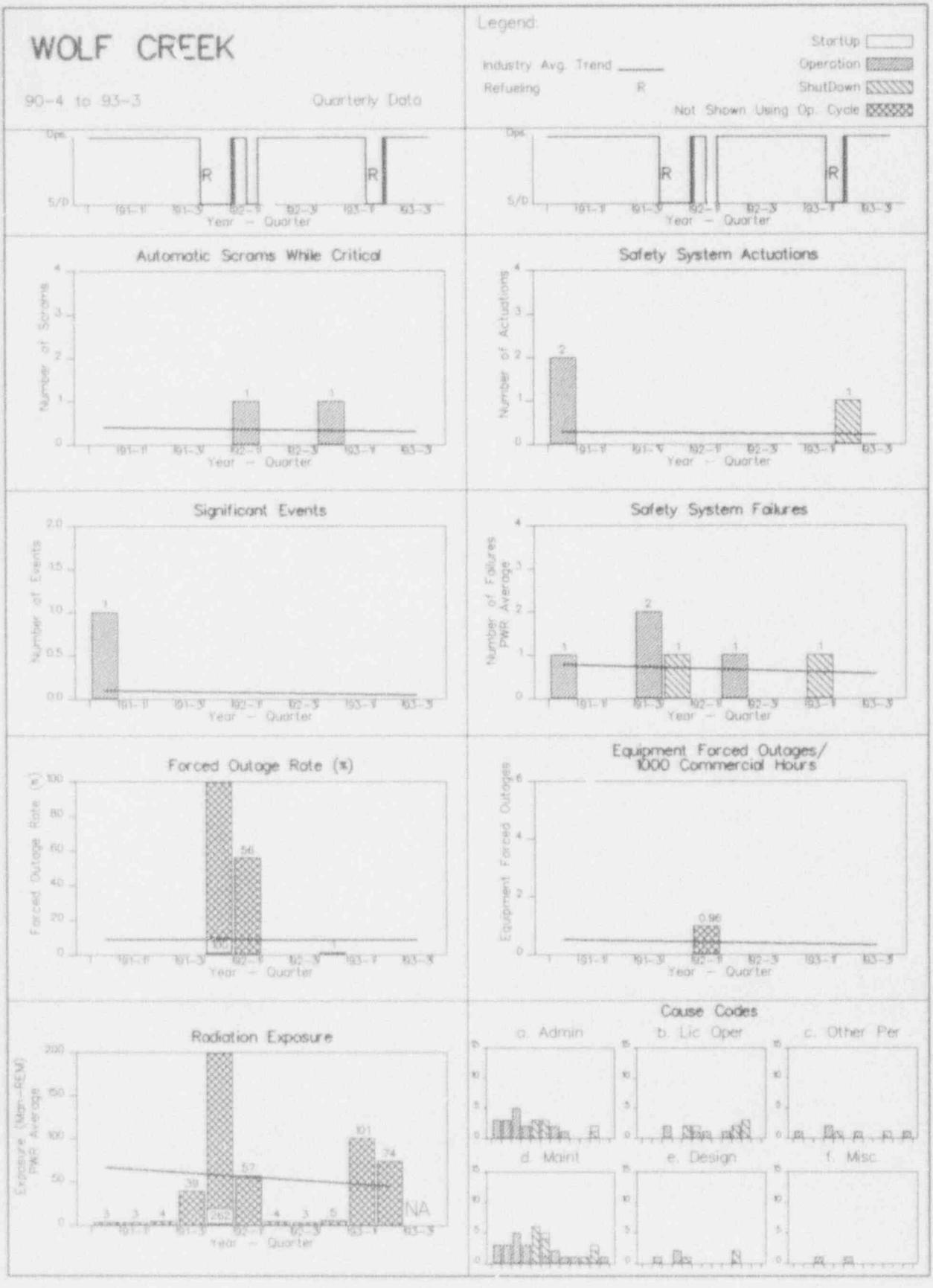


FIGURE 7.107b

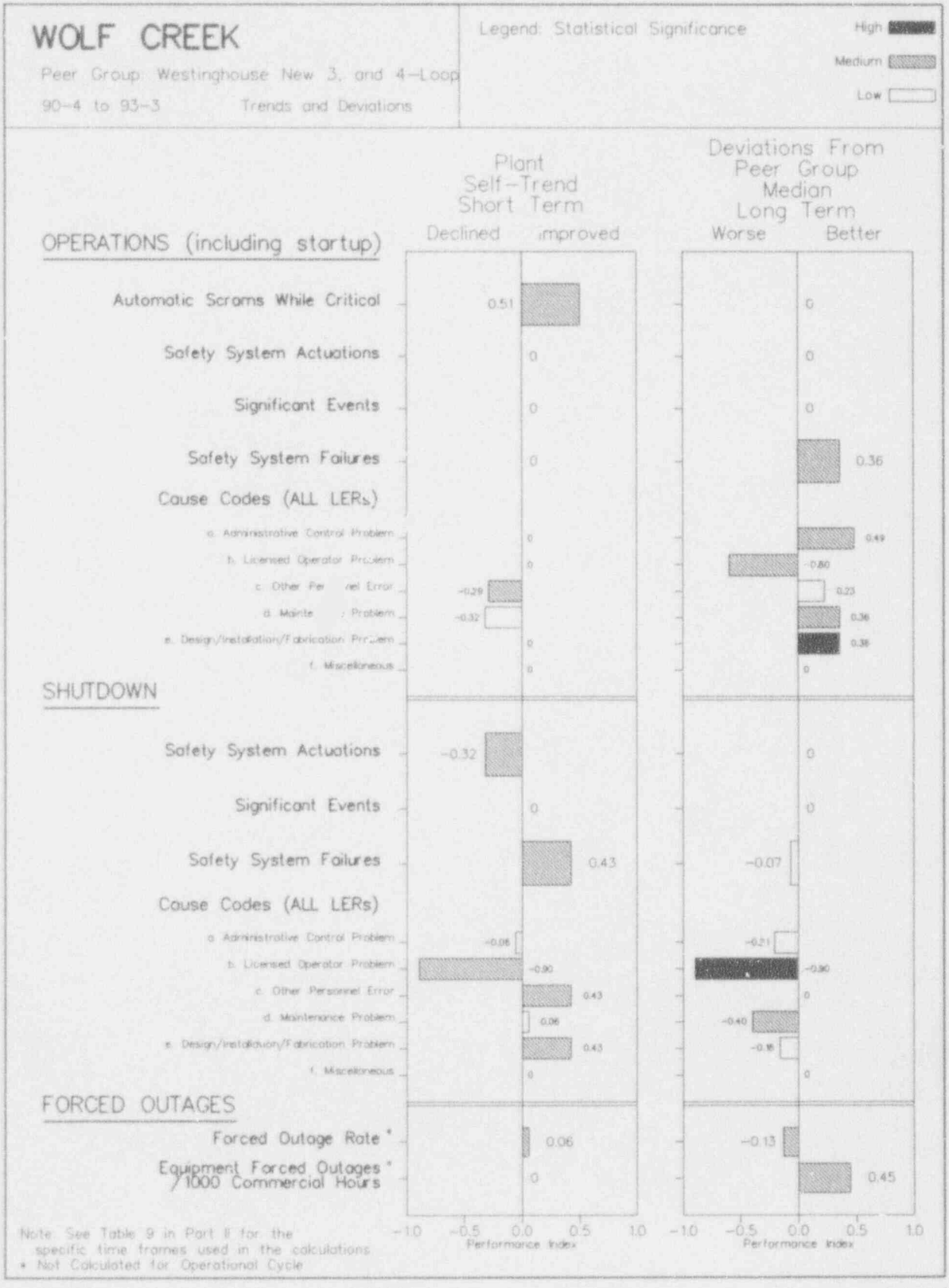


FIGURE 7.108a

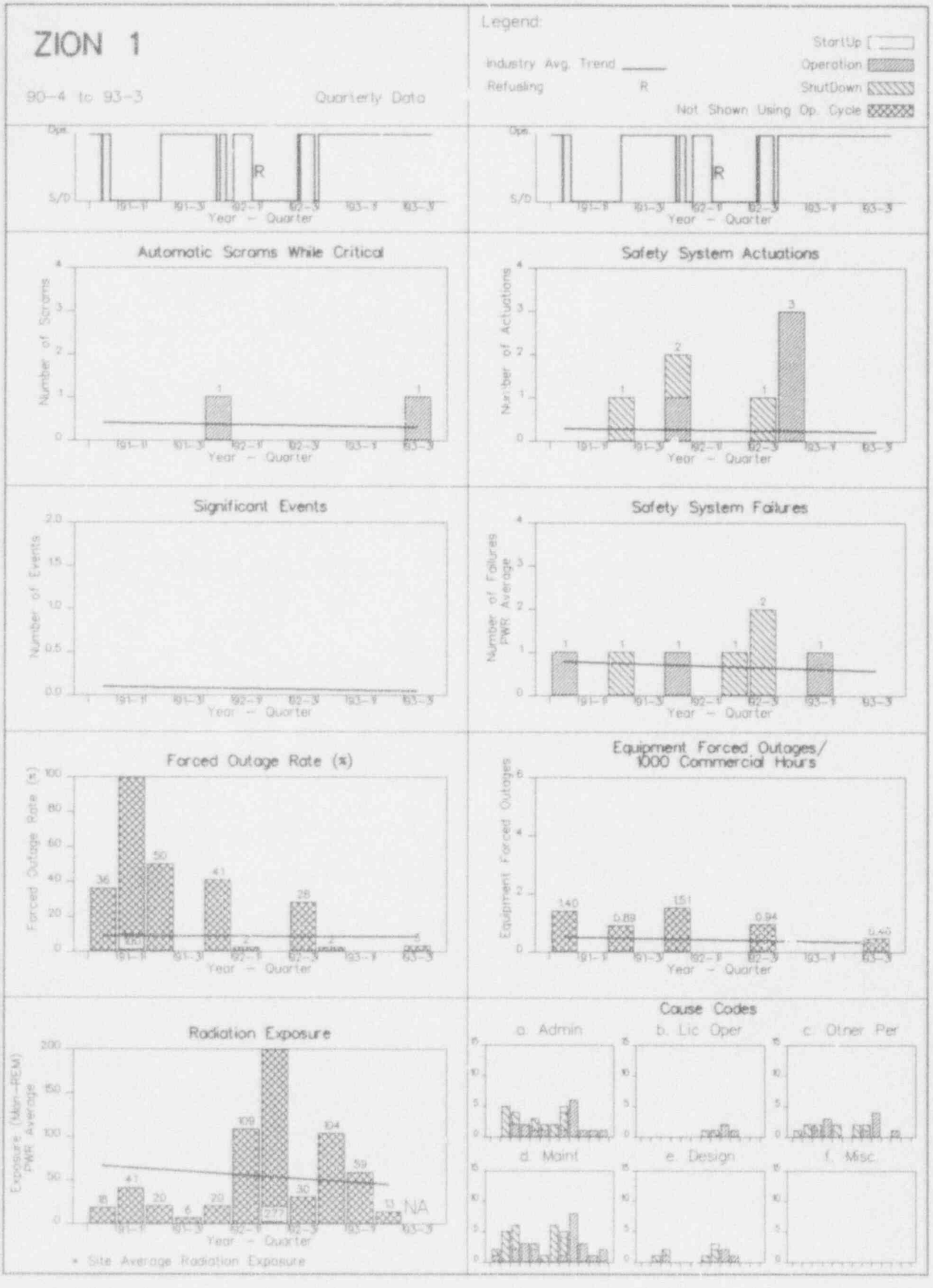


FIGURE 7.108b

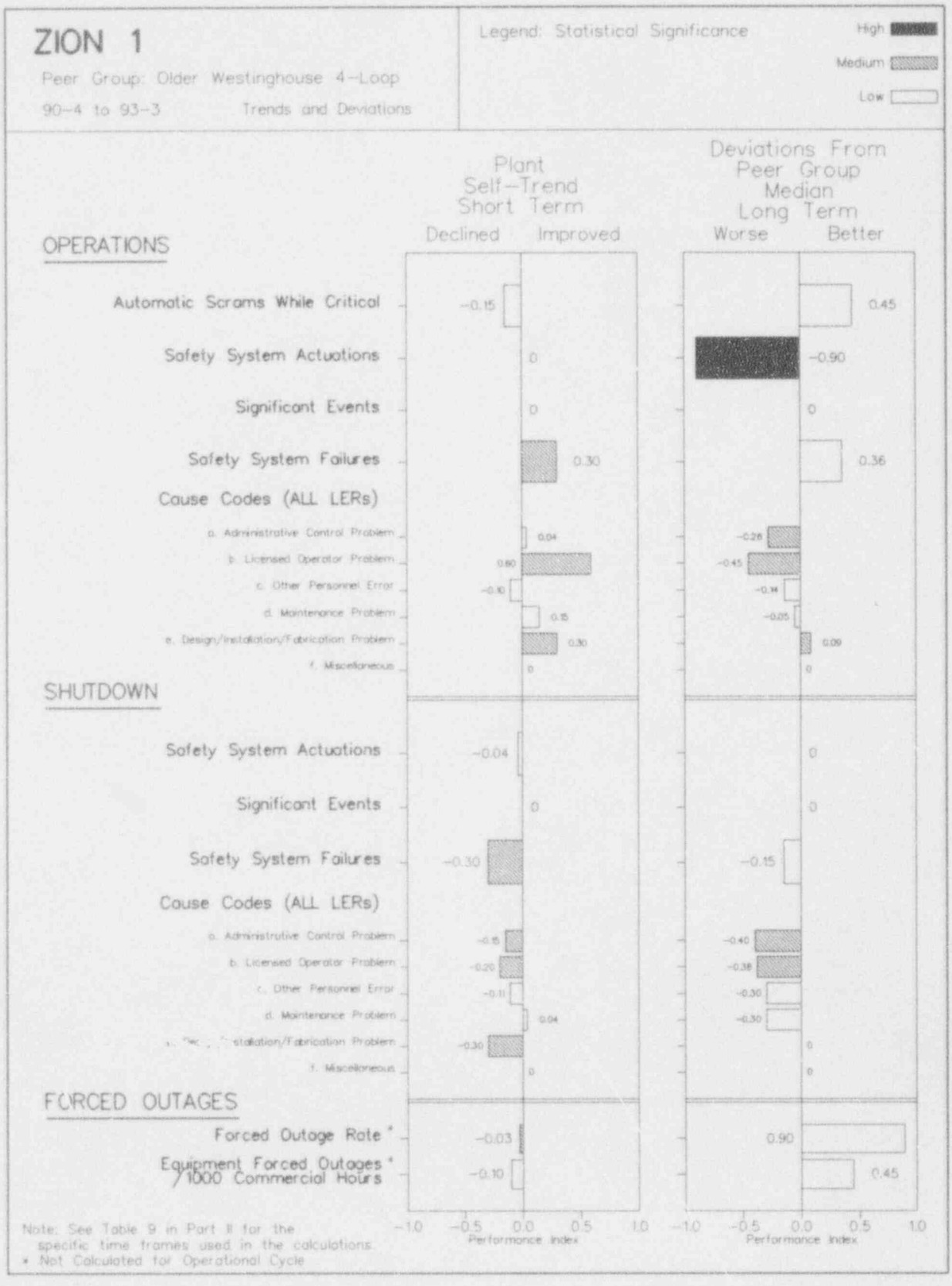


FIGURE 7.109a

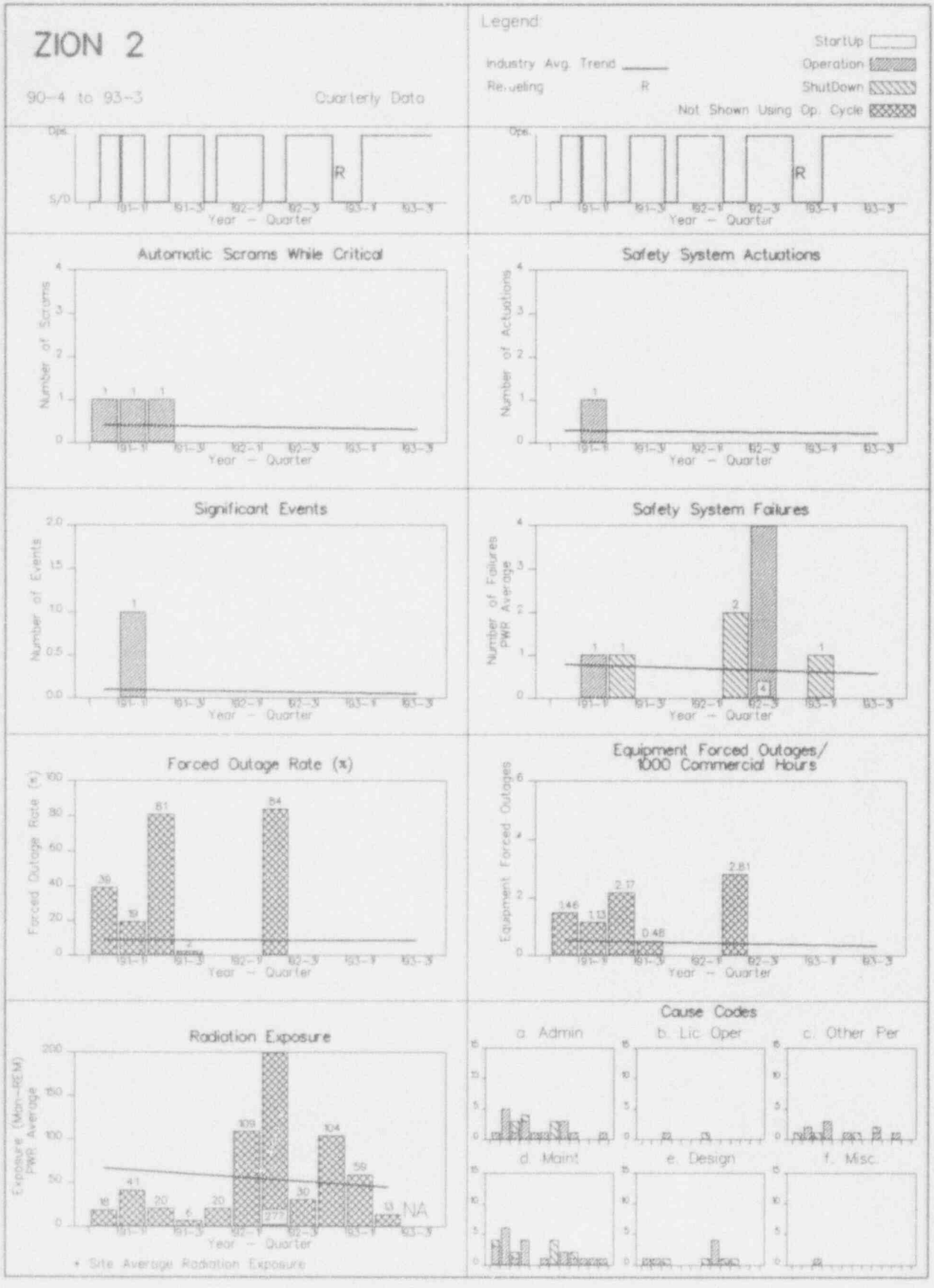
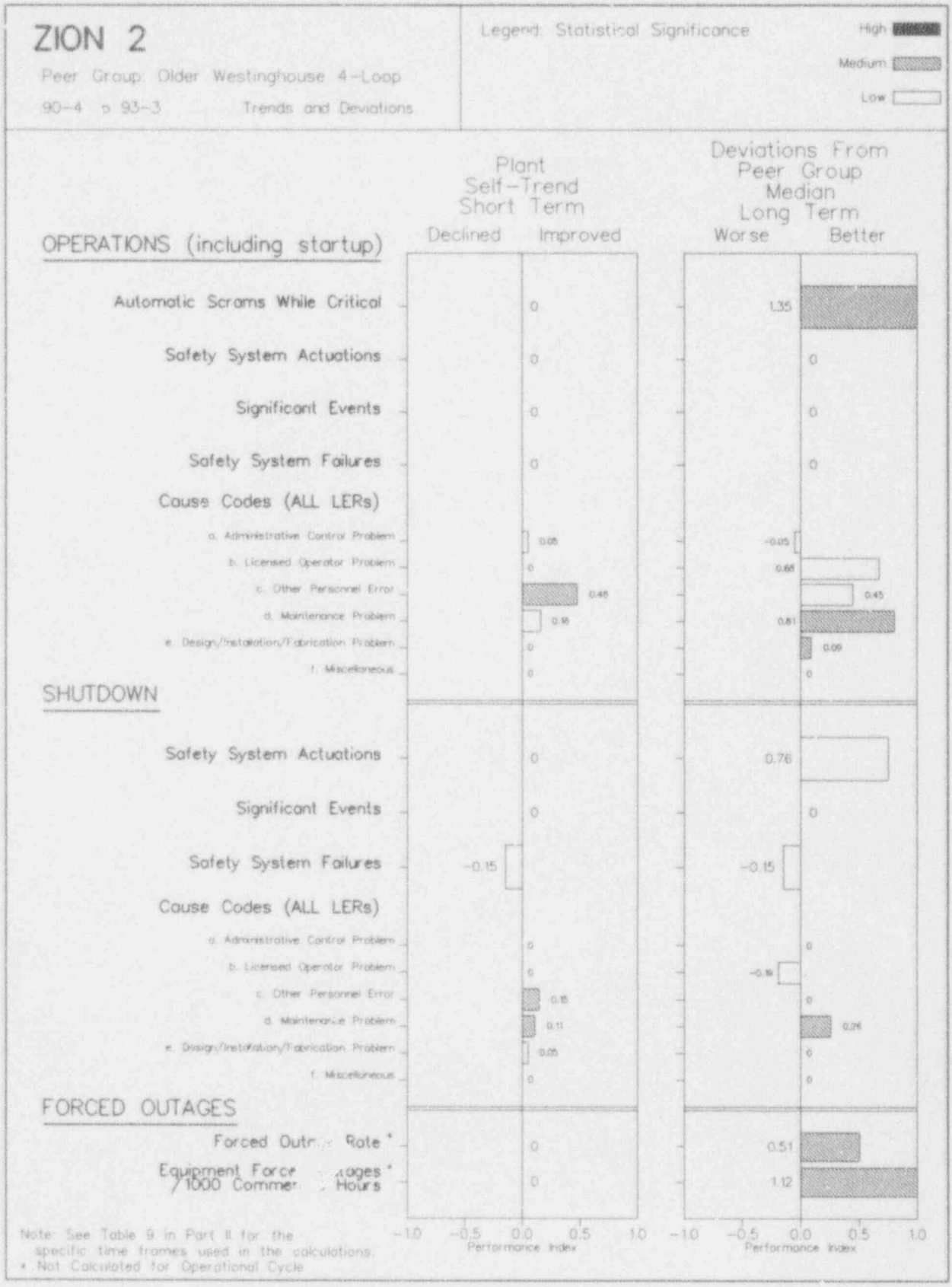


FIGURE 7.109b



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8. DESCRIPTIONS OF PLANT EVENTS

QUARTERS 92-4 THROUGH 93-3

TABLE 8.1

ARKANSAS 1

SCRAM 03/05/93 LER# 31393001 50.72#: 25196 PWR HIST: POWER OPERATIONS AT 100%
DESC : AN AUTOMATIC REACTOR TRIP OCCURRED DUE TO A TURBINE TRIP, CAUSED BY A GROUND ON THE MAIN GENERATOR BUS.

SSA 03/09/93 LER# 31393002 50.72#: 25213 PWR HIST: POWER OPERATIONS AT 100%
DESC : AN EMERGENCY DIESEL GENERATOR AUTO-STARTED AND LOADED ITS RESPECTIVE 4160 VAC VITAL BUS WHEN A FEEDER BREAKER TRIPPED DURING A BUS REALIGNMENT EVOLUTION.

TABLE 8.2

ARKANSAS 2

NONE

TABLE 8.3

BEAVER VALLEY 1

SCRAM 10/09/92 LER# 33492009 50.72#: 24401 PWR HIST: POWER OPERATIONS AT 90%
DESC : A REACTOR TRIP RESULTED WHEN THE "A" RCP TRIPPED ON A GROUND FAULT.

SSF 11/16/92 LER# 33492012 50.72#: 24617
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : LOW-VOLTAGE POWER SYSTEM - CLASS 1E
DESC : SAFETY BUSES 8N AND 9P COULD BE OVERLOADED DURING MAIN STEAMLINE BREAK CONDITIONS RESULTING IN A LOSS OF SEVERAL EMERGENCY CORE COOLING SYSTEMS.

SSF 02/18/93 LER# 33493004 50.72#: 25098
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : REACTOR CONTAINMENT BUILDING
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : A SINGLE CHECK VALVE FAILURE DURING THE RECIRCULATION PHASE OF A LOCA EVENT COULD POSSIBLY RESULT IN A RELEASE EXCEEDING 10 CFR 100 LIMITS.

TABLE 8.4

BEAVER VALLEY 2

SCRAM 01/30/93 LER# 41293002 50.72#: 24979 PWR HIST: POWER OPERATIONS AT 92%
DESC : A REACTOR TRIP OCCURRED ON A MAIN STEAMLINE LOW PRESSURE SIGNAL. THIS EVENT WAS CAUSED WHEN A MAIN STEAM PRESSURE TRANSMITTER POWER SUPPLY FAILED WHILE THE OTHER TRANSMITTER WAS OUT OF SERVICE FOR REPLACEMENT.

SSA 01/30/93 LER# 41293002 50.72#: 24979 PWR HIST: HOT STANDBY FOLLOWING A REACTOR SCRAM
DESC : A HIGH HEAD SAFETY INJECTION ACTUATION WITH INJECTION TO THE VESSEL OCCURRED FOLLOWING A REACTOR SCRAM CAUSED BY A FAILED MAIN STEAM PRESSURE TRANSMITTER POWER SUPPLY AND MAIN STEAM ISOLATION VALVE CLOSURES.

SSF 02/18/93 LER# 33493004 50.72#: 25160
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : REACTOR CONTAINMENT BUILDING
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : A SINGLE CHECK VALVE FAILURE DURING THE RECIRCULATION PHASE OF A LOCA EVENT COULD POSSIBLY RESULT IN A RELEASE EXCEEDING 10 CFR 100 LIMITS.

TABLE 8.4 (CONT.)

BEAVER VALLEY 2

SSF 03/04/93 LER# 41293005 50.72#:
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : LOW PRESSURE SAFETY INJECTION SYSTEM
DESC : INADEQUATE CORE COOLING COULD RESULT DUE TO THE POSTULATED SINGLE FAILURE OF A HOT LEG DISCHARGE VALVE IN THE LOW HEAD SAFETY INJECTION SYSTEM.

TABLE 8.5

BIG ROCK POINT

SSA 10/29/92 LER# 15592014 50.72#: 24531 PWR HIST: POWER OPERATIONS AT 98%
DESC : THE EMERGENCY DIESEL GENERATORS STARTED BUT DID NOT LOAD WHEN A 138 KV OFFSITE TIE BREAKER TRIPPED. THIS WAS CAUSED BY A LOOSE CONNECTION IN THE TIE BREAKER'S CURRENT TERMINAL BLOCK.

SSF 06/29/93 LER# 15593002 50.72#:
PWR HIST: EVENT DISCOVERED IN COLD SHUTDOWN.
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : PRIMARY CONTAINMENT
DESC : CONTAINMENT INTEGRITY WAS INADVERTENTLY BREACHED WHEN SEVERAL ONE INCH DRAIN VALVES IN THE FEEDWATER SYSTEM PIPING WERE OPENED DURING TESTING.

SSF 07/08/93 LER# 15593003 50.72#: 25761
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : CONTAINMENT COOLING SYSTEMS GROUP
SYSTEM : CONTAINMENT SPRAY SYSTEM
DESC : THE CONTAINMENT SPRAY SYSTEM WAS INCAPABLE OF AUTOMATICALLY OPERATING WHEN REQUIRED BECAUSE TWO OF FOUR HIGH PRESSURE SENSORS WERE FOUND OUT OF TOLERANCE HIGH.

SSA 08/03/93 LER# 15593007 50.72#: 25872 PWR HIST: REFUELING
DESC : A LPCI PUMP WHICH ALSO SERVES AS A FIRE PUMP SPURIOUSLY STARTED DURING A SURVEILLANCE TEST.

TABLE 8.6

BRAIDWOOD 1

SSA 10/23/92 LER# 45692013 50.72#: 24481 PWR HIST: COLD SHUTDOWN
DESC : DURING RESTORATION FROM A SOLID STATE PROTECTION SYSTEM BIMONTHLY SURVEILLANCE, AN SI SIGNAL WAS PROCESSED. THE SIGNAL SHOULD HAVE BEEN BLOCKED BELOW 1930 PSI.

SCRAM 01/07/93 LER# 45693001 50.72#: 24843 PWR HIST: POWER OPERATIONS AT 100%
DESC : DURING THE PERFORMANCE OF A REACTOR COOLANT PUMP SURVEILLANCE TEST, FOUR RCPS TRIPPED RESULTING IN A LOW FLOW SCRAM. THIS EVENT WAS CAUSED BY A LOGIC CARD FAILURE IN THE REACTOR COOLANT PUMP UNDER FREQUENCY CIRCUIT.

SSF 02/01/93 LER# 45693002 50.72#:
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : LOW TEMPERATURE/OVERPRESSURE PROTECTION GROUP
SYSTEM : LOW TEMP/OVERPRESSURE PROTECTION SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : THE COLD OVERPRESSURE PROTECTION SYSTEM WOULD HAVE EXCEEDED DESIGN LIMITS UNDER CERTAIN CONDITIONS BECAUSE A NONCONSERVATIVE CALCULATION WAS USED TO ESTABLISH THE PORV SETPOINTS.

TABLE 8.7

BRAIDWOOD 2

SCRAM 11/14/92 LER# 45792007 50.72#: 24609 PWR HIST: POWER OPERATIONS AT 100%
DESC : A REACTOR SCRAM OCCURRED FROM A LOAD REJECT SIGNAL DUE TO A MAIN GENERATOR NEUTRAL GROUND BACKUP RELAY TRIP. THIS WAS CAUSED BY A FAILED POTENTIAL TRANSFORMER SECONDARY FUSE.

TABLE 8.7 (CONT.)

BRAIDWOOD 2

SSF 02/01/93 LER# 45693002 50.72#:
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : LOW TEMPERATURE/OVERPRESSURE PROTECTION GROUP
SYSTEM : LOW TEMP/OVERPRESSURE PROTECTION SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : THE COLD OVERPRESSURE PROTECTION SYSTEM WOULD HAVE EXCEEDED DESIGN LIMITS UNDER CERTAIN CONDITIONS BECAUSE A NONCONSERVATIVE CALCULATION WAS USED TO ESTABLISH THE PORV SETPOINTS.

SSA 04/14/93 LER# 45793002 50.72#: 25394 PWR HIST: COLD SHUTDOWN
DESC : SAFETY INJECTION WAS ACTUATED DUE TO A LOSS OF POWER TO THE ACTUATION RELAY. THE LOSS OF POWER WAS DUE TO AN INSTRUMENT BUS SHIFT CONCURRENT WITH SI SYSTEM TESTING.

TABLE 8.8

BROWNS FERRY 1

SSF 12/11/92 LER# 25992005 50.72#: 24737
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : REACTOR BUILDING
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1, 2 AND 3.
DESC : CONTAINMENT ATMOSPHERE WAS BEING DRAWN INTO THE RAW COOLING WATER SYSTEM AND DISCHARGED OUTSIDE CONTAINMENTS. THIS EVENT WAS CAUSED BY INADEQUATE DESIGN OF THE RAW COOLING WATER HIGH POINT VACUUM BREAKERS.

SSA 02/12/93 LER# 25993002 50.72#: 25069 PWR HIST: REFUELING
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : AN EMERGENCY DIESEL GENERATOR AUTO-STARTED ON A SHUTDOWN BUS UNDERVOLTAGE CONDITION. THE BUS FEED BREAKER TRIPPED DURING MAINTENANCE.

SSA 04/19/93 LER# 25993003 50.72#: 25414 PWR HIST: REFUELING
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1, 2 AND 3.
DESC : A LOSS OF AN OFFSITE JWER SUPPLY RESULTED IN AN AUTOSTART OF ALL EDGS. TWO EDGS LOADED THEIR RESPECTIVE BUSES. T! LOOP WAS CAUSED WHEN A TOOL WAS DROPPED ON SENSITIVE EQUIPMENT.

TABLE 8.9

BROWNS FERRY 2

SSF 10/27/92 LER# 29692003 50.72#: 24513
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 89% POWER.
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : REACTOR BUILDING
DESC : THE REACTOR BUILDING AND REFUELING ZONE VENTILATION SYSTEM FAILED TO ISOLATE DURING A TEST. THE INBOARD AND OUTBOARD EXHAUST DAMPERS FAILED TO CLOSE BECAUSE OF MECHANICAL BINDING AND A FAILED AIR OPERATED SOLENOID VALVE.

SSF 12/11/92 LER# 25992005 50.72#: 24737
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : REACTOR BUILDING
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1, 2 AND 3.
DESC : CONTAINMENT ATMOSPHERE WAS BEING DRAWN INTO THE RAW COOLING WATER SYSTEM AND DISCHARGED OUTSIDE CONTAINMENTS. THIS EVENT WAS CAUSED BY INADEQUATE DESIGN OF THE RAW COOLING WATER HIGH POINT VACUUM BREAKERS.

SSF 01/24/93 LER# 26093001 50.72#: 24939
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 66% POWER.
GROUP : REACTOR CORE ISOLATION COOLING SYSTEMS GROUP
SYSTEM : REACTOR CORE ISOLATION COOLING SYSTEM
DESC : THE REACTOR CORE ISOLATION SYSTEM WAS UNAVAILABLE FOR AUTOMATIC OPERATION. THE STEAM ISOLATION VALVE CLOSED BECAUSE THE VALVE BONNET PRESSURE SEAL RING FAILED.

TABLE 8.9 (CONT.)

BROWNS FERRY 2

SSA 02/12/93 LER# 25993002 50.72#: 25069 PWR HIST: REFUELING
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : AN EMERGENCY DIESEL GENERATOR AUTO-STARTED ON A SHUTDOWN BUS UNDERVOLTAGE CONDITION. THE BUS FEED BREAKER TRIPPED DURING MAINTENANCE.

SSA 04/19/93 LER# 25993003 50.72#: 25414 PWR HIST: REFUELING
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1, 2 AND 3.
DESC : A LOSS OF AN OFFSITE POWER SUPPLY RESULTED IN AN AUTOSTART OF ALL EDGS. TWO EDGS LOADED THEIR RESPECTIVE BUSES. THE LOOP WAS CAUSED WHEN A TOOL WAS DROPPED ON SENSITIVE EQUIPMENT.

TABLE 8.10

BROWNS FERRY 3

SSF 12/11/92 LER# 25992005 50.72#: 24737
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : REACTOR BUILDING
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1, 2 AND 3.
DESC : CONTAINMENT ATMOSPHERE WAS BEING DRAWN INTO THE RAW COOLING WATER SYSTEM AND DISCHARGED OUTSIDE CONTAINMENTS. THIS EVENT WAS CAUSED BY INADEQUATE DESIGN OF THE RAW COOLING WATER HIGH POINT VACUUM BREAKERS.

SSA 04/19/93 LER# 25993003 50.72#: 25414 PWR HIST: REFUELING
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1, 2 AND 3.
DESC : A LOSS OF AN OFFSITE POWER SUPPLY RESULTED IN AN AUTOSTART OF ALL EDGS. TWO EDGS LOADED THEIR RESPECTIVE BUSES. THE LOOP WAS CAUSED WHEN A TOOL WAS DROPPED ON SENSITIVE EQUIPMENT.

TABLE 8.11

BRUNSWICK 1

SSA 03/16/93 LER# 32593008 50.72#: 25270 PWR HIST: COLD SHUTDOWN
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : THE EDGS STARTED AND LOADED ON A LOSS OF POWER CAUSED BY SALT BUILDUP ON SWITCHYARD INSULATORS.

SSF 04/21/93 LER# 32593009 50.72#:
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : EMERGENCY/STANDBY GAS TREATMENT SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : OPERATING PROCEDURES ALLOWED A LINEUP THAT COULD HAVE RESULTED IN SBGT SYSTEM DAMAGE IF CONTAINMENT VENTING WERE IN PROGRESS AND A LOCA OCCURRED.

TABLE 8.12

BRUNSWICK 2

SSA 03/16/93 LER# 32593008 50.72#: 25270 PWR HIST: COLD SHUTDOWN
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : THE EDGS STARTED AND LOADED ON A LOSS OF POWER CAUSED BY SALT BUILDUP ON SWITCHYARD INSULATORS.

SSF 04/21/93 LER# 32593009 50.72#:
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : EMERGENCY/STANDBY GAS TREATMENT SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : OPERATING PROCEDURES ALLOWED A LINEUP THAT COULD HAVE RESULTED IN SBGT SYSTEM DAMAGE IF CONTAINMENT VENTING WERE IN PROGRESS AND A LOCA OCCURRED.

TABLE 8.12 (CONT.)

BRUNSWICK 2

SSF 05/21/93 LER# 32493006 50.72#:
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 34% POWER.
GROUP : PRIMARY REACTOR SYSTEMS GROUP
SYSTEM : CONTROL ROD DRIVE SYSTEM
DESC : TWO CONTROL ROD DRIVE HYDRAULIC CONTROL UNITS WERE SIMULTANEOUSLY INOPERABLE. ONE WAS INOPERABLE FOR TESTING WHEN THE OTHER BECAME INOPERABLE DUE TO A HIGH WATER LEVEL IN ITS HYDRAULIC CONTROL UNIT.

TABLE 8.13

BYRON 1

SSF 02/01/93 LER# 45493001 50.72#: 24995
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : LOW TEMPERATURE/OVERPRESSURE PROTECTION GROUP
SYSTEM : LOW TEMP/OVERPRESSURE PROTECTION SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : UNDER CERTAIN CONDITIONS, THE COLD OVERPRESSURE PROTECTION SYSTEM WOULD HAVE EXCEEDED THE APPENDIX "G" DESIGN LIMITS DUE TO NONCONSERVATIVE PORV SETPOINTS.

TABLE 8.14

BYRON 2

SSF 02/01/93 LER# 45493001 50.72#: 24995
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : LOW TEMPERATURE/OVERPRESSURE PROTECTION GROUP
SYSTEM : LOW TEMP/OVERPRESSURE PROTECTION SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : UNDER CERTAIN CONDITIONS, THE COLD OVERPRESSURE PROTECTION SYSTEM WOULD HAVE EXCEEDED THE APPENDIX "G" DESIGN LIMITS DUE TO NONCONSERVATIVE PORV SETPOINTS.

SCRAM 05/11/93 LER# 45593003 50.72#: 25506 PWR HIST: POWER OPERATIONS AT 97%
DESC : A REACTOR SCRAM FOLLOWED A TURBINE TRIP CAUSED BY AN EHC CONTROL POWER SUPPLY FAILURE.

SSA 09/05/93 LER# 45593004 50.72#: 26024 PWR HIST: COLD SHUTDOWN
DESC : THE "B" HPSI TRAIN WAS INADVERTENTLY STARTED WHILE RESTORING THE SOLID STATE PROTECTION SYSTEM FOLLOWING A SURVEILLANCE TEST ON THE "A" HPSI TRAIN.

TABLE 8.15

CALLAWAY

SE 10/17/92 LER# 48392011 50.72#: 24453
PWR HIST: EVENT OCCURRED AT 100% POWER.
DESC : IMPROPER MAINTENANCE RESULTED IN A COMPLETE LOSS OF ANNUNCIATORS, WHICH WAS NOT RECOGNIZED BY PLANT PERSONNEL. NO OTHER PERFORMANCE INDICATORS WERE INVOLVED.

SSF 09/16/93 LER# 48393001 50.72#: 26069
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : MULTIPLE SYSTEMS GROUP
SYSTEM : MULTIPLE SYSTEMS
DESC : CONTROL ROOM VENTILATION AND CONTAINMENT PURGE EXHAUST RADIATION MONITORS HAVE BEEN CALIBRATED USING THE WRONG CALIBRATION GAS, WHICH RESULTED IN NONCONSERVATIVE SETPOINTS.

TABLE 8.16

CALVERT CLIFFS 1

SCRAM 11/24/92 LER# 31792008 50.72#: 24652 PWR HIST: POWER OPERATIONS AT 100%
DESC : THE REACTOR AUTOMATICALLY TRIPPED DUE TO A GROUND OVERCURRENT FAULT IN THE ISOLATED PHASE BUS DUCT SYSTEM.

TABLE 8.16 (CONT.)

CALVERT CLIFFS 1

SSF 02/02/93 LER# 31793001 50.72#:
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : CONTROL ROOM EMERGENCY VENTILATION SYSTEM GROUP
SYSTEM : CONTROL BUILDING/CONTROL COMPLEX ENVIRONMENTAL CONTROL SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : BOTH TRAINS OF CONTROL ROOM VENTILATION BECAME INOPERABLE WHEN ONE TRAIN WAS REMOVED FROM SERVICE FOR ROUTINE MAINTENANCE AND THE OTHER TRAIN WAS DISCOVERED TO HAVE INSUFFICIENT REFRIGERANT INVENTORY.

SSA 06/10/93 LER# 31793003 50.72#: 25633 PWR HIST: HOT STANDBY FOLLOWING A MANUAL SCRAM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : EMERGENCY DIESEL GENERATORS AUTO-STARTED AND LOADED THEIR EMERGENCY BUSES WHEN A PARTIAL LOSS OF OFFSITE POWER OCCURRED.

SCRAM 06/11/93 LER# 31793004 50.72#: 25638 PWR HIST: POWER OPERATIONS AT 16%
DESC : A REACTOR SCRAM OCCURRED DUE TO A TURBINE TRIP. THE TURBINE TRIP WAS THE RESULT OF A HIGH WATER LEVEL IN THE LOW PRESSURE FEEDWATER HEATERS.

SSF 06/30/93 LER# 31793005 50.72#: 25718
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : CONTAINMENT COOLING SYSTEMS GROUP
SYSTEM : CONTAINMENT SPRAY SYSTEM
DESC : WITH ONE CONTAINMENT SPRAY TRAIN INOPERABLE FOR PLANNED MAINTENANCE, THE OTHER TRAIN WAS DECLARED INOPERABLE BECAUSE OF A FAILED HEAT EXCHANGER COOLING WATER SUPPLY VALVE.

TABLE 8.17

CALVERT CLIFFS 2

SSF 02/02/93 LER# 31793001 50.72#:
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : CONTROL ROOM EMERGENCY VENTILATION SYSTEM GROUP
SYSTEM : CONTROL BUILDING/CONTROL COMPLEX ENVIRONMENTAL CONTROL SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : BOTH TRAINS OF CONTROL ROOM VENTILATION BECAME INOPERABLE WHEN ONE TRAIN WAS REMOVED FROM SERVICE FOR ROUTINE MAINTENANCE AND THE OTHER TRAIN WAS DISCOVERED TO HAVE INSUFFICIENT REFRIGERANT INVENTORY.

SSF 02/20/93 LER# 31893001 50.72#: 25115
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE MARCH 1989.
GROUP : SAFETY AND RELIEF VALVES GROUP
SYSTEM : REACTOR COOLANT SYSTEM
DESC : BOTH PRESSURIZER CODE SAFETY VALVES WERE FOUND INOPERABLE BECAUSE THEIR LIFT SETPOINTS WERE HIGHER THAN ALLOWED. THIS CONDITION WAS CAUSED BY INADEQUATE TEST AND SETPOINT METHODOLOGY.

SSA 06/10/93 LER# 31793003 50.72#: 25633 PWR HIST: HOT STANDBY
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : EMERGENCY DIESEL GENERATORS AUTO-STARTED AND LOADED THEIR EMERGENCY BUSES WHEN A PARTIAL LOSS OF OFFSITE POWER OCCURRED.

SCRAM 06/25/93 LER# 31893003 50.72#: 25699 PWR HIST: STARTUP MODE AT 4%
DESC : THE REACTOR SCRAMMED ON LOW S/G WATER LEVEL RESULTING FROM IMPROPER OPERATION OF THE LEVEL CONTROL SYSTEM BY PLANT OPERATORS.

TABLE 8.18

CATAWBA 1

SSF 12/03/92 LER# 41392013 50.72#:
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : CONTROL ROOM EMERGENCY VENTILATION SYSTEM GROUP
SYSTEM : CONTROL BUILDING/CONTROL COMPLEX ENVIRONMENTAL CONTROL SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : BOTH TRAINS OF CONTROL ROOM VENTILATION WERE INOPERABLE WHEN ONE TRAIN WAS OUT OF SERVICE FOR MAINTENANCE AND THE OTHER TRAIN'S GUIDE VANE ACTUATOR MOTOR FAILED.

TABLE 8.18 (CONT.)

CATAWBA 1

SSF 01/31/93 LER# 41393001 50.72#:
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : CONTROL ROOM EMERGENCY VENTILATION SYSTEM GROUP
SYSTEM : CONTROL BUILDING/CONTROL COMPLEX ENVIRONMENTAL CONTROL SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : WITH ONE TRAIN OF CONTROL ROOM VENTILATION INOPERABLE FOR MAINTENANCE, THE CHLORINE DETECTOR ON THE OTHER TRAIN FAILED, RESULTING IN SYSTEM ISOLATION AND MOMENTARY LOSS OF CONTROL ROOM PRESSURIZATION.

SSF 02/25/93 LER# 41393002 50.72#: 25139
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : MULTIPLE SYSTEMS GROUP
SYSTEM : MULTIPLE SYSTEMS
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : BOTH TRAINS OF THE SERVICE WATER SYSTEM WERE DECLARED INOPERABLE WHEN THE PUMP DISCHARGE VALVES WOULD NOT OPEN DURING TESTING. THE VALVE MOTOR OPERATORS WERE NOT PROPERLY SIZED FOR THE LARGE D/P GENERATED DURING THE TEST.

SE 02/25/93 LER# 41393002 50.72#: 25139
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : THREE OF FOUR NUCLEAR SERVICE WATER PUMPS FOR UNITS 1 AND 2 WERE INOPERABLE BECAUSE THEIR DISCHARGE VALVES WOULD NOT OPEN AGAINST MAX DIFFERENTIAL PRESSURE. POTENTIAL SYSTEM FAILURE TO BOTH UNITS ASSUMING A SINGLE FAILURE OF THE ONE OPERABLE VALVE.

SCRAM 06/12/93 LER# 41393006 50.72#: 25645 PWR HIST: STARTUP MODE AT 2%
DESC : WHILE SHUTTING DOWN THE PLANT, A CONTROL POWER FUSE FOR AN IRM BLEW, CAUSING AN IRM HIGH FLUX REACTOR TRIP.

SCRAM 07/18/93 LER# 41393008 50.72#: 25799 PWR HIST: POWER OPERATIONS AT 100%
DESC : WHILE TROUBLESHOOTING THE DIGITAL FEEDWATER CONTROL SYSTEM, A REACTOR TRIP OCCURRED FROM A LOW S/G WATER LEVEL CONDITION. THE CAUSE WAS A PROCEDURAL PROBLEM.

TABLE 8.19

CATAWBA 2

SSF 12/03/92 LER# 41392013 50.72#:
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : CONTROL ROOM EMERGENCY VENTILATION SYSTEM GROUP
SYSTEM : CONTROL BUILDING/CONTROL COMPLEX ENVIRONMENTAL CONTROL SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : BOTH TRAINS OF CONTROL ROOM VENTILATION WERE INOPERABLE WHEN ONE TRAIN WAS OUT OF SERVICE FOR MAINTENANCE AND THE OTHER TRAIN'S GUIDE VANE ACTUATOR MOTOR FAILED.

SCRAM 12/14/92 LER# 41492006 50.72#: 24751 PWR HIST: POWER OPERATIONS AT 100%
DESC : A REACTOR TRIP OCCURRED ON LOW S/G WATER LEVEL WHEN A FEEDWATER PUMP TRIPPED DURING TESTING.

SSF 01/31/93 LER# 41393001 50.72#:
PWR HIST: EVENT DISCOVERED IN HOT SHUTDOWN.
GROUP : CONTROL ROOM EMERGENCY VENTILATION SYSTEM GROUP
SYSTEM : CONTROL BUILDING/CONTROL COMPLEX ENVIRONMENTAL CONTROL SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : WITH ONE TRAIN OF CONTROL ROOM VENTILATION INOPERABLE FOR MAINTENANCE, THE CHLORINE DETECTOR ON THE OTHER TRAIN FAILED, RESULTING IN SYSTEM ISOLATION AND MOMENTARY LOSS OF CONTROL ROOM PRESSURIZATION.

SSF 02/25/93 LER# 41393002 50.72#: 25139
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : MULTIPLE SYSTEMS GROUP
SYSTEM : MULTIPLE SYSTEMS
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : BOTH TRAINS OF THE SERVICE WATER SYSTEM WERE DECLARED INOPERABLE WHEN THE PUMP DISCHARGE VALVES WOULD NOT OPEN DURING TESTING. THE VALVE MOTOR OPERATORS WERE NOT PROPERLY SIZED FOR THE LARGE D/P GENERATED DURING THE TEST.

TABLE 8.19 (CONT.)

CATAWBA 2

SE 02/25/93 LER# 41393002 50.72#: 25139
PWR HIST: EVENT DISCOVERED WHILE DEFUELED.
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : THREE OF FOUR NUCLEAR SERVICE WATER PUMPS FOR UNITS 1 AND 2 WERE INOPERABLE BECAUSE THEIR DISCHARGE VALVES WOULD NOT OPEN AGAINST MAX DIFFERENTIAL PRESSURE. POTENTIAL SYSTEM FAILURE TO BOTH UNITS ASSUMING A SINGLE FAILURE OF THE ONE OPERABLE VALVE.

SCRAM 09/25/93 LER# 50.72#: 26119 PWR HIST: POWER OPERATIONS AT 100%
DESC : THE REACTOR AND TURBINE TRIPPED ON HIGH STEAM GENERATOR LEVEL FOLLOWING THE CLOSURE OF AN MSIV. THE CAUSE WAS PERSONNEL ERROR.

TABLE 8.20

CLINTON 1

NONE

TABLE 8.21

COMANCHE PEAK 1

SCRAM 01/18/93 LER# 44593001 50.72#: 24904 PWR HIST: POWER OPERATIONS AT 100%
DESC : A REACTOR TRIP OCCURRED DURING RESTORATION OF THE PLANT PROTECTION SYSTEM FOLLOWING A SURVEILLANCE TEST. AS A RESULT OF PERSONNEL ERROR, THE APPROPRIATE TRIP BLOCKS WERE NOT IN PLACE PRIOR TO THE RESTORATION.

SCRAM 01/24/93 LER# 44593002 50.72#: 24938 PWR HIST: POWER OPERATIONS AT 100%
DESC : AN AUTOMATIC REACTOR TRIP OCCURRED WHEN A LOW PRESSURE SPIKE ON A PRESSURIZER PRESSURE TRANSMITTER INITIATED THE RPS TRIP LOGIC BISTABLES.

TABLE 8.22

COMANCHE PEAK 2

SCRAM 05/20/93 LER# 44693005 50.72#: 25538 PWR HIST: POWER OPERATIONS AT 72%
DESC : THE REACTOR SCRAMMED DUE TO A TURBINE/GENERATOR TRIP CAUSED BY LOW STATOR WATER COOLING FLOW. THIS OCCURRED DUE TO A FAILED FLOW CONTROL VALVE IN THE STATOR WATER COOLING SYSTEM.

TABLE 8.23

COOK 1

SCRAM 10/28/92 LER# 31592012 50.72#: 24517 PWR HIST: POWER OPERATIONS AT 16%
DESC : A REACTOR TRIP OCCURRED DUE TO A MAIN TURBINE TRIP CAUSED BY A SIGNAL FROM AN ERRONEOUSLY SET MAIN TURBINE THRUST BEARING WEAR DETECTOR.

TABLE 8.24

COOK 2

SSF 10/16/92 LER# 31693003 50.72#:
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : EMERGENCY/STANDBY GAS TREATMENT SYSTEM
DESC : BOTH TRAINS OF THE CONTAINMENT VENTILATION SYSTEM WERE ISOLATED SIMULTANEOUSLY. THIS EVENT WAS CAUSED BY A PIPING ERROR IN THE INSTRUMENT AIR SUPPLY TO THE SYSTEM CONTROL DAMPERS.

TABLE 8.24 (CONT.)

COOK 2

SCRAM 08/02/93 LER# 31693007 50.72#: 25867 PWR HIST: POWER OPERATIONS AT 70%
DESC : A TURBINE TRIP RESULTED IN A REACTOR TRIP. THE TURBINE TRIP WAS CAUSED BY A SPURIOUS ACTUATION OF THE TURBINE EXHAUST HOOD HIGH TEMPERATURE SWITCHES.

SCRAM 08/27/93 LER# 31693008 50.72#: 25980 PWR HIST: POWER OPERATIONS AT 90%
DESC : A TRIP OF A MAIN FEEDWATER PUMP AND A LOSS OF SPEED CONTROL ON THE OTHER PUMP RESULTED IN A REACTOR TRIP ON STEAM FLOW/FEED FLOW MISMATCH COINCIDENT WITH LOW SG LEVEL.

TABLE 8.25

COOPER STATION

SSF 12/30/92 LER# 29892019 50.72#: 24810
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : EMERGENCY ONSITE POWER SUPPLY SYSTEM
DESC : BOTH EDGS WERE DECLARED INOPERABLE BECAUSE A DESIGN DEFICIENCY IN THEIR CONTROL CIRCUITS COULD PREVENT THEM FROM PERFORMING THEIR SAFETY FUNCTION.

SSF 02/25/93 LER# 29893001 50.72#:
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : MULTIPLE SYSTEMS GROUP
SYSTEM : MULTIPLE SYSTEMS
DESC : THE SERVICE WATER SYSTEM AND REACTOR EQUIPMENT COOLING SYSTEMS WERE DECLARED INOPERABLE DUE TO SEVERAL DESIGN DISCREPANCIES. THE DESIGN DISCREPANCIES RESULTED IN OPERATING MODES WHERE A SINGLE FAULT COULD DISABLE BOTH SYSTEMS.

SSF 03/06/93 LER# 29893003 50.72#: 25198
PWR HIST: EVENT DISCOVERED IN COLD SHUTDOWN.
GROUP : RESIDUAL HEAT REMOVAL SYSTEMS GROUP
SYSTEM : RESIDUAL HEAT REMOVAL SYSTEM
DESC : THE RHR SYSTEM WAS ISOLATED FOR 36 MINUTES RESULTING IN A 20 DEGREE F PLANT HEATUP. THE RHR ISOLATION OCCURRED WHEN A STATION OPERATOR INADVERTENTLY TRIPPED THE WRONG BREAKER DURING A TAG CLEARANCE.

SSF 03/29/93 LER# 29893009 50.72#: 25329
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : MULTIPLE SYSTEMS GROUP
SYSTEM : MULTIPLE SYSTEMS
DESC : THE FAILURE OF NON-SAFETY RELATED PRESSURE REGULATING AND/OR RELIEF VALVES COULD PREVENT SOLENOID OPERATED VALVES FROM PERFORMING THEIR SAFETY FUNCTIONS. THE SYSTEMS AFFECTED WERE THE MSIVS, REACTOR RECIRC SAMPLE, SBGT, AND REACTOR BUILDING CONTAINMENT.

SSF 04/14/93 LER# 29893012 50.72#:
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE 6/92.
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : PRIMARY CONTAINMENT
DESC : OPERATION OF A MANUAL 3/4-INCH VALVE DURING MONTHLY SURVEILLANCE TESTING VIOLATED PRIMARY CONTAINMENT INTEGRITY.

SSF 04/20/93 LER# 29893015 50.72#: 25424
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : HIGH PRESSURE COOLANT INJECTION SYSTEM
DESC : THE HPCI SYSTEM WOULD NOT AUTOMATICALLY ATTAIN ITS DESIGN FLOW RATE DUE TO A DESIGN DISCREPANCY IN ITS FLOW CONTROL SYSTEM.

SSF 04/30/93 LER# 29893018 50.72#: 25468
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : EMERGENCY/STANDBY GAS TREATMENT SYSTEM
DESC : A DESIGN REVIEW DETERMINED THAT IF A DAMPER IN THE SBGT SYSTEM FAILED IN THE CLOSED POSITION, SBGT WOULD BE UNABLE TO PROVIDE OR MAINTAIN THE REQUIRED REACTOR BUILDING NEGATIVE PRESSURE.

TABLE 8.25 (CONT.)

COOPER STATION

SSF 08/30/93 LER# 29893031 50.72#: 25993
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : HIGH PRESSURE COOLANT INJECTION SYSTEM
DESC : THE HPCI SYSTEM WAS DECLARED INOPERABLE WHEN THE PUMP DISCHARGE VALVE WOULD NOT REOPEN UPON DEMAND AFTER PERFORMING A SURVEILLANCE TEST. THIS EVENT WAS CAUSED WHEN THE VALVE MOTOR PINION GEAR KEY BECAME DISLODGED.

TABLE 8.26

CRYSTAL RIVER 3

SCRAM 12/29/92 LER# 30292027 50.72#: 24804 PWR HIST: POWER OPERATIONS AT 100%
DESC : THE REACTOR TRIPPED ON HIGH PRESSURE CAUSED BY A LOSS OF FEEDWATER FLOW WHEN A FEEDWATER PUMP TURBINE CONTROL ACTUATOR FAILED.

SSA 03/29/93 LER# 30293002 50.72#: 25325 PWR HIST: COLD SHUTDOWN
DESC : BOTH EMERGENCY DIESEL GENERATORS AUTO-STARTED AND LOADED THEIR RESPECTIVE EMERGENCY BUSES DUE TO THE LOSS OF THE 500KV FEEDER. DURING A STORM, SALTWATER ENTERED SWITCHYARD CABLE TRENCHES CONTAINING CABLE WITH DEGRADED INSULATION.

SE 03/29/93 LER# 30293002 50.72#: 25325
PWR HIST: EVENTS OCCURRED DURING COLD SHUTDOWN IN MARCH AND APRIL 1993.
DESC : IN MARCH AND APRIL 1993, MULTIPLE LOSS OF OFFSITE POWER EVENTS OCCURRED.

SSA 04/08/93 LER# 30293004 50.72#: 25377 PWR HIST: COLD SHUTDOWN
DESC : THE "B" EDG AUTO-STARTED AND LOADED ITS RESPECTIVE VITAL BUS WHEN OFFSITE POWER WAS LOST. AN INCORRECT PROCEDURE USED DURING SWITCHYARD MAINTENANCE WAS THE CAUSE.

SSF 05/20/93 LER# 30293006 50.72#: 25542
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE 1990.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : MULTIPLE SYSTEMS
DESC : VALVES IN THE HPI AND LPI SYSTEMS COULD HAVE BEEN PREVENTED FROM PERFORMING THEIR SAFETY FUNCTION DUE TO NON-SEISMICALLY QUALIFIED CONTROL SWITCH BARRIERS.

SCRAM 09/18/93 LER# 30293009 50.72#: 26090 PWR HIST: POWER OPERATIONS AT 100%
DESC : THE REACTOR TRIPPED ON A POWER-TO-FLOW IMBALANCE SIGNAL FOLLOWING A TRIP OF A RCP. THE RCP TRIPPED AS A RESULT OF HIGH DIFFERENTIAL CURRENT FROM A SHORTED "B" PHASE SURGE CAPACITOR.

TABLE 8.27

DAVIS-BESSE

SCRAM 05/20/93 LER# 34693003 50.72#: 25539 PWR HIST: POWER OPERATIONS AT 100%
DESC : THE REACTOR SCRAMMED ON HIGH REACTOR COOLANT PRESSURE, DUE TO FAILURE OF AN AVERAGE TEMPERATURE INPUT TO THE INTEGRATED CONTROL SYSTEM.

TABLE 8.28

DIABLO CANYON 1

SSF 11/07/92 LER# 27592027 50.72#:
PWR HIST: EVENT DISCOVERED IN HOT STANDBY.
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : REACTOR CONTAINMENT BUILDING
DESC : THE AUTOMATIC ISOLATION CAPABILITY OF CONTAINMENT VENT PIPING WAS INADVERTENTLY BYPASSED DURING A CONTAINMENT VENT TO REDUCE PRESSURE.

TABLE 8.28 (CONT.)

DIABLO CANYON 1

SSF 01/08/93 LER# 27593003 50.72#: 24851
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : LOW TEMPERATURE/OVERPRESSURE PROTECTION GROUP
SYSTEM : LOW TEMP/OVERPRESSURE PROTECTION SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : A NONCONSERVATIVE SETPOINT ANALYSIS RENDERED THE LOW TEMPERATURE OVERPRESSURE PROTECTION SYSTEM INCAPABLE OF PERFORMING ITS DESIGN FUNCTION IN A CERTAIN SITUATION.

SSF 01/13/93 LER# 27593001 50.72#: 24876
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : MULTIPLE SYSTEMS GROUP
SYSTEM : MULTIPLE SYSTEMS
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : A DESIGN REVIEW FOUND THAT UNDER CERTAIN CONDITIONS THE COMPONENT COOLING WATER DESIGN BASIS TEMPERATURE MAY BE EXCEEDED.

TABLE 8.29

DIABLO CANYON 2

SSF 01/08/93 LER# 27593003 50.72#: 24851
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : LOW TEMPERATURE/OVERPRESSURE PROTECTION GROUP
SYSTEM : LOW TEMP/OVERPRESSURE PROTECTION SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : A NONCONSERVATIVE SETPOINT ANALYSIS RENDERED THE LOW TEMPERATURE OVERPRESSURE PROTECTION SYSTEM INCAPABLE OF PERFORMING ITS DESIGN FUNCTION IN A CERTAIN SITUATION.

SSF 01/13/93 LER# 27593001 50.72#: 24876
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : MULTIPLE SYSTEMS GROUP
SYSTEM : MULTIPLE SYSTEMS
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : A DESIGN REVIEW FOUND THAT UNDER CERTAIN CONDITIONS THE COMPONENT COOLING WATER DESIGN BASIS TEMPERATURE MAY BE EXCEEDED.

SCRAM 01/30/93 LER# 32393001 50.72#: 24984 PWR HIST: POWER OPERATIONS AT 100%
DESC : THE REACTOR SCRAMMED DUE TO A TURBINE TRIP WHICH OCCURRED DURING TURBINE FUNCTIONAL TESTING. THE CAUSE OF THE TRIP IS BELIEVED TO BE EITHER PERSONNEL ERROR OR LUBE OIL CONTAMINATION.

SSF 03/12/93 LER# 32393003 50.72#: 25238
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : REACTOR CONTAINMENT BUILDING
DESC : CONTAINMENT WAS NOT PROPERLY ESTABLISHED DURING CORE ALTERATIONS. THE EQUIPMENT HATCH DOOR WOULD NOT COMPLETELY SEAL.

SSF 03/17/93 LER# 32393004 50.72#:
PWR HIST: EVENT DISCOVERED DURING REFUELING.
GROUP : SPENT FUEL SYSTEMS GROUP
SYSTEM : FUEL BUILDING
DESC : A FUEL HANDLING BUILDING DOOR WAS PROPPED OPEN WHILE FUEL WAS BEING MOVED. THE BUILDING NEGATIVE PRESSURE REQUIREMENT WAS NOT MAINTAINED.

TABLE 8.30

DRESDEN 2

SSF 10/27/92 LER# 23792037 50.72#: 24515
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : MULTIPLE SYSTEMS
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 2 AND 3.
DESC : LOW PRESSURE COOLANT INJECTION AND CORE SPRAY PUMPS COULD FAIL TO RESTART DURING A LOCA EVENT. THE EMERGENCY BUS UNDERVOLTAGE RELAYS ARE SUSCEPTIBLE TO SETPOINT DRIFT WHICH COULD AFFECT BUS TRANSFER AND THE TIME DELAY FOR THE PUMPS TO RESTART.

TABLE 8.30 (CONT.)

DRESDEN 2

SSF 03/03/93 LER# 23793011 50.72#: 25173
PWR HIST: EVENT DISCOVERED DURING REFUELING.
GROUP : CONTAINMENT COOLING SYSTEMS GROUP
SYSTEM : DRYWELL ENVIRONMENTAL CONTROL SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 2 AND 3.
DESC : THE CONTAINMENT COOLING SERVICE WATER KEEP FILL SYSTEM WAS INADVERTENTLY ISOLATED. THIS COULD HAVE RESULTED IN A WATER HAMMER EVENT AND THE LOSS OF CONTAINMENT COOLING SERVICE WATER.

SSF 07/06/93 LER# 23793008 50.72#: 25747
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 90% POWER.
GROUP : MULTIPLE SYSTEMS GROUP
SYSTEM : MULTIPLE SYSTEMS
DESC : THE HPCI SYSTEM AND BOTH EMERGENCY DIESEL GENERATORS WERE RENDERED INOPERABLE AS A RESULT OF A LOSS OF POWER TO TWO MOTOR CONTROL CENTERS WHEN A BREAKER TRIPPED FOR UNKNOWN REASONS.

SSF 07/17/93 LER# 23793008 50.72#: 25796
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 91% POWER.
GROUP : MULTIPLE SYSTEMS GROUP
SYSTEM : MULTIPLE SYSTEMS
DESC : THE HPCI SYSTEM AND BOTH EMERGENCY DIESEL GENERATORS WERE RENDERED INOPERABLE AS A RESULT OF A LOSS OF POWER TO TWO MOTOR CONTROL CENTERS WHEN A BREAKER TRIPPED FOR UNKNOWN REASONS. THIS IS THE SECOND OF TWO SIMILAR EVENTS.

SSF 08/05/93 LER# 23793016 50.72#: 25883
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 92% POWER.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : HIGH PRESSURE COOLANT INJECTION SYSTEM
DESC : THE HPCI SYSTEM WAS DECLARED INOPERABLE WHEN THE TURBINE COULD NOT BE PLACED ON ITS TURNING GEAR. THE ENGAGEMENT LINKAGE HAD MALFUNCTIONED DUE TO A MISSING COTTER PIN.

SSF 09/08/93 LER# 23793017 50.72#: 26034
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 90% POWER.
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : EMERGENCY ONSITE POWER SUPPLY SYSTEM
DESC : ON FOUR OCCASIONS BETWEEN 7/6/93 AND 7/17/93 IT WAS NOT RECOGNIZED THAT 2 OF 3 EDGS WERE INOPERABLE WHEN A BUS TO MCC FEED BREAKER WAS OPEN.

TABLE 8.31

DRESDEN 3

SSF 10/05/92 LER# 24992019 50.72#: 24381
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 96% POWER.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : HIGH PRESSURE COOLANT INJECTION SYSTEM
DESC : THE HPCI SYSTEM WAS DECLARED INOPERABLE WHEN AUTOMATIC CONTROL WAS LOST DUE TO LOOSE WIRING IN THE SIGNAL CONVERTER POWER MONITORING CIRCUIT FROM PREVIOUS MAINTENANCE.

SCRAM 10/13/92 LER# 24992021 50.72#: 24421 PWR HIST: POWER OPERATIONS AT 97%
DESC : A LOW REACTOR VESSEL LEVEL SCRAM OCCURRED FOLLOWING A CONDENSATE BOOSTER PUMP FAILURE AND SUBSEQUENT MFW PUMP TRIP ON LOW SUCTION PRESSURE.

SSF 10/20/92 LER# 24992022 50.72#: 24463
PWR HIST: EVENT DISCOVERED IN COLD SHUTDOWN.
GROUP : ISOLATION CONDENSER SYSTEM GROUP
SYSTEM : ISOLATION CONDENSER SYSTEM
DESC : THE ISOLATION CONDENSER SYSTEM WAS DECLARED INOPERABLE BECAUSE OF INSUFFICIENT CONDENSATE RETURN LINE WATER LEVEL RESULTING FROM INADEQUATE RESTORATION FROM MAINTENANCE.

SSF 10/27/92 LER# 23792037 50.72#: 24515
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : MULTIPLE SYSTEMS
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 2 AND 3.
DESC : LOW PRESSURE COOLANT INJECTION AND CORE SPRAY PUMPS COULD FAIL TO RESTART DURING A LOCA EVENT. THE EMERGENCY BUS UNDERVOLTAGE RELAYS ARE SUSCEPTIBLE TO SETPOINT DRIFT WHICH COULD AFFECT BUS TRANSFER AND THE TIME DELAY FOR THE PUMPS TO RESTART.

TABLE 8.31 (CONT.)

DRESDEN 3

SSF 12/01/92 LER# 24992023 50.72#: 24682
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 77% POWER.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : LOW PRESSURE COOLANT INJECTION SYSTEM
DESC : THE LOW PRESSURE COOLANT INJECTION SYSTEM WAS DECLARED INOPERABLE DUE TO THE DEPRESSURIZATION OF THE SYSTEM DISCHARGE HEADER BY A STUCK-OPEN CHECK VALVE.

SCRAM 12/25/92 LER# 24992025 50.72#: 24797 PWR HIST: POWER OPERATIONS AT 73%
DESC : THE REACTOR SCRAMMED FROM A TURBINE TRIP CAUSED BY A MAIN TURBINE HIGH VIBRATION TRIP SIGNAL.

SSF 12/30/92 LER# 24992024 50.72#: 24816
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 62% POWER.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : HIGH PRESSURE COOLANT INJECTION SYSTEM
DESC : THE HIGH PRESSURE COOLANT INJECTION SYSTEM WAS DECLARED INOPERABLE DUE TO MISALIGNED OIL PUMP CIRCUIT BREAKER MOTOR CONTACTS, AND DEGRADED TURNING GEAR CONTROL CIRCUIT AUXILIARY CONTACTS.

SSF 01/13/93 LER# 24993001 50.72#: 24873
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : MULTIPLE SYSTEMS
DESC : THE HPCI AND LPCI SYSTEMS WERE DECLARED INOPERABLE WHEN TWO OF FOUR REACTOR WATER LEVEL SWITCHES WERE FOUND OUT OF TOLERANCE DURING SURVEILLANCE.

SCRAM 02/26/93 LER# 24993007 50.72#: 25149 PWR HIST: POWER OPERATIONS AT 100%
DESC : AN AUTOMATIC REACTOR SCRAM OCCURRED ON HIGH RPV PRESSURE. THE HIGH RPV PRESSURE WAS CAUSED BY FOREIGN MATERIAL BLOCKAGE IN THE HIGH PRESSURE TURBINE.

SSF 03/03/93 LER# 23793011 50.72#: 25173
PWR HIST: EVENT DISCOVERED IN COLD SHUTDOWN.
GROUP : CONTAINMENT COOLING SYSTEMS GROUP
SYSTEM : DRYWELL ENVIRONMENTAL CONTROL SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 2 AND 3.
DESC : THE CONTAINMENT COOLING SERVICE WATER KEEP FILL SYSTEM WAS INADVERTENTLY ISOLATED. THIS COULD HAVE RESULTED IN A WATER HAMMER EVENT AND THE LOSS OF CONTAINMENT COOLING SERVICE WATER.

SCRAM 07/10/93 LER# 24993014 50.72#: 25772 PWR HIST: POWER OPERATIONS AT 93%
DESC : A REACTOR SCRAM OCCURRED ON LOW CONDENSER VACUUM WHILE ATTEMPTING TO PERFORM A WEEKLY PROCEDURE TO REVERSE CIRCULATING WATER SYSTEM FLOW.

SSF 08/09/93 LER# 24993013 50.72#: 25899
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : HIGH PRESSURE COOLANT INJECTION SYSTEM
DESC : THE HPCI SYSTEM WAS DECLARED INOPERABLE WHEN THE TURBINE FAILED TO RESET FOLLOWING A TEST. THIS WAS CAUSED BY A LOOSE CONTROL VALVE LIMIT SWITCH.

SSF 08/11/93 LER# 24993015 50.72#: 25924
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : CONTAINMENT COOLING SYSTEMS GROUP
SYSTEM : DRYWELL ENVIRONMENTAL CONTROL SYSTEM
DESC : BOTH CONTAINMENT COOLING SERVICE WATER LOOPS WERE DISCOVERED INOPERABLE, ONE ON 8/11/93 AND THE OTHER ON 8/16/93. THIS WAS CAUSED BY A VALVE TRAVEL RESTRICTION DESIGN DEFICIENCY WHICH WOULD PREVENT ATTAINING REQUIRED FLOW.

SSF 08/16/93 LER# 24993018 50.72#: 25933
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : HIGH PRESSURE COOLANT INJECTION SYSTEM
DESC : THE HPCI SYSTEM WAS DECLARED INOPERABLE AS A RESULT OF A DISABLED HPCI TURBINE HIGH REACTOR LEVEL TRIP INSTRUMENT.

TABLE 8.32

DUANE ARNOLD

SSF 10/22/92 LER# 33192016 50.72#: 24478
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : CONTROL ROOM EMERGENCY VENTILATION SYSTEM GROUP
SYSTEM : CONTROL BUILDING/CONTROL COMPLEX ENVIRONMENTAL CONTROL SYSTEM
DESC : WITH ONE CONTROL BUILDING HVAC CHILLER OUT OF SERVICE FOR MAINTENANCE, THE OTHER CHILLER TRIPPED ON LOW SUCTION PRESSURE.

SCRAM 11/13/92 LER# 33192018 50.72#: 2 593 PWR HIST: POWER OPERATIONS AT 100%
DESC : A REACTOR SCRAM OCCURRED ON A TURBINE TRIP CAUSED BY HIGH CONDENSER BACK PRESSURE. THIS WAS DUE TO A FAILED CIRC WATER PUMP.

SSF 11/19/92 LER# 33192019 50.72#: 24636
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 87% POWER.
GROUP : CONTROL ROOM EMERGENCY VENTILATION SYSTEM GROUP
SYSTEM : CONTROL BUILDING/CONTROL COMPLEX ENVIRONMENTAL CONTROL SYSTEM
DESC : WITH THE "B" TRAIN OF CONTROL BUILDING HVAC OUT OF SERVICE FOR MAINTENANCE, THE "A" TRAIN TRIPPED DUE TO LOW OIL PRESSURE.

SSA 02/11/93 LER# 33193001 50.72#: 25060 PWR HIST: POWER OPERATIONS AT 100%
DESC : AN AUTOSTART OF BOTH EMERGENCY DIESEL GENERATORS OCCURRED DUE TO MOMENTARY UNDERVOLTAGE GRID DISTURBANCES DURING AN ICE STORM. THIS IS THE FIRST OF THREE EVENTS.

SSA 02/11/93 LER# 33193001 50.72#: 25060 PWR HIST: POWER OPERATIONS AT 100%
DESC : AN AUTOSTART OF BOTH EMERGENCY DIESEL GENERATORS OCCURRED DUE TO MOMENTARY UNDERVOLTAGE GRID DISTURBANCES DURING AN ICE STORM. THIS IS THE SECOND OF THREE EVENTS.

SSA 02/11/93 LER# 33193001 50.72#: 25060 PWR HIST: POWER OPERATIONS AT 100%
DESC : AN AUTOSTART OF BOTH EMERGENCY DIESEL GENERATORS OCCURRED DUE TO MOMENTARY UNDERVOLTAGE GRID DISTURBANCES DURING AN ICE STORM. THIS IS THE THIRD OF THREE EVENTS.

SSF 09/16/93 LER# 33193008 50.72#: 26137
PWR HIST: CONDITION EXISTED FROM JULY 21, 1993.
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : EMERGENCY ONSITE POWER SUPPLY SYSTEM
DESC : THE "B" EDG OUTPUT BREAKER COULD NOT CLOSE DUE TO DISABLED CLOSURE PERMISSIVES. THIS CONDITION EXISTED AT A TIME WHEN THE OTHER EDG WAS OUT OF SERVICE FOR MAINTENANCE AND AT LEAST ONE EDG WAS REQUIRED TO BE OPERABLE.

TABLE 8.33

FARLEY 1

SSA 10/28/92 LER# 34892006 50.72#: 24526 PWR HIST: REFUELING
DESC : AN ELECTRICIAN INADVERTENTLY CONTACTED THE WRONG TERMINAL DURING A SURVEILLANCE, WHICH RESULTED IN A LOAD SHED SIGNAL TO THE LOSS OF OFFSITE POWER SEQUENCER AND THE AUTO START OF THE "1B" AND "2C" EMERGENCY DIESEL GENERATORS.

SSA 11/29/92 LER# 34892007 50.72#: 24672 PWR HIST: HOT STANDBY
DESC : THE "1-2A" EDG AUTOMATICALLY STARTED AND SEQUENCED ONTO VITAL BUS 1F, DUE TO A PARTIAL LOSS OF OFFSITE POWER.

SCRAM 12/13/92 LER# 34892008 50.72#: 24745 PWR HIST: POWER OPERATIONS AT 100%
DESC : THE REACTOR SCRAMMED ON LOW S/G WATER LEVEL CAUSED BY A BLOWN FUSE IN A SWITCH RELAY CARD DURING TESTING.

TABLE 8.34

FARLEY 2

SSA 02/05/93 LER# 36493001 50.72#: 25022 PWR HIST: COLD SHUTDOWN
DESC : BOTH SAFETY INJECTION SYSTEMS AUTO-STARTED AND THE HPSI SYSTEM INJECTED TO THE VESSEL DURING A SURVEILLANCE TEST. THE EDGS STARTED BUT DID NOT LOAD ON THE ECCS ACTUATION SIGNAL. THIS EVENT WAS CAUSED BY MISOPERATION OF A SWITCH.

TABLE 8.35

FERMI 2

SSA 10/24/92 LER# 34192011 50.72#: 24495 PWR HIST: COLD SHUTDOWN
DESC : A SPURIOUS LOW REACTOR VESSEL WATER LEVEL SIGNAL RESULTED IN AN AUTO START OF THE CORE SPRAY SYSTEM. THE SIGNAL WAS GENERATED WHEN A TECHNICIAN BUMPED AN INSTRUMENT RACK.

SSA 11/18/92 LER# 34192012 50.72#: 24625 PWR HIST: HOT SHUTDOWN FOLLOWING SCRAM
DESC : THE HPCI AND RCIC SYSTEMS AUTO-STARTED AND INJECTED ON LOW VESSEL LEVEL FOLLOWING A MANUAL SCRAM. ALL THREE FEED PUMPS HAD TRIPPED ON LOW SUCTION PRESSURE DUE TO PROBLEMS BRINGING A DEMINERALIZER ON LINE.

SSF 01/04/93 LER# 34193001 50.72#: 24830
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 80% POWER.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : HIGH PRESSURE COOLANT INJECTION SYSTEM
DESC : THE HIGH PRESSURE COOLANT INJECTION SYSTEM WAS DECLARED INOPERABLE DUE TO A FAULTED RELAY.

SSF 01/14/93 LER# 34193002 50.72#: 24884
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 98% POWER.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : HIGH PRESSURE COOLANT INJECTION SYSTEM
DESC : THE HIGH PRESSURE COOLANT INJECTION SYSTEM WAS DECLARED INOPERABLE WHEN IT FAILED AN AUTOSTART SURVEILLANCE TEST. THIS WAS CAUSED BY A FAILED RESISTOR IN THE POWER SUPPLY FOR THE GOVERNOR CONTROL SYSTEM.

SCRAM 02/19/93 LER# 34193004 50.72#: 25106 PWR HIST: POWER OPERATIONS AT 90%
DESC : THE REACTOR AUTOMATICALLY SCRAMMED FOLLOWING A TURBINE TRIP CAUSED BY A LOSS OF CONDENSER VACUUM. THIS EVENT WAS CAUSED WHEN A TECHNICIAN INADVERTENTLY DEENERGIZED A BUS.

SCRAM 04/20/93 LER# 34193007 50.72#: 25422 PWR HIST: STARTUP MODE OF 3%
DESC : A REACTOR SCRAM ON HIGH IRM POWER OCCURRED WHEN A PRESSURE REGULATOR FAILED DUE TO AN INCORRECT TEST SETUP. THIS CAUSED THE TURBINE BYPASS TO OPEN, RESULTING IN POWER OSCILLATIONS.

SSF 05/19/93 LER# 34193008 50.72#: 25540
PWR HIST: CONDITION EXISTED IN MODES 1 AND 2 BETWEEN 11/4/92 AND 5/16/93.
GROUP : ACCIDENT MONITORING INSTRUMENTATION
SYSTEM : POST-ACCIDENT MONITORING SYSTEM
DESC : BOTH DIVISIONS OF DRYWELL AND TORUS PRESSURE RECORDERS WERE INOPERABLE. ONE DIVISION WAS NOT SEISMICALLY QUALIFIED AND THE OTHER WAS PLUGGED INTO THE WRONG POWER SOURCE.

SCRAM 08/13/93 LER# 34193010 50.72#: 25911 PWR HIST: POWER OPERATIONS AT 93%
DESC : A TURBINE TRIP, FEED PUMP TRIP, AND REACTOR TRIP OCCURRED WHEN A SPURIOUS HIGH REACTOR WATER LEVEL SIGNAL WAS GENERATED. A REFERENCE LEG VALVE WAS INADVERTENTLY OPENED WHILE REMOVING TAPE FROM THE VALVE HANDLE.

SSA 08/13/93 LER# 34193010 50.72#: 25911 PWR HIST: HOT SHUTDOWN FOLLOWING A SCRAM FROM 93% POWER.
DESC : HPCI AND RCIC AUTOMATICALLY STARTED AND INJECTED TO THE REACTOR VESSEL FOLLOWING A REACTOR TRIP.

TABLE 8.36

FITZPATRICK

SSF 10/10/92 LER# 33392044 50.72#: 24404
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE 1986.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : MULTIPLE SYSTEMS
DESC : THE ECCS SYSTEMS WERE DECLARED INOPERABLE BECAUSE A FOUR FOOT SECTION OF ELECTRICAL CABLE WAS NOT COVERED BY CONDUIT AS REQUIRED. THIS CABLE IS ASSOCIATED WITH THE ECCS ACTUATION LOGIC.

SSF 11/06/92 LER# 33392048 50.72#: 24563
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION.
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : MULTIPLE SYSTEMS
DESC : TWO 4160/600 VAC TRANSFORMERS THAT SUPPLY REDUNDANT ECCS SYSTEMS, SBGT AND SLC, WERE NOT SEISMICALLY QUALIFIED. THEY HAVE BEEN MISSING HOLD DOWN HARDWARE SINCE CONSTRUCTION.

TABLE 8.36 (CONT.)

FITZPATRICK

SSF 01/13/93 LER# 33393003 50.72#:
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE 1985.
GROUP : SAFETY AND RELIEF VALVES GROUP
SYSTEM : AUTOMATIC DEPRESSURIZATION SYSTEM
DESC : NON-SAFETY RELATED COMPONENTS WERE IDENTIFIED ON THE DRYWELL NITROGEN SUPPLY HEADER WHICH COULD LEAD TO THE INABILITY TO SUPPLY THE AUTOMATIC DEPRESSURIZATION SYSTEM WITH A 7 DAY SUPPLY OF NITROGEN.

SSF 01/25/93 LER# 33393002 50.72#: 24964
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE 1980.
GROUP : CONTROL ROOM EMERGENCY VENTILATION SYSTEM GROUP
SYSTEM : CONTROL BUILDING/CONTROL COMPLEX ENVIRONMENTAL CONTROL SYSTEM
DESC : A CONTROL BUILDING RELAY ROOM VENTILATION SYSTEM MODIFICATION INTRODUCED A POTENTIAL SINGLE COMMON MODE FAILURE OF THE ACTUATION CIRCUIT.

SCRAM 04/20/93 LER# 33393009 50.72#: 25425 PWR HIST: POWER OPERATIONS AT 100%
DESC : THE REACTOR SCRAMMED DUE TO LOW RPV WATER LEVEL. THIS WAS CAUSED BY A CONTROL SIGNAL FAILURE TO THE RFP COMPOUNDED BY A CONCURRENT FAILURE OF THE RFP DISCHARGE CHECK VALVE.

SSA 04/20/93 LER# 33393009 50.72#: 25425 PWR HIST: HOT SHUTDOWN FOLLOWING THE REACTOR SCRAM
DESC : THE HPCI AND RCIC SYSTEMS AUTO-STARTED ON LOW VESSEL LEVEL FOLLOWING A REACTOR SCRAM. THE SCRAM TRANSIENT AND LOSS OF RPV LEVEL CONTROL CONTRIBUTED TO THE INITIATION.

SSF 04/20/93 LER# 33393009 50.72#: 25425
PWR HIST: CONDITION OCCURRED DURING A REQUIRED ISOLATION FOLLOWING A SCRAM.
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : PRIMARY CONTAINMENT
DESC : A DRYWELL FLOOR DRAIN PUMP DISCHARGE ISOLATION VALVE FAILED TO INDICATE FULLY CLOSED ON AN ISOLATION SIGNAL FOLLOWING A SCRAM. THE BACKUP VALVE WAS PROMPTLY CLOSED.

SSF 04/20/93 LER# 33393010 50.72#: 25427
PWR HIST: EVENT DISCOVERED IN HOT SHUTDOWN.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : HIGH PRESSURE COOLANT INJECTION SYSTEM
DESC : THE HIGH PRESSURE COOLANT INJECTION SYSTEM WAS DECLARED INOPERABLE DUE TO AN ELECTRICAL GROUND ON THE POWER SUPPLY FOR THE HPCI TURBINE STEAM SUPPLY VALVE.

SCRAM 05/25/93 LER# 33393013 50.72#: 25564 PWR HIST: STARTUP MODE AT 6%
DESC : A REACTOR SCRAM OCCURRED DUE TO A SPURIOUS APRM SCRAM SIGNAL. A HALF-SCRAM WAS PREVIOUSLY INITIATED DUE TO A MSL RAD MONITOR FAILURE AND THE APRM SPURIOUS SPIKE COMPLETED THE SCRAM LOGIC SEQUENCE.

SSF 09/23/93 LER# 33393019 50.72#: 26106
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : CONTROL ROOM EMERGENCY VENTILATION SYSTEM GROUP
SYSTEM : CONTROL BUILDING/CONTROL COMPLEX ENVIRONMENTAL CONTROL SYSTEM
DESC : A POTENTIAL FAILURE OF A VENTILATION SYSTEM INTAKE LINE BYPASS DAMPER COULD RESULT IN EXCESSIVE UNFILTERED OUTSIDE AIR LEAKAGE INTO THE CONTROL ROOM.

SCRAM 09/24/93 LER# 33393020 50.72#: 26112 PWR HIST: POWER OPERATIONS AT 17%
DESC : THE REACTOR SCRAMMED ON HIGH REACTOR PRESSURE FOLLOWING CLOSURE OF MAIN TURBINE BYPASS VALVES DURING TROUBLESHOOTING DUE TO PERSONNEL ERROR.

SSF 09/28/93 LER# 33393021 50.72#: 26133
PWR HIST: CONDITION EXISTED IN COLD SHUT DOWN MODES SINCE INITIAL OPERATION
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : LOW PRESSURE COOLANT INJECTION SYSTEM
DESC : A COMMON MODE FAILURE WHICH COULD PREVENT THE AUTOMATIC REALIGNMENT OF VALVES IN BOTH RHR/LPCI SUBSYSTEMS DUE TO UNDERSIZED VALVE MOTOR BRAKES WAS DISCOVERED.

TABLE 8.37

FORT CALHOUN

SSF 01/22/93 LER# 28593002 50.72#:
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE THE 1988-89 REFUELING OUTAGE.
GROUP : REACTOR TRIP INSTRUMENTATION
SYSTEM : PLANT PROTECTION SYSTEM
DESC : THE S/G LOW PRESSURE SCRAM SIGNAL BLOCK RESET VALUES, FOR ALL FOUR CHANNELS OF BOTH S/GS, WERE GREATER THAN THE ALLOWED LIMITS, RENDERING THIS SCRAM INPUT INOPERABLE DURING CERTAIN OPERATING CONDITIONS.

TABLE 8.37 (CONT.)

FORT CALHOUN

SSF 04/22/93 LER# 28593005 50.72#: 25435
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE DEC. 1986.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : HIGH PRESSURE SAFETY INJECTION SYSTEM
DESC : A SECTION OF THE PIPING CONFIGURATION FOR THE BORATED WATER SOURCE OF THE SAFETY INJECTION SYSTEM WAS NOT SEISMICALLY QUALIFIED. THIS COULD HAVE RESULTED IN A FAILURE OF THE SYSTEM TO MEET DESIGN REQUIREMENTS DURING A SEISMIC EVENT.

SSA 04/30/93 LER# 28593007 50.72#: 25467 PWR HIST: HOT STANDBY
DESC : AN EDG AUTO-STARTED AND A VITAL BUS LOAD SHED OCCURRED WHEN AN OPERATOR INADVERTENTLY TRIPPED AN UNDERVOLTAGE RELAY. THE EDG DID NOT LOAD THE BUS.

SCRAM 06/24/93 LER# 28593011 50.72#: 25694 PWR HIST: POWER OPERATIONS AT 100%
DESC : A REACTOR SCRAM OCCURRED AS A RESULT OF A TURBINE TRIP/LOSS OF ELECTRICAL LOAD. THIS WAS CAUSED WHEN A WORKER INADVERTENTLY TRIPPED BOTH 345KV FEEDERS.

SSA 06/24/93 LER# 28593011 50.72#: 25694 PWR HIST: HOT STANDBY FOLLOWING A SCRAM
DESC : A CHARGING PUMP AUTO-STARTED IN THE HIGH PRESSURE INJECTION MODE OF OPERATION AS A RESULT OF LOW PRESSURIZER LEVEL SIGNAL FOLLOWING A SCRAM. THIS OCCURRED DUE TO A GENERATOR LOAD REJECT.

TABLE 8.38

GINNA

SSA 12/24/92 LER# 24492007 50.72#: 24794 PWR HIST: POWER OPERATIONS AT 77%
DESC : THE EMERGENCY DIESEL GENERATOR STARTED AND LOADED TWO SAFEGUARDS BUSES WHEN AN OFFSITE POWER LINE WAS LOST DURING A STORM.

SSF 03/12/93 LER# 24493001 50.72#:
PWR HIST: EVENT DISCOVERED IN HOT SHUTDOWN.
GROUP : REACTOR TRIP INSTRUMENTATION
SYSTEM : PLANT PROTECTION SYSTEM
DESC : BOTH SOURCE RANGE DETECTORS AND THEIR SCRAM FUNCTION WERE INOPERABLE DURING A PLANT SHUTDOWN. THIS OCCURRED DUE TO DEGRADATION OF THE DETECTOR CENTER ELECTRODES.

TABLE 8.39

GRAND GULF

SSF 12/15/92 LER# 41692020 50.72#: 24761
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : REACTOR CORE ISOLATION COOLING SYSTEMS GROUP
SYSTEM : REACTOR CORE ISOLATION COOLING SYSTEM
DESC : THE REACTOR CORE ISOLATION COOLING SYSTEM WAS DECLARED INOPERABLE WHEN A FAILED TEMPERATURE SWITCH CAUSED A STEAM LINE ISOLATION.

SSF 03/24/93 LER# 41693003 50.72#: 25301
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : HIGH PRESSURE CORE SPRAY SYSTEM
DESC : THE HPCS SYSTEM AND THE DIVISION 3 EDG WERE DECLARED INOPERABLE WHEN A SERVICE WATER PUMP WHICH PROVIDES HPCS ROOM AND EDG COOLING WATER FAILED.

SSF 07/20/93 LER# 41693006 50.72#: 25815
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : REACTOR CORE ISOLATION COOLING SYSTEMS GROUP
SYSTEM : REACTOR CORE ISOLATION COOLING SYSTEM
DESC : THE REACTOR CORE ISOLATION COOLING SYSTEM WAS DECLARED INOPERABLE WHEN ITS OUTBOARD STEAM SUPPLY VALVE ISOLATED DUE TO A FAILED TEMPERATURE SWITCH FOR THE ISOLATION LOGIC CIRCUIT.

TABLE 8.39 (CONT.)

GRAND GULF

SSF 07/23/93 LER# 41693007 50.72#: 25843
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : CONTROL ROOM EMERGENCY VENTILATION SYSTEM GROUP
SYSTEM : CONTROL BUILDING/CONTROL COMPLEX ENVIRONMENTAL CONTROL SYSTEM
DESC : THE CONTROL ROOM EMERGENCY VENTILATION SYSTEM WAS RENDERED INOPERABLE AS A RESULT OF BREACHING THE CONTROL ROOM ENVELOPE BOUNDARY WHEN A SMOKE DETECTOR ACCESS PANEL WAS REMOVED FOR MAINTENANCE.

SCRAM 09/13/93 LER# 41693008 50.72#: 26057 PWR HIST: POWER OPERATIONS AT 100%
DESC : THE REACTOR SCRAMMED ON HIGH VESSEL LEVEL FOLLOWING A SPURIOUS ACTUATION OF HPCS.

SSA 09/13/93 LER# 41693008 50.72#: 26057 PWR HIST: POWER OPERATIONS AT 100%
DESC : THE HPCS SYSTEM STARTED AND INJECTED TO THE REACTOR VESSEL DUE TO A DISPLACED JET PUMP MIXER WHICH CAUSED PERTURBATIONS IN THE HPCS LEVEL INSTRUMENTATION.

TABLE 8.40

HADDAM NECK

SSF 05/12/93 LER# 21393004 50.72#:
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 99% POWER.
GROUP : ESSENTIAL SERVICE WATER SYSTEM GROUP
SYSTEM : ESSENTIAL SERVICE WATER SYSTEM
DESC : A TEST WHICH RENDERED BOTH SERVICE WATER TRAINS INOPERABLE, AND WHICH SHOULD HAVE BEEN PERFORMED ONLY IN A SHUTDOWN MODE, WAS PERFORMED WHILE OPERATING BECAUSE THE PROCEDURE DID NOT SPECIFY MODE REQUIREMENTS.

SSF 05/25/93 LER# 21393006 50.72#:
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : EMERGENCY ONSITE POWER SUPPLY SYSTEM
DESC : BOTH EDGS WERE INOPERABLE DUE TO INADEQUATE COOLING OF THE EXCITATION CABINET. THIS LED TO THE FAILURE OF TWO FIELD RECTIFIERS ON ONE UNIT.

SSA 06/22/93 LER# 21393009 50.72#: 25682 PWR HIST: COLD SHUTDOWN
DESC : BOTH EMERGENCY DIESEL GENERATORS AUTO-STARTED AND LOADED THEIR RESPECTIVE BUSES AFTER LOSING OFFSITE POWER. THIS OCCURRED DURING CIRCUIT BREAKER TESTING AND WAS THE RESULT OF WIRING ERRORS.

SSA 06/26/93 LER# 21393010 50.72#: 25701 PWR HIST: COLD SHUTDOWN
DESC : BOTH EMERGENCY DIESEL GENERATORS AUTO-STARTED AND LOADED THEIR RESPECTIVE BUSES AFTER LOSING OFFSITE POWER. THIS OCCURRED DURING A PARTIAL LOSS OF AC TEST AND WAS THE RESULT OF A BLOWN UNDERVOLTAGE CIRCUIT FUSE.

SE 06/27/93 LER# 50.72#: 25706
PWR HIST: EVENT OCCURRED IN COLD SHUTDOWN.
DESC : WHILE CONDUCTING A PARTIAL LOSS OF OFFSITE POWER COINCIDENT WITH A SAFETY INJECTION SIGNAL, A LOSS OF MCC-5 OCCURRED, WHICH SUPPLIES POWER TO ALL SAFETY INJECTION VALVES. THE ABT FOR MCC-5 FAILED TO PROPERLY TRANSFER. NO ROOT CAUSE WAS DETERMINED.

SSF 07/14/93 LER# 21393012 50.72#:
PWR HIST: EVENT DISCOVERED IN HOT STANDBY.
GROUP : MULTIPLE SYSTEMS GROUP
SYSTEM : MULTIPLE SYSTEMS
DESC : ALL FOUR STEAM LINE FLOW TRANSMITTERS WERE DISCOVERED ISOLATED. THEY PROVIDE BOTH A REACTOR TRIP AND A MSL ISOLATION ON HIGH STEAM FLOW.

SCRAM 07/19/93 LER# 21393013 50.72#: 25803 PWR HIST: STARTUP MODE AT 0%
DESC : A REACTOR TRIP OCCURRED DURING A SURVEILLANCE OF THE NUCLEAR INSTRUMENTATION SYSTEM AS A RESULT OF A TECHNICIAN LEAVING CHANNEL 1 TRIPPED AND TESTING CHANNEL 2.

SSF 08/16/93 LER# 21393015 50.72#: 25928
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : CONTAINMENT COOLING SYSTEMS GROUP
SYSTEM : CONTAINMENT FAN COOLING SYSTEM
DESC : TWO SERVICE WATER SYSTEM FILTER HOUSINGS WERE DISCOVERED WITH WALL THICKNESS BELOW THE MINIMUM REQUIRED VALUE. A LEAK FROM THESE FILTERS COULD HAVE AFFECTED BOTH CONTAINMENT AIR RECIRCULATION SYSTEM LOOPS.

TABLE 8.40 (CONT.)

HADDAM NECK

SSF 09/20/93 LER# 21393016 50.72#: 26093
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER BETWEEN INITIAL OPERATION AND 5/16/93.
GROUP : AUXILIARY/EMERGENCY FEEDWATER SYSTEMS GROUP
SYSTEM : AUXILIARY/EMERGENCY FEEDWATER SYSTEM
DESC : A SINGLE FAILURE OF THE CONDENSER HOTWELL MAKE UP VALVE COULD HAVE RENDERED THE AFW SYSTEM INCAPABLE OF PERFORMING ITS DESIGN FUNCTION.

TABLE 8.41

HARRIS

SSF 03/30/93 LER# 40093002 50.72#:
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : MEDIUM-VOLTAGE POWER SYSTEM - CLASS 1E
DESC : BOTH TRAINS OF EMERGENCY SWITCHGEAR WERE INOPERABLE DUE TO THE FAILURE OF A COOLING UNIT FOR ONE TRAIN WHILE THE OTHER TRAIN WAS OUT OF SERVICE FOR MAINTENANCE.

SSF 03/31/93 LER# 40093003 50.72#:
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : CONTAINMENT VACUUM RELIEF SYSTEM
DESC : THE CONTAINMENT VACUUM RELIEF SYSTEM WOULD NOT HAVE ACTUATED AT THE REQUIRED SETPOINT DUE TO A DESIGN DEFICIENCY WITH THE DIFFERENTIAL PRESSURE SENSING SYSTEM.

SSF 04/28/93 LER# 40093005 50.72#:
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : HIGH PRESSURE SAFETY INJECTION SYSTEM
DESC : HPSI WAS INOPERABLE FOR APPROXIMATELY ONE MINUTE WHEN AN INOPERABLE PUMP WAS ERRONEOUSLY PLACED IN SERVICE AND THE TWO OPERABLE PUMPS WERE REMOVED FROM SERVICE.

SSA 05/23/93 LER# 40093007 50.72#: 25558 PWR HIST: POWER OPERATIONS AT 20%
DESC : AN EMERGENCY DIESEL GENERATOR AUTO-STARTED AND LOADED ITS RESPECTIVE EMERGENCY BUS. THE LOSS OF POWER TO THE BUS WAS CAUSED BY IMPROPER ALIGNMENT OF A SUPPLY BREAKER MECHANISM OPERATED CELL SWITCH.

TABLE 8.42

HATCH 1

SSF 05/05/93 LER# 32193008 50.72#:
PWR HIST: EVENT DISCOVERED IN COLD SHUTDOWN.
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : EMERGENCY/STANDBY GAS TREATMENT SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : BOTH TRAINS OF SBGT BECAME INOPERABLE WHEN THE HUMIDITY CONTROLLER FOR ONE TRAIN WAS DISCOVERED INOPERABLE WHILE THE EMERGENCY POWER SOURCE FOR THE OTHER TRAIN WAS INOPERABLE.

SCRAM 05/14/93 LER# 32193009 50.72#: 25516 PWR HIST: STARTUP MODE AT 7%
DESC : A REACTOR SCRAM OCCURRED ON AN MSIV CLOSURE WHEN THE MODE SWITCH WAS PLACED IN THE RUN POSITION. SEVERAL BLOWN FUSES IN THE MSIV CLOSURE LOGIC CAUSED THE CIRCUIT TO SENSE AN ISOLATION OF THE MSIVS EVEN THOUGH THEY WERE OPEN.

SCRAM 06/15/93 LER# 32193012 50.72#: 25655 PWR HIST: POWER OPERATIONS AT 100%
DESC : A REACTOR SCRAM OCCURRED ON A SPURIOUS LOW RPV WATER LEVEL SIGNAL. THE SPURIOUS LEVEL SIGNAL WAS CAUSED BY AN INSTRUMENT LINE ISOLATION VALVE PACKING LEAK.

TABLE 8.43

HATCH 2

SSA 11/14/92 LER# 36692023 50.72#: 24605 PWR HIST: COLD SHUTDOWN
DESC : ALL THREE EMERGENCY DIESELS STARTED, AND THE LOW PRESSURE INJECTION AND CORE SPRAY SYSTEMS AUTO-STARTED AND INJECTED, WHEN A LOW RPV LEVEL SIGNAL WAS INADVERTENTLY INTRODUCED INTO AN ECCS LOGIC CIRCUIT DURING A TEST.

TABLE 8.43 (CONT.)

HATCH 2

SCRAM 11/27/92 LER# 36692026 50.72#: 24664 PWR HIST: POWER OPERATIONS AT 70%
DESC : THE REACTOR SCRAMMED DUE TO A MAIN TURBINE TRIP ON HIGH VIBRATION. THE TURBINE SHAFT WAS NOT ADEQUATELY ALIGNED FOLLOWING AN OUTAGE.

SSF 05/05/93 LER# 32193008 50.72#:
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 74% POWER.
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : EMERGENCY/STANDBY GAS TREATMENT SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : BOTH TRAINS OF SBGT BECAME INOPERABLE WHEN THE HUMIDITY CONTROLLER FOR ONE TRAIN WAS DISCOVERED INOPERABLE WHILE THE EMERGENCY POWER SOURCE FOR THE OTHER TRAIN WAS INOPERABLE.

SSF 07/21/93 LER# 36693006 50.72#: 25827
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 85% POWER.
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : PRIMARY CONTAINMENT
DESC : TWO PRIMARY ISOLATION VALVES ON A REACTOR COOLANT SAMPLE LINE WOULD NOT ISOLATE, RENDERING THEIR ASSOCIATED CONTAINMENT ISOLATION FUNCTION INOPERABLE. BECAUSE OF INADEQUATE PROCEDURAL CONTROLS, THE VALVE ACTUATORS HAD NOT BEEN PROPERLY ADJUSTED.

SSF 08/25/93 LER# 36693007 50.72#: 25975
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 85% POWER.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : HIGH PRESSURE COOLANT INJECTION SYSTEM
DESC : THE HPCI SYSTEM WAS DECLARED INOPERABLE WHEN ITS INBOARD ISOLATION VALVE ISOLATED DURING A TEST. A POTENTIAL CAUSE WAS THOUGHT TO BE ELECTRICAL INTERACTION BETWEEN ADJACENT TRIP CARDS IN A PANEL.

TABLE 8.44

HOPE CREEK

SSF 12/16/92 LER# 35492015 50.72#:
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : CONTROL ROOM EMERGENCY VENTILATION SYSTEM GROUP
SYSTEM : CONTROL BUILDING/CONTROL COMPLEX ENVIRONMENTAL CONTROL SYSTEM
DESC : ONE TRAIN OF CONTROL ROOM VENTILATION BECAME INOPERABLE. DUE TO A POWER LOSS CAUSED BY A LOGIC CARD FAILURE, WHILE THE OTHER TRAIN WAS INOPERABLE FOR PREVENTIVE MAINTENANCE.

SSA 05/13/93 LER# 35493003 50.72#: 25515 PWR HIST: POWER OPERATIONS AT 100%
DESC : THE EMERGENCY DIESEL GENERATORS AUTO-STARTED AND LOADED THEIR RESPECTIVE BUSES DUE TO A PARTIAL LOSS OF OFFSITE POWER. THE LOSS OF POWER WAS CAUSED BY A FAULT IN THE INCOMING POWER LINE.

SCRAM 05/16/93 LER# 35493004 50.72#: 25522 PWR HIST: POWER OPERATIONS AT 61%
DESC : THE REACTOR SCRAMMED DUE TO HIGH RPV PRESSURE. THE HIGH RPV PRESSURE WAS CAUSED BY CLOSURE OF MAIN TURBINE CONTROL AND INTERCEPT VALVES, WHICH APPEARS TO HAVE BEEN CAUSED BY EQUIPMENT FAILURE.

SSF 08/14/93 LER# 35493005 50.72#: 25921
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : HIGH PRESSURE COOLANT INJECTION SYSTEM
DESC : HPCI WAS DECLARED INOPERABLE WHEN THE INJECTION VALVE FAILED TO STROKE PROPERLY DURING A SURVEILLANCE TEST. THE SYSTEM WAS SECURED TO PERFORM REPAIRS. THE ROOT CAUSE WAS A FAILED TORQUE SWITCH ROLL PIN IN THE MOTOR OPERATOR.

SSF 09/09/93 LER# 35493006 50.72#: 26038
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : MULTIPLE SYSTEMS GROUP
SYSTEM : MULTIPLE SYSTEMS
DESC : A SINGLE DESIGN PROBLEM WITH COOLING WATER ISOLATION VALVES COULD HAVE PREVENTED THE EDG AND ECCS ROOM COOLERS FROM OPERATING AS REQUIRED.

TABLE 8.45

INDIAN POINT 2

SSA 02/08/93 LER# 24793002 50.72#: 25045 PWR HIST: REFUELING
DESC : THE EMERGENCY DIESEL GENERATORS AUTO-STARTED WHEN A TECHNICIAN INADVERTENTLY TRIPPED AN UNDERVOLTAGE DEVICE CAUSING A SAFEGUARDS BUS TO LOSE POWER. THE OTHER BUSES REMAINED ENERGIZED AND OFFSITE POWER REMAINED AVAILABLE.

SSA 03/04/93 LER# 24793004 50.72#: 25189 PWR HIST: REFUELING
DESC : THE EMERGENCY DIESELS AUTO-STARTED WHEN THEIR ASSOCIATED SAFETY BUS DEENERGIZED. THE LOSS OF POWER TO THE SAFETY BUSES WAS CAUSED BY A SPURIOUS TRIP OF THE NORMAL SUPPLY BREAKERS.

SSF 03/05/93 LER# 24793005 50.72#: 25197
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : MULTIPLE SYSTEMS GROUP
SYSTEM : MULTIPLE SYSTEMS
DESC : A SINGLE ELECTRICAL FAILURE COULD PREVENT PROPER OPERATION OF AN HVAC SYSTEM IN THE 480 VOLT SWITCHGEAR CABLE SPREADING ROOM AND CABLE TUNNEL AREAS. THIS COULD RESULT IN THE POTENTIAL INABILITY TO SAFELY SHUTDOWN THE PLANT.

SSA 03/24/93 LER# 24793006 50.72#: 25304 PWR HIST: REFUELING
DESC : THE EMERGENCY DIESEL GENERATORS AUTO-STARTED AND LOADED WHEN A VITAL BUS WAS INADVERTENTLY DEENERGIZED DURING MAINTENANCE.

SSF 08/10/93 LER# 24793009 50.72#: 25902
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : EMERGENCY ONSITE POWER SUPPLY SYSTEM
DESC : WITH ONE EDG OUT OF SERVICE FOR MAINTENANCE, THE OTHER EDG WAS DECLARED INOPERABLE BECAUSE OF A LOSS OF DISCHARGE PRESSURE ON THE SERVICE WATER PUMP FOR THAT EDG.

SSF 08/10/93 LER# 24793009 50.72#:
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : EMERGENCY ONSITE POWER SUPPLY SYSTEM
DESC : WITH ONE EDG INOPERABLE FOR MAINTENANCE, THE OTHER BECAME INOPERABLE WHEN ONE OF ITS TWO CONTROL POWER FUSES BLEW.

SSF 09/10/93 LER# 24793012 50.72#: 26050
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : CONTAINMENT LEAKAGE CONTROL SYSTEM
DESC : THE CONTAINMENT WELD CHANNEL PRESSURIZATION SYSTEM COULD BE RENDERED INOPERABLE BY A LOSS OF INSTRUMENT AIR BECAUSE THE SYSTEM'S AIR PRESSURE REGULATORS MAY NOT REOPEN WHEN SUPPLIED BY BACKUP NITROGEN.

TABLE 8.46

INDIAN POINT 3

SSF 11/17/92 LER# 28692018 50.72#: 24618
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : MULTIPLE SYSTEMS GROUP
SYSTEM : MULTIPLE SYSTEMS
DESC : SAFETY RELATED CIRCUITS THAT SIGNAL REDUNDANT CONTAINMENT ISOLATION VALVES FOR MULTIPLE SYSTEMS DID NOT MEET FIRE SEPARATION DESIGN CRITERIA.

SSF 12/31/92 LER# 28693005 50.72#: 25193
PWR HIST: CONDITION EXISTED FROM 8/3/92 THROUGH 1/12/93, UP TO 100% POWER.
GROUP : ENGINEERED SAFETY FEATURES INSTRUMENTATION
SYSTEM : ANTICIPATED TRANSIENT WITHOUT SCRAM SYSTEM
DESC : AN ATWS MITIGATING SYSTEM THAT INITIATES THE AUXILIARY FEEDWATER PUMPS WOULD NOT OPERATE PROPERLY DUE TO A DISABLED TIME DELAY IN THE AMSAC LOGIC.

TABLE 8.46 (CONT.)

INDIAN POINT 3

SE 03/18/93 LER# 28693011 50.72#:
PWR HIST: EVENT OCCURRED DURING COLD SHUTDOWN.
DESC : THE REACTOR COOLANT WATER LEVEL WAS DRAINED TO A REDUCED INVENTORY CONDITION WITHOUT FUNCTIONAL LEVEL INDICATION. NO OTHER PERFORMANCE INDICATORS WERE INVOLVED.

SSF 04/14/93 LER# 28693013 50.72#:
PWR HIST: CONDITION EXISTED IN COLD SHUTDOWN TO 100% POWER SINCE 7/23/92.
GROUP : CONTAINMENT COOLING SYSTEMS GROUP
SYSTEM : CONTAINMENT FAN COOLING SYSTEM
DESC : THREE OF FIVE CONTAINMENT FAN COOLER UNITS WERE INOPERABLE. THEIR DAMPERS HAD NOT BEEN INCLUDED IN THE PREVENTIVE MAINTENANCE PROGRAM. AN ACCUMULATION OF DIRT AND RUST AND LACK OF LUBRICATION PREVENTED OPERATION OF THE DAMPERS.

SSF 06/18/93 LER# 28693026 50.72#: 25668
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : LOW-VOLTAGE POWER SYSTEM - CLASS 1E
DESC : A PROTECTIVE DEVICE COORDINATION STUDY IDENTIFIED FUSES FROM TWO MOTOR CONTROL CENTERS THAT DID NOT COORDINATE WITH THEIR RESPECTIVE FEEDER BREAKERS. THIS CONDITION COULD HAVE DISABLED MULTIPLE TRAINS OF SAFETY-RELATED SYSTEMS.

SSF 06/24/93 LER# 28693027 50.72#: 25693
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : EMERGENCY ONSITE POWER SUPPLY SYSTEM
DESC : ALL THREE EMERGENCY DIESEL GENERATORS WERE DECLARED INOPERABLE DUE TO A SEISMIC CONCERN ASSOCIATED WITH THE DIESEL CONTROL PANELS.

SSF 09/03/93 LER# 28693033 50.72#:
PWR HIST: CONDITION EXISTED IN COLD SHUTDOWN UP TO 100% POWER SINCE 12/4/92.
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : EMERGENCY ONSITE POWER SUPPLY SYSTEM
DESC : FAILURE TO AMEND TECHNICAL SPECIFICATIONS AND OPERATING LOGS FOLLOWING A MODIFICATION COULD HAVE RESULTED IN EDG FUEL OIL LEVELS BELOW THE DESIGN BASIS MINIMUM VOLUME.

SSF 09/15/93 LER# 28693036 50.72#:
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : CONTROL ROOM EMERGENCY VENTILATION SYSTEM GROUP
SYSTEM : CONTROL BUILDING/CONTROL COMPLEX ENVIRONMENTAL CONTROL SYSTEM
DESC : THE CONTROL ROOM VENTILATION SYSTEM WAS DETERMINED TO BE INOPERABLE BECAUSE DAMPER ACTUATORS WERE NOT SEISMICALLY MOUNTED.

TABLE 8.47

KEWAUNEE

SSF 11/16/92 LER# 30592021 50.72#: 24615
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : SHIELD ANNULUS RETURN AND EXHAUST SYSTEM
DESC : THE SETPOINT FOR THE SHIELD BUILDING VENTILATION SYSTEM ELECTRIC HEATERS WAS INCORRECT AND HAD NOT BEEN CALIBRATED SINCE INITIAL CONSTRUCTION. FURTHERMORE, COMPONENTS IN THE HEAT DETECTION CIRCUIT WERE NOT QUALIFIED.

SCRAM 01/28/93 LER# 30593001 50.72#: 24961 PWR HIST: POWER OPERATIONS AT 100%
DESC : A REACTOR TRIP OCCURRED DUE TO AN ELECTRICAL DISTURBANCE ON THE NONVITAL BUSES CAUSED BY A LARGE FAULT ON A FEEDWATER PUMP MOTOR.

SCRAM 01/29/93 LER# 30593001 50.72#: 24976 PWR HIST: STARTUP MODE AT 5%
DESC : A REACTOR TRIP OCCURRED ON LOW S/G LEVEL WHEN A STEAM DUMP VALVE MALFUNCTIONED IN CONJUNCTION WITH MANUAL S/G LEVEL CONTROL.

TABLE 8.47 (CONT.)

KEWAUNEE

SSF 03/22/93 LER# 30593005 50.72#:
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : REACTOR TRIP INSTRUMENTATION
SYSTEM : PLANT PROTECTION SYSTEM
DESC : THE PZR HIGH PRESSURE SCRAM INPUT WAS FOUND OUT OF TOLERANCE DUE TO SETPOINT DRIFT. THE SUSPECTED CAUSE IS AGING OF THE TRANSMITTERS.

SSF 03/22/93 LER# 30593006 50.72#:
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : LOW TEMPERATURE/OVERPRESSURE PROTECTION GROUP
SYSTEM : LOW TEMP/OVERPRESSURE PROTECTION SYSTEM
DESC : THE LOW TEMPERATURE OVERPRESSURE PROTECTION SYSTEM WAS DECLARED INOPERABLE WHEN AN ENGINEERING REVIEW IDENTIFIED NONCONSERVATIVE SYSTEM SETPOINTS.

TABLE 8.48

LASALLE 1

SSA 12/01/92 LER# 37392015 50.72#: 24678 PWR HIST: REFUELING
DESC : THE DIVISION I EMERGENCY DIESEL AUTO-STARTED AND LOADED ONTO THE EMERGENCY BUS WHEN THE NORMAL FEED BREAKER WAS INADVERTENTLY OPENED DURING TESTING.

SSA 01/05/93 LER# 37393001 50.72#: 24833 PWR HIST: COLD SHUTDOWN
DESC : BOTH LPCI PUMPS STARTED ON A FALSE LOW REACTOR VESSEL LEVEL SIGNAL WHEN A TECHNICIAN VALVED IN A PRESSURE GAUGE DURING TESTING.

SSF 01/29/93 LER# 37393003 50.72#: 24971
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 20% POWER.
GROUP : REACTOR CORE ISOLATION COOLING SYSTEMS GROUP
SYSTEM : REACTOR CORE ISOLATION COOLING SYSTEM
DESC : THE RCIC SYSTEM WAS DECLARED INOPERABLE DURING A SURVEILLANCE TEST WHEN THE RCIC BAROMETRIC CONDENSER CONDENSATE PUMP FAILED.

SSF 02/10/93 LER# 37393004 50.72#: 25054
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 85% POWER.
GROUP : REACTOR CORE ISOLATION COOLING SYSTEMS GROUP
SYSTEM : REACTOR CORE ISOLATION COOLING SYSTEM
DESC : THE REACTOR CORE ISOLATION COOLING SYSTEM WAS DECLARED INOPERABLE WHEN THE SYSTEM'S INBOARD ISOLATION VALVE FAILED DUE TO ITS SUPPLY CIRCUIT BREAKER TRIPPING ON OVERLOAD.

SSF 02/26/93 LER# 37393007 50.72#:
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : REACTOR CORE ISOLATION COOLING SYSTEMS GROUP
SYSTEM : REACTOR CORE ISOLATION COOLING SYSTEM
DESC : THE RCIC SYSTEM WAS DECLARED INOPERABLE DUE TO A BROKEN SPRING RETAINER PIN ON THE INBOARD ISOLATION VALVE.

SSF 04/14/93 LER# 37393010 50.72#: 25392
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 90% POWER.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : HIGH PRESSURE CORE SPRAY SYSTEM
DESC : THE HPCS SYSTEM WAS DECLARED INOPERABLE DUE TO A COOLING WATER PUMP BREAKER TRIP. THE BREAKER TRIP WAS CAUSED BY PERSONNEL ERROR DURING THE PERFORMANCE OF A SURVEILLANCE TEST.

SSF 07/02/93 LER# 37393012 50.72#: 25734
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : REACTOR CORE ISOLATION COOLING SYSTEMS GROUP
SYSTEM : REACTOR CORE ISOLATION COOLING SYSTEM
DESC : THE RCIC SYSTEM WAS DECLARED INOPERABLE AFTER ITS 250 VDC POWER SUPPLY WAS INTERRUPTED, AS A RESULT OF A FAILED CHARGER TIMER.

TABLE 8.48 (CONT.)

LASALLE 1

SSF 08/02/93 LER# 37493005 50.72#:
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : EMERGENCY ONSITE POWER SUPPLY SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : WITH ONE EDG REMOVED FROM SERVICE FOR MAINTENANCE, THE OTHER EDG BECAME INOPERABLE WHEN ITS STARTING AIR RECEIVER PRESSURE BECAME LOW.

SCRAM 09/14/93 LER# 37393015 50.72#: 26060 PWR HIST: POWER OPERATIONS AT 100%
DESC : A REACTOR SCRAM OCCURRED AS A RESULT OF A LOW RPV WATER LEVEL CONDITION THAT RESULTED FROM A GROUND ON A 4160 VAC BUS WHICH CAUSED THE FEEDWATER CONTROL SYSTEM TO LOCK UP.

SSA 09/14/93 LER# 37393015 50.72#: 26060 PWR HIST: EVENT OCCURRED DURING OPERATION AT 100% POWER
DESC : THE EMERGENCY DIESEL GENERATORS AUTO-STARTED AND LOADED THEIR RESPECTIVE VITAL BUSES FOLLOWING A LOSS OF THE UNITS 4160 VAC POWER.

SSA 09/14/93 LER# 37393015 50.72#: 26060 PWR HIST: HOT SHUTDOWN FOLLOWING SCRAM FROM 100% POWER
DESC : THE RCIC AND LPCS SYSTEMS WERE UTILIZED, FOLLOWING THE LOSS OF SITE 4160 POWER, TO CONTROL REACTOR VESSEL LEVEL AND PRESSURE DURING THE SUBSEQUENT PLANT COOLDOWN.

SSF 09/14/93 LER# 37393015 50.72#: 26060
PWR HIST: EVENT OCCURRED FOLLOWING A SCRAM FROM 100% AND A LOSS OF SITE 4160 VAC POWER
GROUP : RESIDUAL HEAT REMOVAL SYSTEMS GROUP
SYSTEM : RESIDUAL HEAT REMOVAL SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : THE SHUTDOWN COOLING SUCTION SUPPLY VALVES FROM THE RCS COULD NOT BE OPENED BECAUSE OF A LOSS OF POWER. SITE 4160 VAC POWER HAD BEEN LOST, AND THE MG SET FOR THE RPS BUS WHICH POWERS THE VALVES FAILED.

TABLE 8.49

LASALLE 2

SCRAM 11/16/92 LER# 37492016 50.72#: 24613 PWR HIST: POWER OPERATIONS AT 100%
DESC : A REACTOR SCRAM OCCURRED DUE TO A TURBINE TRIP. THE TURBINE TRIP RESULTED FROM A FEEDWATER TRANSIENT WHEN INSTRUMENT AIR WAS LOST.

SSF 02/22/93 LER# 37493001 50.72#: 25119
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 96% POWER.
GROUP : REACTOR CORE ISOLATION COOLING SYSTEMS GROUP
SYSTEM : REACTOR CORE ISOLATION COOLING SYSTEM
DESC : THE RCIC SYSTEM WAS DECLARED INOPERABLE DUE TO A RUPTURED DIAPHRAGM IN THE STEAM FLOW DIFFERENTIAL PRESSURE TRANSMITTER. THE OUTBOARD ISOLATION CAPABILITY WAS LOST.

SSF 02/23/93 LER# 37493002 50.72#: 25125
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : REACTOR CORE ISOLATION COOLING SYSTEMS GROUP
SYSTEM : REACTOR CORE ISOLATION COOLING SYSTEM
DESC : THE RCIC SYSTEM WAS DECLARED INOPERABLE WHEN THE SYSTEM FAILED TO DELIVER THE REQUIRED FLOW RATE DURING A SURVEILLANCE TEST.

SSA 05/24/93 LER# 37493003 50.72#: 25559 PWR HIST: POWER OPERATIONS AT 100%
DESC : LOW PRESSURE CORE SPRAY AND LOW PRESSURE COOLANT INJECTION SYSTEMS AUTO-STARTED FROM AN INVALID SIGNAL DURING THE PERFORMANCE OF AN RPV WATER LEVEL FUNCTIONAL TEST. NO INJECTION INTO THE REACTOR OCCURRED.

SSF 08/02/93 LER# 37493005 50.72#:
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : EMERGENCY ONSITE POWER SUPPLY SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : WITH ONE EDG REMOVED FROM SERVICE FOR MAINTENANCE, THE OTHER EDG BECAME INOPERABLE WHEN ITS STARTING AIR RECEIVER PRESSURE BECAME LOW.

TABLE 8.49 (CONT.)

LASALLE 2

SSF 08/18/93 LER# 37493006 50.72#: 25942
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 87% POWER.
GROUP : REACTOR CORE ISOLATION COOLING SYSTEMS GROUP
SYSTEM : REACTOR CORE ISOLATION COOLING SYSTEM
DESC : THE RCIC SYSTEM WAS DECLARED INOPERABLE WHEN THE BREAKER FOR AN ASSOCIATED PUMP WHICH PROVIDES WATER FOR AREA COOLING TRIPPED. THE ROOT CAUSE OF THE BREAKER FAILURE COULD NOT BE IDENTIFIED.

SSF 09/14/93 LER# 37393015 50.72#: 26060
PWR HIST: EVENT OCCURRED AS A RESULT OF A LOSS OF SITE 4160 POWER.
GROUP : SPENT FUEL SYSTEMS GROUP
SYSTEM : FUEL POOL COOLING AND PURIFICATION SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : SPENT FUEL POOL COOLING WAS LOST FOR THREE AND ONE-HALF HOURS FOLLOWING A LOSS OF THE UNIT #1 STATION AUXILIARY TRANSFORMER.

TABLE 8.50

LIMERICK 1

SSF 02/17/93 LER# 35293003 50.72#:
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : CONTROL ROOM EMERGENCY VENTILATION SYSTEM GROUP
SYSTEM : CONTROL BUILDING/CONTROL COMPLEX ENVIRONMENTAL CONTROL SYSTEM
DESC : THE TOXIC GAS ANALYZERS FOR THE CONTROL ROOM HVAC SYSTEM WERE DECLARED INOPERABLE. THE ANALYZERS WOULD NOT RESPOND IN ADEQUATE TIME TO THE PRESENCE OF AMMONIA.

SCRAM 09/07/93 LER# 35293011 50.72#: 26031 PWR HIST: POWER OPERATIONS AT 100%
DESC : THE REACTOR SCRAMMED ON LOW VESSEL LEVEL FOLLOWING A PARTIAL LOSS OF OFFSITE POWER.

SSA 09/07/93 LER# 35293011 50.72#: 26031 PWR HIST: POWER OPERATIONS AT 100%
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : THE EDGS STARTED ON A PARTIAL LOSS OF OFFSITE POWER, BUT DID NOT LOAD BECAUSE THE SAFEGUARDS BUS SUCCESSFULLY FAST-TRANSFERRED.

TABLE 8.51

LIMERICK 2

SCRAM 01/03/93 LER# 35393001 50.72#: 24824 PWR HIST: POWER OPERATIONS AT 69%
DESC : THE REACTOR SCRAMMED ON HIGH PRESSURE WHEN THE TURBINE CONTROL AND BYPASS VALVES CYCLED BRIEFLY DURING AN EHC SYSTEM TRANSIENT.

SSA 02/13/93 LER# 35393003 50.72#: 25073 PWR HIST: REFUELING
DESC : A LOCA SIGNAL WAS INADVERTENTLY INITIATED DURING A SURVEILLANCE TEST. THE LOCA SIGNAL RESULTED IN A CORE SPRAY INJECTION TO THE RPV AND AN EDG START.

SSA 03/03/93 LER# 35393004 50.72#: 25174 PWR HIST: COLD SHUTDOWN
DESC : AN EMERGENCY DIESEL GENERATOR AUTO-STARTED AND LOADED ITS ASSOCIATED SAFETY BUS WHEN A TEST PROCEDURE STEP WAS PERFORMED OUT OF SEQUENCE.

SCRAM 03/26/93 LER# 35393005 50.72#: 25318 PWR HIST: POWER OPERATIONS AT 100%
DESC : A TURBINE TRIP AND SUBSEQUENT REACTOR SCRAM OCCURRED DURING TURBINE VALVE TESTING, DUE TO AIR BEING TRAPPED IN THE EHC SYSTEM.

SSA 03/26/93 LER# 35393005 50.72#: 25318 PWR HIST: POWER OPERATIONS AT 100%
DESC : THE HPCI SYSTEM AUTO-STARTED ON A FALSE LOW RPV WATER LEVEL SIGNAL BECAUSE OF INSTRUMENT SPIKING. THE SPIKING WAS CAUSED BY A TURBINE TRIP AND SUBSEQUENT REACTOR SCRAM.

SSF 07/16/93 LER# 35393009 50.72#: 25792
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : HIGH PRESSURE COOLANT INJECTION SYSTEM
DESC : THE HIGH PRESSURE COOLANT INJECTION SYSTEM WAS DECLARED INOPERABLE WHEN THE OUTBOARD ISOLATION VALVE CLOSED AS A RESULT OF A FAILED PRESSURE TRANSMITTER IN THE ISOLATION CIRCUIT.

TABLE 8.51 (CONT.)

LIMERICK 2

SSA 09/07/93 LER# 35293011 50.72#: 26032 PWR HIST: POWER OPERATIONS AT 100%
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : THE EDGS STARTED BUT DID NOT LOAD ON A MOMENTARY LOSS OF POWER TO THE SAFEGUARDS BUS CAUSED BY A PARTIAL LOSS OF OFFSITE POWER.

TABLE 8.52

MAINE YANKEE

SSF 12/02/92 LER# 30992012 50.72#:
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : MULTIPLE SYSTEMS GROUP
SYSTEM : MULTIPLE SYSTEMS
DESC : DUE TO PROCEDURAL PROBLEMS, BOTH TRAINS OF LOW PRESSURE SAFETY INJECTION AND CONTAINMENT SPRAY WERE SIMULTANEOUSLY INOPERABLE DURING SURVEILLANCE TESTING OF THE MINIMUM FLOW RECIRCULATION VALVES.

SSF 04/08/93 LER# 30993010 50.72#:
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : MULTIPLE SYSTEMS GROUP
SYSTEM : MULTIPLE SYSTEMS
DESC : A PROCEDURAL PROBLEM ASSOCIATED WITH THE SURVEILLANCE TESTING OF THE SPRAY BUILDING EXHAUST VENTILATION FILTERS INADVERTENTLY RENDERS BOTH TRAINS OF THE LPSI AND CONTAINMENT SPRAY SYSTEMS INOPERABLE.

SSF 08/04/93 LER# 30993016 50.72#: 25878
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : MULTIPLE SYSTEMS GROUP
SYSTEM : MULTIPLE SYSTEMS
DESC : A PROBLEM WITH A BREAKER TRIP DEVICE INSTALLED ON ALL AK-25 BREAKERS COULD CAUSE SAFETY RELATED LOADS TO SPURIOUSLY TRIP AND DEENERGIZE DURING A LOCA.

TABLE 8.53

MCGUIRE 1

SSF 05/13/93 LER# 36993004 50.72#:
PWR HIST: EVENT DISCOVERED DURING REFUELING.
GROUP : CONTROL ROOM EMERGENCY VENTILATION SYSTEM GROUP
SYSTEM : CONTROL BUILDING/CONTROL COMPLEX ENVIRONMENTAL CONTROL SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : WITH ONE CONTROL ROOM VENTILATION TRAIN INOPERABLE FOR MAINTENANCE, EQUIPMENT FAILURE (CHILLER MOTOR TEMPERATURE SENSOR CONTACT) RENDERED THE OTHER TRAIN INOPERABLE.

SSF 05/26/93 LER# 36993006 50.72#:
PWR HIST: EVENT DISCOVERED IN COLD SHUTDOWN.
GROUP : CONTROL ROOM EMERGENCY VENTILATION SYSTEM GROUP
SYSTEM : CONTROL BUILDING/CONTROL COMPLEX ENVIRONMENTAL CONTROL SYSTEM
DESC : AUTOMATIC ISOLATION CAPABILITY FOR THE CONTROL ROOM AIR INTAKE WAS LOST DURING TESTING DUE TO AN INADEQUATE PROCEDURE.

TABLE 8.54

MCGUIRE 2

SSA 03/22/93 LER# 37093003 50.72#: 25294 PWR HIST: POWER OPERATIONS AT 100%
DESC : THE ECCS CHARGING PUMP WAS STARTED DUE TO A LOSS OF PRIMARY SYSTEM INVENTORY CAUSED BY A RUPTURED ONE-HALF INCH COMPRESSION FITTING.

TABLE 8.54 (CONT.)

MCGUIRE 2

SSF 05/13/93 LER# 36993004 50.72#:
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : CONTROL ROOM EMERGENCY VENTILATION SYSTEM GROUP
SYSTEM : CONTROL BUILDING/CONTROL COMPLEX ENVIRONMENTAL CONTROL SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : WITH ONE CONTROL ROOM VENTILATION TRAIN INOPERABLE FOR MAINTENANCE, EQUIPMENT FAILURE (CHILLER MOTOR TEMPERATURE SENSOR CONTACT) RENDERED THE OTHER TRAIN INOPERABLE.

TABLE 8.55

MILLSTONE 1

SSF 10/02/92 LER# 24592026 50.72#:
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : ESSENTIAL SERVICE WATER SYSTEM GROUP
SYSTEM : ESSENTIAL SERVICE WATER SYSTEM
DESC : OPERABILITY OF THE EMERGENCY SERVICE WATER SYSTEM COULD NOT BE ASSURED FOLLOWING A SEISMIC EVENT DUE TO EXTERNAL CORROSION AND SUBSEQUENT PIPING WALL DEGRADATION.

SCRAM 12/03/92 LER# 24592028 50.72#: 24693 PWR HIST: POWER OPERATIONS AT 100%
DESC : THE REACTOR SCRAMMED WHEN A MAIN STEAM ISOLATION VALVE WAS INADVERTENTLY CLOSED DURING AN ISOLATION CONDENSER TEST.

SSF 03/14/93 LER# 24593002 50.72#: 25257
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : REACTOR BUILDING
DESC : A SECONDARY CONTAINMENT BREACH OCCURRED WHEN A REACTOR BUILDING RELIEF VENTILATOR OPENED, DUE TO TWO REDUNDANT REACTOR BUILDING SUPPLY FANS OPERATING IN COMBINATION WITH SEVERE WINDS.

SSF 06/23/93 LER# 24593007 50.72#:
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE 1981.
GROUP : COMPONENT COOLING WATER SYSTEM GROUP
SYSTEM : CLOSED/COMPONENT COOLING WATER SYSTEM
DESC : A PORTION OF THE TURBINE BUILDING SECONDARY CLOSED COOLING WATER SYSTEM WAS NOT SEISMICALLY QUALIFIED. FAILURE OF THIS PIPING COULD CAUSE INOPERABILITY OF EDGS AND FEEDWATER COOLANT INJECTION PUMPS.

SSF 07/06/93 LER# 24593009 50.72#: 25745
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : LOW PRESSURE COOLANT INJECTION SYSTEM
DESC : THE LPCI SYSTEM BECAME INOPERABLE WHEN ITS OUTBOARD CONTAINMENT ISOLATION VALVE FAILED TO OPEN DURING A SURVEILLANCE.

SSF 09/23/93 LER# 24593014 50.72#: 26115
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : CONTROL ROOM EMERGENCY VENTILATION SYSTEM GROUP
SYSTEM : CONTROL BUILDING/CONTROL COMPLEX ENVIRONMENTAL CONTROL SYSTEM
DESC : OPEN TEST LINES IN THE SBGT SYSTEM COULD ALLOW RADIOACTIVE GASES TO ESCAPE INTO THE VENTILATION ROOM AND SUBSEQUENTLY INTO THE CONTROL ROOM, MAKING IT UNINHABITABLE.

TABLE 8.56

MILLSTONE 2

SSF 02/17/93 LER# 33693003 50.72#:
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : HIGH PRESSURE SAFETY INJECTION SYSTEM
DESC : HPSI WAS IN A DEGRADED CONDITION FOR APPROXIMATELY THREE AND ONE-HALF HOURS DUE TO A MISPOSITIONED VALVE. THE SYSTEM COULD ONLY HAVE PROVIDED APPROXIMATELY 95% OF REQUIRED FLOW.

TABLE 8.56 (CONT.)

MILLSTONE 2

SCRAM 02/22/93 LER# 33693004 50.72#: 25118 PWR HIST: POWER OPERATIONS AT 100%
DESC : THE REACTOR TRIPPED ON LOW S/G WATER LEVEL FOLLOWING A LOW SUCTION PRESSURE TRIP OF THE FEEDWATER PUMP. THIS WAS CAUSED BY AN ADV FAILING OPEN ON A STEAM GENERATOR.

SCRAM 02/23/93 LER# 33693004 50.72#: 25126 PWR HIST: POWER OPERATIONS AT 14%
DESC : THE REACTOR TRIPPED ON LOW S/G WATER LEVEL FOLLOWING A MANUAL TURBINE TRIP. THE TURBINE TRIP WAS INITIATED BECAUSE OF HIGH TURBINE VIBRATION OBSERVED DURING THE STARTUP.

SSF 03/29/93 LER# 33693007 50.72#: 25328
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : EMERGENCY ONSITE POWER SUPPLY SYSTEM
DESC : OPERATING AND SURVEILLANCE PROCEDURES REQUIRED THAT THE EDGS BE PARALLELED WITH THE GRID EACH TIME THEY WERE STARTED. THE EDGS COULD FAIL DUE TO FAULTS ON THE GRID. THE LICENSEE FAILED TO RECOGNIZE THIS WHEN IMPLEMENTING THE VENDOR RECOMMENDATION.

SSF 05/05/93 LER# 33693008 50.72#:
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : HIGH PRESSURE SAFETY INJECTION SYSTEM
DESC : ALL THREE CHARGING PUMPS COULD FAIL TO START DURING A DEGRADED VOLTAGE CONDITION DUE TO INSUFFICIENT CONTROL POWER TO THE ELECTRICAL STARTERS.

SCRAM 05/24/93 LER# 33693012 50.72#: 25560 PWR HIST: POWER OPERATIONS AT 100%
DESC : A REACTOR SCRAM OCCURRED DUE TO A TURBINE TRIP. THE TURBINE TRIP WAS CAUSED BY ELEVATED STATOR WATER TEMPERATURE FROM A MAINTENANCE EVOLUTION.

SCRAM 06/03/93 LER# 33693013 50.72#: 25605 PWR HIST: POWER OPERATIONS AT 100%
DESC : A HIGH PRESSURE REACTOR TRIP OCCURRED WHEN THE TURBINE CONTROL VALVES STARTED TO SHUT FOR UNKNOWN REASONS. THE SUSPECTED CAUSE IS VIBRATION OR EMF INDUCTION WHICH OCCURRED WHEN EHC CABINET DOORS WERE REPOSITIONED.

SE 08/05/93 LER# 33693018 50.72#: 25886
PWR HIST: EVENT OCCURRED WHILE OPERATING AT 100% POWER.
DESC : DURING LEAK SEALANT INJECTION TO STOP MINOR BODY TO BONNET LEAKAGE FROM A LETDOWN MANUAL ISOLATION VALVE (UNISOLABLE FROM RCS), THE LEAKAGE SUDDENLY INCREASED TO ABOUT 4.3 GPM. TS LIMIT IS 1.0 GPM.

SCRAM 08/12/93 LER# 33693019 50.72#: 25909 PWR HIST: STARTUP MODE AT 1%
DESC : THE REACTOR TRIPPED ON LOW STEAM GENERATOR LEVEL DURING STARTUP WHEN FEED FLOWS WERE NOT ADJUSTED FOR INCREASING POWER.

SSF 09/03/93 LER# 33693022 50.72#: 26023
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : AUXILIARY/EMERGENCY FEEDWATER SYSTEMS GROUP
SYSTEM : AUXILIARY/EMERGENCY FEEDWATER SYSTEM
DESC : A DESIGN ERROR DURING CONSTRUCTION RESULTED IN AN AFW SUCTION HEADER BRANCH LINE NOT BEING SEISMICALLY QUALIFIED. THIS COULD HAVE RESULTED IN A LOSS OF SUCTION HEADER AND INVENTORY TO THE AFW SYSTEM.

SSF 09/13/93 LER# 33693015 50.72#: 260[illegible]
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO [illegible] POWER SINCE INITIAL OPERATION
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : REACTOR CONTAINMENT BUILDING
DESC : MOTOR OPERATED VALVES EQUIPPED WITH MOTOR BRAKES MAY FAIL UNDER DEGRADED VOLTAGE CONDITIONS. THE FEED PUMP DISCHARGE VALVES AND FRV BLOCK VALVES, WHICH ARE REQUIRED IN A MAIN STEAM LINE BREAK ACCIDENT, WERE DECLARED INOPERABLE.

SSF 09/18/93 LER# 33693015 50.72#: 26088
PWR HIST: EVENT DISCOVERED IN HOT SHUTDOWN.
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : REACTOR CONTAINMENT BUILDING
DESC : THE THRUST SETTING ON FEEDWATER ISOLATION VALVES WAS TOO HIGH. THIS COULD RESULT IN STEM NUT FAILURE PRIOR TO THE VALVES BEING FULLY CLOSED DURING AN ACCIDENT.

TABLE 8.57

MILLSTONE 3

SCRAM 11/05/92 LER# 42392027 50.72#: 24559 PWR HIST: POWER OPERATIONS AT 16%
DESC : A SCRAM OCCURRED WHEN THE MAIN GENERATOR OUTPUT BREAKER TRIPPED CAUSING A LOSS OF POWER TO RPS MG SETS. A SPURIOUS ELECTRICAL FAULT PROTECTION SIGNAL IN THE ZONE BETWEEN THE GENERATOR AND SWITCHYARD WAS THE CAUSE.

SCRAM 11/20/92 LER# 42392029 50.72#: 24631 PWR HIST: POWER OPERATIONS AT 100%
DESC : THE UNIT SCRAMMED ON LOW S/G WATER LEVEL FOLLOWING A TURBINE RUNBACK. A TURBINE INSTRUMENTATION LOW VOLTAGE CONDITION WAS THE CAUSE. HOWEVER, THE CONDITION COULD NOT BE REPRODUCED.

SSF 02/07/93 LER# 42393002 50.72#:
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : CONTROL ROOM EMERGENCY VENTILATION SYSTEM GROUP
SYSTEM : CONTROL BUILDING/CONTROL COMPLEX ENVIRONMENTAL CONTROL SYSTEM
DESC : BOTH TRAINS OF CONTROL ROOM PRESSURIZING SYSTEM WERE INOPERABLE DUE TO A POTENTIAL COMMON MODE FAILURE. THE CONTROL AIR SYSTEM DEW POINT WAS TOO HIGH, RESULTING IN A FROZEN VALVE ON ONE TRAIN. THIS COULD HAVE RENDERED BOTH TRAINS INOPERABLE.

SCRAM 03/31/93 LER# 42393004 50.72#: 25332 PWR HIST: POWER OPERATIONS AT 100%
DESC : A REACTOR TRIP OCCURRED WHEN THE MAIN TURBINE TRIPPED DUE TO A FAILED POWER SUPPLY IN THE ELECTROHYDRAULIC CONTROL SYSTEM.

SSF 06/11/93 LER# 42393007 50.72#: 25637
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : EMERGENCY ONSITE POWER SUPPLY SYSTEM
DESC : THE EDG FUEL OIL STORAGE TANK CAPACITY WAS LESS THAN REQUIRED FOR THE DESIGN BASIS. THE ORIGINAL DESIGN CALCULATION USED THE GROSS TANK VOLUME VICE THE USABLE VOLUME. OTHER NONCONSERVATIVE ASSUMPTIONS WERE ALSO IDENTIFIED.

SSF 06/17/93 LER# 42393009 50.72#:
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : CONTAINMENT LEAKAGE CONTROL SYSTEM
DESC : THE CONTAINMENT LEAKAGE CONTROL SYSTEM MAY HAVE BEEN INOPERABLE IN PAST COLD WEATHER PERIODS. THE TECH SPEC ACCEPTANCE CRITERIA WAS NOT CORRECTED FOR TEMPERATURE INDUCED PRESSURE GRADIENTS WITHIN THE ENCLOSURE BUILDING.

SSF 09/01/93 LER# 42393013 50.72#:
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : REACTOR TRIP INSTRUMENTATION
SYSTEM : PLANT PROTECTION SYSTEM
DESC : THE P-10 BISTABLE RESET POINT WAS MISCALIBRATED AND RESULTED IN THE LATE ACTIVATION OF THE INTERMEDIATE RANGE REACTOR TRIP AND POWER RANGE HIGH FLUX LOW SETPOINT REACTOR TRIP ON DECREASING POWER.

TABLE 8.58

MONTICELLO

SSF 10/21/92 LER# 26392015 50.72#: 24477
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : CONTROL ROOM EMERGENCY VENTILATION SYSTEM GROUP
SYSTEM : CONTROL BUILDING/CONTROL COMPLEX ENVIRONMENTAL CONTROL SYSTEM
DESC : CONTROL ROOM RADIATION MONITORS DID NOT MEET CABLE SEPARATION CRITERIA, RENDERING THE CONTROL ROOM AUTOMATIC HIGH RADIATION ISOLATION FUNCTION INOPERABLE DURING CERTAIN ACCIDENT CONDITIONS.

SSF 11/13/92 LER# 26392018 50.72#: 24599
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : REACTOR TRIP INSTRUMENTATION
SYSTEM : PLANT PROTECTION SYSTEM
DESC : THE APRM SCRAM SETPOINT WAS SET SUCH THAT A SCRAM COULD OCCUR OUTSIDE ANALYZED CONDITIONS.

TABLE 8.58 (CONT.)

MONTICELLO

SSF 01/29/93 LER# 26393001 50.72#: 24978
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : EMERGENCY/STANDBY GAS TREATMENT SYSTEM
DESC : A POTENTIAL SINGLE FAILURE OF THE THERMOSTAT CONTACTS IN THE SBGT SYSTEM COULD RESULT IN INCREASED ROOM TEMPERATURES AND POSSIBLY EXCEEDING EQUIPMENT DESIGN TEMPERATURES.

SSF 03/15/93 LER# 26390001 50.72#:
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : CONTROL ROOM EMERGENCY VENTILATION SYSTEM GROUP
SYSTEM : CONTROL BUILDING/CONTROL COMPLEX ENVIRONMENTAL CONTROL SYSTEM
DESC : DESIGN ERRORS IN THE CONTROL ROOM EMERGENCY VENTILATION SYSTEM COULD PREVENT THE SYSTEM FROM ADEQUATELY PRESSURIZING THE CONTROL ROOM DURING CERTAIN SYSTEM LINEUPS.

SSF 03/17/93 LER# 26389040 50.72#:
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : EMERGENCY/STANDBY GAS TREATMENT SYSTEM
DESC : A DESIGN DEFICIENCY WAS FOUND CONCERNING A SINGLE FAILURE IN THE MAIN STACK FAN DAMPER CONTROLS THAT COULD PREVENT THE STANDBY GAS TREATMENT SYSTEM FROM ACHIEVING RATED FLOW.

SCRAM 03/23/93 LER# 26393006 50.72#: 25291 PWR HIST: POWER OPERATIONS AT 10%
DESC : THE REACTOR SCRAMMED DUE TO HIGH RPV PRESSURE DURING A TURBINE STOP AND CONTROL VALVE TIGHTNESS TEST.

SCRAM 07/31/93 LER# 26393008 50.72#: 25863 PWR HIST: POWER OPERATIONS AT 100%
DESC : AN AUTOMATIC REACTOR SCRAM OCCURRED ON LOW REACTOR VESSEL WATER LEVEL. THE CAUSE WAS A LOSS OF REACTOR FEEDWATER AFTER A CONDENSATE PUMP TRIPPED ON A MOTOR GROUND FAULT.

TABLE 8.59

NINE MILE PT. 1

SCRAM 01/26/93 LER# 22093002 50.72#: 24944 PWR HIST: POWER OPERATIONS AT 100%
DESC : THE REACTOR SCRAMMED ON HIGH NEUTRON FLUX DURING A MONTHLY CALIBRATION TEST OF THE APRMS. THE HIGH FLUX SIGNAL WAS CAUSED BY A TECHNICIAN NOT FOLLOWING THE SURVEILLANCE TEST PROCEDURE.

SCRAM 04/13/93 LER# 22093006 50.72#: 25390 PWR HIST: STARTUP MODE AT 0%
DESC : A REACTOR SCRAM OCCURRED DUE TO A SPURIOUS UPSCALE IRM TRIP. THE SPURIOUS TRIP WAS CAUSED BY NOISE IN A CONTROLLER USED TO BYPASS THE IRM.

SSA 08/31/93 LER# 22093007 50.72#: 25999 PWR HIST: POWER OPERATIONS AT 97%
DESC : TWO EDGS STARTED AND LOADED WHEN OFFSITE POWER WAS MOMENTARILY LOST DUE TO A LIGHTNING STRIKE.

TABLE 8.60

NINE MILE PT. 2

SCRAM 11/04/92 LER# 41092022 50.72#: 24551 PWR HIST: POWER OPERATIONS AT 100%
DESC : A RELAY FAILURE IN THE RPS SYSTEM CAUSED 25% OF THE RODS TO DROP. THE RESULTING REACTOR PRESSURE VESSEL LEVEL SHRINK CAUSED A FULL SCRAM ON LOW LEVEL.

SSA 11/15/92 LER# 41092023 50.72#: 24612 PWR HIST: POWER OPERATIONS AT 100%
DESC : DIVISION I AND III EDGS AUTO-STARTED WHEN AN OFFSITE POWER FEEDER BREAKER OPENED DUE TO A FAILURE OF ITS HYDRAULIC OIL PUMP.

SSF 12/04/92 LER# 41092024 50.72#: 24700
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : REACTOR CORE ISOLATION COOLING SYSTEMS GROUP
SYSTEM : REACTOR CORE ISOLATION COOLING SYSTEM
DESC : THE REACTOR CORE ISOLATION COOLING SYSTEM ISOLATED DUE TO A FAILED TEMPERATURE SWITCH.

TABLE 8.60 (CONT.)

NINE MILE PT. 2

SSA 01/05/93 LER# 41093001 50.72#: 24834 PWR HIST: POWER OPERATIONS AT 100%
DESC : DIVISION II EMERGENCY DIESEL GENERATOR AUTO-STARTED AND LOADED DUE TO A LOSS OF POWER TO THE DIVISION II EMERGENCY BUS WHEN THE NORMAL SUPPLY BREAKER TRIPPED. A SPURIOUS BREAKER TRIP SIGNAL WAS GENERATED BY A FAULTY CONNECTION IN THE TRIP CIRCUITRY.

SSA 08/17/93 LER# 41093001 50.72#: 25936 PWR HIST: POWER OPERATIONS AT 100%
DESC : A LOSS OF POWER TO AN EMERGENCY BUS OCCURRED DURING A SURVEILLANCE TEST. THE EDG DID NOT START, HOWEVER, SINCE IT WAS OUT OF SERVICE FOR PREPLANNED MAINTENANCE.

SSF 09/16/93 LER# 41093006 50.72#: 26072
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : EMERGENCY/STANDBY GAS TREATMENT SYSTEM
DESC : LOW CHARCOAL LEVELS WERE FOUND IN BOTH DIVISIONS OF THE STANDBY GAS TREATMENT SYSTEM. THE SYSTEM BYPASS LEAKAGE WAS ABOVE ACCEPTABLE LEVELS.

TABLE 8.61

NORTH ANNA 1

SSF 01/17/93 LER# 33893001 50.72#: 24901
PWR HIST: EVENT DISCOVERED DURING REFUELING.
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : REACTOR CONTAINMENT BUILDING
DESC : A BREACH OF CONTAINMENT INTEGRITY DURING CORE ALTERATIONS WAS DISCOVERED WHEN AN EQUALIZATION VALVE FOR AN ESCAPE HATCH WAS FOUND OPEN.

SSF 02/15/93 LER# 33893004 50.72#:
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : CONTAINMENT ISOLATION CONTROL SYSTEM
DESC : CONTAINMENT GASEOUS AND PARTICULATE RADIATION MONITORS WERE INOPERABLE, RENDERING THE CONTAINMENT PURGE AND EXHAUST ISOLATION SYSTEM INOPERABLE, BECAUSE NO CONTAINMENT AIR RECIRCULATING FANS WERE OPERATING.

SSA 02/19/93 LER# 33893005 50.72#: 25105 PWR HIST: REFUELING
DESC : AN EMERGENCY BUS WAS UNEXPECTEDLY DEENERGIZED WHEN ITS FEEDER BREAKERS OPENED DUE TO THE FAILURE OF TWO DEGRADED VOLTAGE AUXILIARY RELAYS. THE ASSOCIATED EDG WAS IN MANUAL FOR TESTING AND DID NOT START.

SSF 03/08/93 LER# 33893007 50.72#: 25210
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE 3/92.
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : REACTOR CONTAINMENT BUILDING
DESC : A MODIFICATION TO THE CONTAINMENT EQUIPMENT HATCH WORK PLATFORM DID NOT INCLUDE DESIGN BASIS TORNADO LOADS IN THE ANALYSIS. THE CAUSE WAS AN INADEQUATE REVIEW OF THE ORIGINAL DESIGN CALCULATIONS.

TABLE 8.62

NORTH ANNA 2

SCRAM 04/16/93 LER# 33993002 50.72#: 25403 PWR HIST: POWER OPERATIONS AT 100%
DESC : A REACTOR SCRAM OCCURRED DUE TO A TURBINE TRIP CAUSED BY A FAILED VOLTAGE REGULATOR IN THE MAIN GENERATOR EXCITER.

SSF 04/16/93 LER# 33993002 50.72#: 25403
PWR HIST: EVENT DISCOVERED IN HOT STANDBY.
GROUP : AUXILIARY/EMERGENCY FEEDWATER SYSTEMS GROUP
SYSTEM : AUXILIARY/EMERGENCY FEEDWATER SYSTEM
DESC : FOLLOWING A REACTOR TRIP, THE AFW PUMPS WERE SECURED BEFORE S/G LEVELS WERE RESTORED ABOVE THE AFW PUMP AUTOMATIC START SETPOINT, RENDERING THEIR AUTOMATIC START CAPABILITY INOPERABLE.

TABLE 8.62 (CONT.)

NORTH ANNA 2

SSF 09/02/93 LER# 33993004 50.72#: 26012
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : REACTOR TRIP INSTRUMENTATION
SYSTEM : PLANT PROTECTION SYSTEM
DESC : CABLE SEPARATION CRITERIA WERE NOT MET FOR REACTOR COOLANT PUMP UNDERFREQUENCY RELAY INPUTS TO THE REACTOR PROTECTION SYSTEM.

TABLE 8.63

OCONEE 1

SCRAM 10/03/92 LER# 26992015 50.72#: 24375 PWR HIST: STARTUP MODE AT 7%
DESC : WHILE VALVING-IN AN ISOLATED MFW PUMP, AN ANTICIPATORY REACTOR TRIP OCCURRED DUE TO A PRESSURE SWING ON THE OPERATING MFW PUMP.

SSF 10/12/92 LER# 26992016 50.72#: 24410
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : EMERGENCY ONSITE POWER SUPPLY SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1, 2 AND 3.
DESC : A SINGLE FAILURE COULD RESULT IN THE LOSS OF BOTH EMERGENCY POWER PATHS FROM THE KEOWEE EMERGENCY POWER UNITS.

SSF 10/19/92 LER# 27092004 50.72#: 24455
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : EMERGENCY ONSITE POWER SUPPLY SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1, 2 AND 3.
DESC : BOTH KEOWEE HYDRO UNITS WERE UNABLE TO AUTOMATICALLY SUPPLY EMERGENCY POWER FOR APPROXIMATELY 31 SECONDS DUE TO UNEXPECTED SYSTEM INTERACTION AND INADEQUATE CIRCUIT DESIGN.

SSF 11/18/92 LER# 26992017 50.72#: 24629
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : DC POWER SYSTEM - CLASS 1E
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1, 2 AND 3.
DESC : THE VITAL BATTERY RACKS FOR UNITS 2 AND 3 WERE NOT SEISMICALLY INSTALLED DUE TO ORIGINAL DESIGN/INSTALLATION DEFICIENCY. ALL THREE UNITS WERE AFFECTED DUE TO SHARED EQUIPMENT.

SSF 12/02/92 LER# 26992018 50.72#: 24687
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : EMERGENCY ONSITE POWER SUPPLY SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1, 2 AND 3.
DESC : DURING DEGRADED DC VOLTAGE CONDITIONS, BOTH EMERGENCY POWER SOURCES COULD BE RENDERED INOPERABLE DUE TO A FAILURE OF THEIR BREAKERS TO CLOSE.

SSF 12/10/92 LER# 26992019 50.72#: 24762
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : EMERGENCY ONSITE POWER SUPPLY SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1, 2 AND 3.
DESC : A SINGLE FAULT COULD RENDER THE UNDERGROUND AND OVERHEAD EMERGENCY POWER PATHS INOPERABLE DUE TO A DESIGN DEFICIENCY.

SSF 01/12/93 LER# 26993001 50.72#: 24866
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : MEDIUM-VOLTAGE POWER SYSTEM - CLASS 1E
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1, 2 AND 3.
DESC : THE KEOWEE EMERGENCY POWER SYSTEM THAT SUPPLIES ALL THREE UNITS SAFETY RELATED EQUIPMENT WAS SUBJECT TO FAILURE IN THE GOVERNOR CONTROL CIRCUITRY AT FULL LOAD.

TABLE 8.63 (CONT.)

OCONEE 1

SSF 04/08/93 LER# 26993004 50.72#: 25378
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : MULTIPLE SYSTEMS GROUP
SYSTEM : MULTIPLE SYSTEMS
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1, 2 AND 3.
DESC : A DESIGN DEFICIENCY IN THE LPSW SYSTEM MAY RESULT IN THE LPSI AND THE REACTOR BUILDING COOLING SYSTEMS BECOMING INOPERABLE DURING A DESIGN BASIS ACCIDENT.

SSF 05/04/93 LER# 26993005 50.72#:
PWR HIST: CONDITION EXISTED IN HOT SHUTDOWN AND OPERATION UP TO 100% POWER SINCE JANUARY 1993.
GROUP : PRIMARY REACTOR SYSTEMS GROUP
SYSTEM : CONTROL ROD DRIVE SYSTEM
DESC : TWO CONTROL RODS WERE DECLARED INOPERABLE UPON DETERMINING THAT PREVIOUS ROD DROP TIME TEST RESULTS WERE OUTSIDE THE TS REQUIREMENTS.

SSF 06/02/93 LER# 26993006 50.72#: 25601
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : REACTOR CONTAINMENT BUILDING
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1, 2 AND 3.
DESC : DESIGN REVIEW DETERMINED THAT CONTAINMENT DESIGN PRESSURE COULD BE EXCEEDED DURING A MAIN STEAM LINE BREAK INSIDE CONTAINMENT. FEEDWATER WILL NOT AUTOMATICALLY ISOLATE; OPERATOR ACTION IS REQUIRED WITHIN 170 SECONDS TO PREVENT EXCEEDING DESIGN PRESSURE.

SCRAM 08/23/93 LER# 26993008 50.72#: 25961 PWR HIST: POWER OPERATIONS AT 100%
DESC : AN ANTICIPATORY REACTOR TRIP OCCURRED UPON A LOSS OF MAIN TURBINE CONTROL VOLTAGE DURING TESTING OF THE VITAL I&C POWER SYSTEM.

TABLE 8.64

OCONEE 2

SSF 10/12/92 LER# 26992016 50.72#: 24410
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : EMERGENCY ONSITE POWER SUPPLY SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1, 2 AND 3.
DESC : A SINGLE FAILURE COULD RESULT IN THE LOSS OF BOTH EMERGENCY POWER PATHS FROM THE KEOWEE EMERGENCY POWER UNITS.

SCRAM 10/19/92 LER# 27092004 50.72#: 24455 PWR HIST: POWER OPERATIONS AT 100%
DESC : A RED AND YELLOW BUS LOCKOUT OCCURRED ON THE SWITCHYARD CAUSING BOTH GENERATOR BREAKERS TO TRIP. A REACTOR TRIP FOLLOWED.

SSA 10/19/92 LER# 27092004 50.72#: 24455 PWR HIST: HOT SHUTDOWN FOLLOWING SCRAM
DESC : A RED AND YELLOW BUS LOCKOUT OCCURRED ON THE SWITCHYARD CAUSING A LOSS OF OFFSITE POWER. THE KEOWEE HYDRO PLANT STARTED AND REENERGIZED THE PLANT BUSES.

SSA 10/19/92 LER# 27092004 50.72#: 24455 PWR HIST: HOT SHUTDOWN FOLLOWING SCRAM
DESC : HIGH PRESSURE INJECTION STARTED TO MAINTAIN PRESSURIZER LEVEL FOLLOWING A REACTOR TRIP.

SSF 10/19/92 LER# 27092004 50.72#: 24455
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : EMERGENCY ONSITE POWER SUPPLY SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1, 2 AND 3.
DESC : BOTH KEOWEE HYDRO UNITS WERE UNABLE TO AUTOMATICALLY SUPPLY EMERGENCY POWER FOR APPROXIMATELY 31 SECONDS DUE TO UNEXPECTED SYSTEM INTERACTION AND INADEQUATE CIRCUIT DESIGN.

SE 10/19/92 LER# 27092004 50.72#: 24455
PWR HIST: EVENT OCCURRED DURING OPERATION AT 100% POWER.
DESC : A PLANT TRIP AND LOSS OF OFFSITE POWER OCCURRED WITH COMPLICATIONS.

TABLE 8.64 (CONT.)

OCONEE 2

SSF 11/18/92 LER# 26992017 50.72#: 24629
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : DC POWER SYSTEM - CLASS 1E
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1, 2 AND 3.
DESC : THE VITAL BATTERY RACKS FOR UNITS 2 AND 3 WERE NOT SEISMICALLY INSTALLED DUE TO ORIGINAL DESIGN/INSTALLATION DEFICIENCY. ALL THREE UNITS WERE AFFECTED DUE TO SHARED EQUIPMENT.

SSF 12/02/92 LER# 26992018 50.72#: 24687
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : EMERGENCY ONSITE POWER SUPPLY SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1, 2 AND 3.
DESC : DURING DEGRADED DC VOLTAGE CONDITIONS, BOTH EMERGENCY POWER SOURCES COULD BE RENDERED INOPERABLE DUE TO A FAILURE OF THEIR BREAKERS TO CLOSE.

SSF 12/10/92 LER# 26992019 50.72#: 24762
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : EMERGENCY ONSITE POWER SUPPLY SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1, 2 AND 3.
DESC : A SINGLE FAULT COULD RENDER THE UNDERGROUND AND OVERHEAD EMERGENCY POWER PATHS INOPERABLE DUE TO A DESIGN DEFICIENCY.

SSF 01/12/93 LER# 26993001 50.72#: 24866
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : MEDIUM-VOLTAGE POWER SYSTEM - CLASS 1E
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1, 2 AND 3.
DESC : THE KEOWEE EMERGENCY POWER SYSTEM THAT SUPPLIES ALL THREE UNITS SAFETY RELATED EQUIPMENT WAS SUBJECT TO FAILURE IN THE GOVERNOR CONTROL CIRCUITRY AT FULL LOAD.

SSF 04/08/93 LER# 26993004 50.72#: 25378
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : MULTIPLE SYSTEMS GROUP
SYSTEM : MULTIPLE SYSTEMS
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1, 2 AND 3.
DESC : A DESIGN DEFICIENCY IN THE LPSW SYSTEM MAY RESULT IN THE LPSI AND THE REACTOR BUILDING COOLING SYSTEMS BECOMING INOPERABLE DURING A DESIGN BASIS ACCIDENT.

SSF 06/02/93 LER# 26993006 50.72#: 25601
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : REACTOR CONTAINMENT BUILDING
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1, 2 AND 3.
DESC : DESIGN REVIEW DETERMINED CONTAINMENT DESIGN PRESSURE COULD BE EXCEEDED DURING A MAIN STEAMLINE BREAK INSIDE CONTAINMENT. FEEDWATER WILL NOT AUTOMATICALLY ISOLATE; OPERATOR ACTION IS REQUIRED WITHIN 170 SECONDS TO PREVENT EXCEEDING THE DESIGN PRESSURE.

SSF 06/10/93 LER# 27093002 50.72#:
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : REACTOR CONTAINMENT BUILDING
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 2 AND 3.
DESC : CONTAINMENT INTEGRITY COULD BE LOST DURING A POSTULATED LOSS OF INSTRUMENT AIR. AIR OPERATED VALVES COULD DRIFT OPEN BECAUSE OF ACCUMULATOR LEAKAGE.

SCRAM 08/25/93 LER# 27093005 50.72#: 25977 PWR HIST: POWER OPERATIONS AT 100%
DESC : AN ANTICIPATORY REACTOR TRIP OCCURRED ON A TURBINE TRIP WHEN AN OPERATOR DEENERGIZED THE WRONG UNIT'S MAIN GENERATOR "Z" PHASE RELAYING POTENTIAL DRAWER.

TABLE 8.64 (CONT.)

OCONEE 2

SSF 09/02/93 LER# 27093006 50.72#:
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : REACTOR CONTAINMENT BUILDING
DESC : A CONTAINMENT ISOLATION VALVE ON THE CORE FLOOD TANK SYSTEM WAS FOUND MISPOSITIONED OPEN, POTENTIALLY RENDERING THE CONTAINMENT UNABLE TO PERFORM ITS DESIGN FUNCTION.

TABLE 8.65

OCONEE 3

SSF 10/12/92 LER# 26992016 50.72#: 24410
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : EMERGENCY ONSITE POWER SUPPLY SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1, 2 AND 3.
DESC : A SINGLE FAILURE COULD RESULT IN THE LOSS OF BOTH EMERGENCY POWER PATHS FROM THE KEOWEE EMERGENCY POWER UNITS.

SSF 10/19/92 LER# 27092004 50.72#: 24455
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : EMERGENCY ONSITE POWER SUPPLY SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1, 2 AND 3.
DESC : BOTH KEOWEE HYDRO UNITS WERE UNABLE TO AUTOMATICALLY SUPPLY EMERGENCY POWER FOR APPROXIMATELY 31 SECONDS DUE TO UNEXPECTED SYSTEM INTERACTION AND INADEQUATE CIRCUIT DESIGN.

SSF 11/18/92 LER# 26992017 50.72#: 24629
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : DC POWER SYSTEM - CLASS 1E
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1, 2 AND 3.
DESC : THE VITAL BATTERY RACKS FOR UNITS 2 AND 3 WERE NOT SEISMICALLY INSTALLED DUE TO ORIGINAL DESIGN/INSTALLATION DEFICIENCY. ALL THREE UNITS WERE AFFECTED DUE TO SHARED EQUIPMENT.

SSF 12/02/92 LER# 26992018 50.72#: 24687
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : EMERGENCY ONSITE POWER SUPPLY SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1, 2 AND 3.
DESC : DURING DEGRADED DC VOLTAGE CONDITIONS, BOTH EMERGENCY POWER SOURCES COULD BE RENDERED INOPERABLE DUE TO A FAILURE OF THEIR BREAKERS TO CLOSE.

SSF 12/10/92 LER# 26992019 50.72#: 24762
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : EMERGENCY ONSITE POWER SUPPLY SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1, 2 AND 3.
DESC : A SINGLE FAULT COULD RENDER THE UNDERGROUND AND OVERHEAD EMERGENCY POWER PATHS INOPERABLE DUE TO A DESIGN DEFICIENCY.

SSF 01/12/93 LER# 26993001 50.72#: 24866
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : MEDIUM-VOLTAGE POWER SYSTEM - CLASS 1E
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1, 2 AND 3.
DESC : THE KEOWEE EMERGENCY POWER SYSTEM THAT SUPPLIES ALL THREE UNITS SAFETY RELATED EQUIPMENT WAS SUBJECT TO FAILURE IN THE GOVERNOR CONTROL CIRCUITRY AT FULL LOAD.

SCRAM 01/26/93 LER# 28793001 50.72#: 24947 PWR HIST: POWER OPERATIONS AT 100%
DESC : AN AUTOMATIC REACTOR SCRAM OCCURRED ON AN ERRONEOUS LOSS OF MAIN FEEDWATER PUMP SIGNAL WHEN A TECHNICIAN CAUSED FUSES TO BLOW IN A LOGIC CIRCUIT.

TABLE 8.65 (CONT.)

OCONEE 3

SSF 01/26/93 LER# 28793001 50.72#: 24953
PWR HIST: EVENT DISCOVERED IN HOT SHUTDOWN.
GROUP : AUXILIARY/EMERGENCY FEEDWATER SYSTEMS GROUP
SYSTEM : AUXILIARY/EMERGENCY FEEDWATER SYSTEM
DESC : BOTH TRAINS OF EMERGENCY FEEDWATER WERE NOT CAPABLE OF AUTOMATICALLY REMOVING RESIDUAL DECAY HEAT. THE SYSTEM'S FEEDWATER CONTROL VALVES WERE INADVERTENTLY LEFT IN MANUAL DURING A SYSTEM RESTORATION.

SSI 04/08/93 LER# 26993004 50.72#: 25378
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : MULTIPLE SYSTEMS GROUP
SYSTEM : MULTIPLE SYSTEMS
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1, 2 AND 3.
DESC : A DESIGN DEFICIENCY IN THE LPSW SYSTEM MAY RESULT IN THE LPSI AND THE REACTOR BUILDING COOLING SYSTEMS BECOMING INOPERABLE DURING A DESIGN BASIS ACCIDENT.

SSF 06/02/93 LER# 26993006 50.72#: 25601
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : REACTOR CONTAINMENT BUILDING
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1, 2 AND 3.
DESC : DESIGN REVIEW DETERMINED CONTAINMENT DESIGN PRESSURE COULD BE EXCEEDED DURING A MAIN STEAMLINE BREAK INSIDE CONTAINMENT. FEEDWATER WILL NOT AUTOMATICALLY ISOLATE; OPERATOR ACTION IS REQUIRED WITHIN 170 SECONDS TO PREVENT EXCEEDING THE DESIGN PRESSURE.

SSF 06/10/93 LER# 27093002 50.72#:
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : REACTOR CONTAINMENT BUILDING
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 2 AND 3.
DESC : CONTAINMENT INTEGRITY COULD BE LOST DURING A POSTULATED LOSS OF INSTRUMENT AIR. AIR OPERATED VALVES COULD DRIFT OPEN BECAUSE OF ACCUMULATOR LEAKAGE.

TABLE 8.66

OYSTER CREEK

SSF 01/25/93 LER# 21993002 50.72#: 24943
PWR HIST: EVENT OCCURRED DURING REFUELING.
GROUP : MULTIPLE SYSTEMS GROUP
SYSTEM : MULTIPLE SYSTEMS
DESC : AN INADVERTENT MODE CHANGE OCCURRED. REACTOR VESSEL METAL TEMPERATURE EXCEEDED 212 DEGREES F WITHOUT PRIMARY CONTAINMENT IN EFFECT, WITHOUT ISOLATION CONDENSERS OPERABLE, AND WITHOUT CONTAINMENT SPRAY/EMERGENCY SERVICE WATER OPERABLE.

SE 01/25/93 LER# 21993002 50.72#: 24943
PWR HIST: EVENT OCCURRED DURING REFUELING.
DESC : SHUTDOWN COOLING FLOW THROUGH THE REACTOR CORE WAS LOST FOR POSSIBLY AS LONG AS TWO DAYS WITHOUT THE OPERATORS BEING AWARE OF THE LOSS. A SPECIAL OPERATING CONFIGURATION HAD BEEN ESTABLISHED TO TEST THE MSIVS FOR LEAKAGE.

TABLE 8.67

PALISADES

SCRAM 10/30/92 LER# 25592039 50.72#: 24534 PWR HIST: POWER OPERATIONS AT 100%
DESC : THE REACTOR TRIPPED FOLLOWING A TURBINE TRIP. THIS WAS CAUSED BY A FAILURE OF THE UNINTERRUPTIBLE POWER SUPPLIES TO PROPERLY REGULATE VOLTAGE TO THE TURBINE HYDRAULIC CONTROL SYSTEM COMPUTERS.

TABLE 8.67 (CONT.)

PALISADES

SSF 01/06/93 LER# 25593001 50.72#: 24836
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : EMERGENCY ONSITE POWER SUPPLY SYSTEM
DESC : BOTH EMERGENCY DIESEL GENERATORS WERE INOPERABLE WHEN ONE EDG WAS TAGGED FOR MAINTENANCE AND THE OTHER EDG'S OVERSPEED TRIP WAS INADVERTENTLY ACTUATED.

SSF 03/06/93 LER# 25593002 50.72#:
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : REACTOR CONTAINMENT BUILDING
DESC : CONTAINMENT INTEGRITY, AS DEFINED BY PLANT TECHNICAL SPECIFICATIONS, WAS VIOLATED AS A RESULT OF AN EQUALIZING VALVE STICKING OPEN FOR THE EMERGENCY ESCAPE AIRLOCK.

SE 06/30/93 LER# 25593004 50.72#: 25725
PWR HIST: EVENT OCCURRED DURING REFUELING
DESC : WHILE PREPARING TO REATTACH THE REACTOR HEAD TO THE VESSEL FOLLOWING REFUELING, THREE PIECES OF A FUEL ROD WERE DISCOVERED IN THE REACTOR CAVITY TILT PIT. THE APPLICABLE FUEL ASSEMBLY HAD ALREADY BEEN INSTALLED IN THE CORE.

SSA 07/20/93 LER# 25593005 50.72#: 25809 PWR HIST: REFUELING
DESC : BOTH EMERGENCY DIESEL GENERATORS AUTO-STARTED DUE TO AN UNDERVOLTAGE CONDITION ON A SAFEGUARDS BUS. THE UNDERVOLTAGE WAS CAUSED BY A TRIP OF THE OFFSITE POWER FEEDER BREAKER.

SSF 08/24/93 LER# 25593008 50.72#: 25972
PWR HIST: CONDITION EXISTED DURING OPERATION AT POWER SINCE 5/2/93
GROUP : MULTIPLE SYSTEMS GROUP
SYSTEM : MULTIPLE SYSTEMS
DESC : MULTIPLE ESF EQUIPMENT WERE INOPERABLE BECAUSE THE ESF ROOM COOLER FANS WERE INOPERABLE DUE TO INADEQUATE THERMAL OVERLOAD PROTECTION SETPOINTS.

TABLE 8.68

PALO VERDE 1

SCRAM 12/08/92 LER# 52892016 50.72#: 24718 PWR HIST: POWER OPERATIONS AT 100%
DESC : THE REACTOR SCRAMMED ON HIGH PRESSURIZER PRESSURE FOLLOWING A MAIN GENERATOR AND TURBINE TRIP. THIS WAS CAUSED BY A RELAY FAILURE DURING 230KV DISTRIBUTION SYSTEM FLUCTUATIONS.

SSA 02/13/93 LER# 52893003 50.72#: 25074 PWR HIST: POWER OPERATIONS AT 100%
DESC : AN EMERGENCY DIESEL GENERATOR AUTO-STARTED AND LOADED A SAFETY RELATED BUS WHEN THE NORMAL FEED BREAKER TRIPPED ON OVERCURRENT.

SSF 05/05/93 LER# 52893006 50.72#:
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : RESIDUAL HEAT REMOVAL SYSTEMS GROUP
SYSTEM : RESIDUAL HEAT REMOVAL SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1, 2 AND 3.
DESC : THERMAL OVERLOAD PROTECTION BYPASSES WERE NOT PROVIDED FOR SHUTDOWN COOLING ISOLATION VALVES. THIS COULD PREVENT REPOSITIONING THE VALVES IF REQUIRED.

TABLE 8.69

PALO VERDE 2

SCRAM 11/13/92 LER# 52992006 50.72#: 24600 PWR HIST: POWER OPERATIONS AT 100%
DESC : THE REACTOR TRIPPED ON LOW DNBR. THIS RESULTED FROM CEA INSERTIONS WHEN AN OPERATOR TRIPPED THE CEA MOTOR GENERATOR SET DURING MAINTENANCE.

TABLE 8.69 (CONT.)

PALO VERDE 2

SSA 11/13/92 LER# 52992006 50.72#: 24600 PWR HIST: HOT STANDBY FOLLOWING SCRAM
DESC : FOLLOWING A REACTOR TRIP, A SAFETY INJECTION ACTUATION OCCURRED ON LOW REACTOR PRESSURE.

SSA 03/14/93 LER# 52993001 50.72#: 25255 PWR HIST: HOT STANDBY FOLLOWING A MANUAL REACTOR SCRAM
DESC : THE HIGH PRESSURE INJECTION SYSTEM AUTO STARTED AND INJECTED IN RESPONSE TO A STEAM GENERATOR TUBE LEAK.

SE 03/14/93 LER# 52993001 50.72#: 25255
PWR HIST: EVENT OCCURRED DURING OPERATION AT 98% POWER.
DESC : THE REACTOR WAS MANUALLY SCRAMMED FOLLOWING A TUBE RUPTURE IN SG 2. VALID ACTUATIONS OF THE SAFETY INJECTION ACTUATION SYSTEM AND CONTAINMENT ISOLATION ACTUATION SYSTEM OCCURRED DUE TO LOW PRESSURIZER PRESSURE.

SSF 05/05/93 LER# 52893006 50.72#:
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : RESIDUAL HEAT REMOVAL SYSTEMS GROUP
SYSTEM : RESIDUAL HEAT REMOVAL SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1, 2 AND 3.
DESC : THERMAL OVERLOAD PROTECTION BYPASSES WERE NOT PROVIDED FOR SHUTDOWN COOLING ISOLATION VALVES. THIS COULD PREVENT REPOSITIONING THE VALVES IF REQUIRED.

TABLE 8.70

PALO VERDE 3

SCRAM 02/04/93 LER# 53093001 50.72#: 25018 PWR HIST: POWER OPERATIONS AT 100%
DESC : A REACTOR TRIP OCCURRED ON LOW S/G WATER LEVEL WHEN A FEED PUMP SHIFTED TO MINIMUM SPEED BECAUSE ITS CONTROL SYSTEM CIRCUIT BOARD FAILED.

SSA 02/04/93 LER# 53093001 50.72#: 25018 PWR HIST: HOT STANDBY FOLLOWING THE SCRAM
DESC : DURING S/G WATER LEVEL RECOVERY FOLLOWING A SCRAM, OVER COOLING OF THE PLANT OCCURRED RESULTING IN A HIGH PRESSURE SAFETY INJECTION TO THE VESSEL.

3SF 05/05/93 LER# 52893006 50.72#:
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : RESIDUAL HEAT REMOVAL SYSTEMS GROUP
SYSTEM : RESIDUAL HEAT REMOVAL SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1, 2 AND 3.
DESC : THERMAL OVERLOAD PROTECTION BYPASSES WERE NOT PROVIDED FOR SHUTDOWN COOLING ISOLATION VALVES. THIS COULD PREVENT REPOSITIONING THE VALVES IF REQUIRED.

TABLE 8.71

PEACH BOTTOM 2

SSF 01/01/93 LER# 27793001 50.72#: 24822
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 25% POWER.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : HIGH PRESSURE COOLANT INJECTION SYSTEM
DESC : THE HIGH PRESSURE COOLANT INJECTION SYSTEM WAS DECLARED INOPERABLE DUE TO LEAKING CHECK VALVES IN THE HPCI HYDRAULIC SYSTEM. THE HPCI SYSTEM FAILED A START TIME SURVEILLANCE TEST AS A RESULT OF THE LEAKING VALVES.

SSF 01/31/93 LER# 27793003 50.72#: 24988
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 99% POWER.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : HIGH PRESSURE COOLANT INJECTION SYSTEM
DESC : THE HIGH PRESSURE COOLANT INJECTION SYSTEM WAS DECLARED INOPERABLE DUE TO EXCESSIVE WATER INTRUSION INTO THE SYSTEM'S GLAND SEAL CONDENSER.

TABLE 8.71 (CONT.)

PEACH BOTTOM 2

SCRAM 03/02/93 LER# 27793004 50.72#: 25168 PWR HIST: POWER OPERATIONS AT 67%
DESC : AN AUTOMATIC REACTOR SCRAM OCCURRED ON LOW RPV WATER LEVEL WHEN TWO CONDENSATE PUMPS TRIPPED FOR UNKNOWN REASONS DURING SYSTEM MAINTENANCE.

SSA 03/02/93 LER# 27793004 50.72#: 25168 PWR HIST: HOT STANDBY FOLLOWING THE SCRAM
DESC : HPCI AND RCIC SYSTEMS AUTO-STARTED ON LOW-LOW RPV LEVEL FOLLOWING A LOSS OF THE CONDENSATE AND FEEDWATER PUMPS DURING CONDENSATE SYSTEM MAINTENANCE ACTIVITIES.

SSF 03/03/93 LER# 27793004 50.72#: 25209
PWR HIST: EVENT DISCOVERED IN HOT SHUTDOWN.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : HIGH PRESSURE COOLANT INJECTION SYSTEM
DESC : THE HPCI SYSTEM WAS INOPERABLE FOR AN EIGHT HOUR PERIOD DUE TO A FAILED RELAY IN THE ACTUATION CIRCUIT FOR THE SYSTEM'S AUXILIARY OIL PUMP.

TABLE 8.72

PEACH BOTTOM 3

SCRAM 10/15/92 LER# 27892008 50.72#: 24437 PWR HIST: POWER OPERATIONS AT 100%
DESC : A SCRAM RESULTED FROM AN MSIV ISOLATION. THIS EVENT OCCURRED WHEN A TECHNICIAN INADVERTENTLY VIBRATED AND ACTUATED THE PCIS GROUP 1 PRESSURE SWITCHES.

SSA 10/15/92 LER# 27892008 50.72#: 24437 PWR HIST: HOT SHUTDOWN FOLLOWING A SCRAM
DESC : HPCI STARTED ON LOW REACTOR VESSEL LEVEL FOLLOWING A SCRAM.

SSF 11/28/92 LER# 27892009 50.72#: 24670
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 99% POWER.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : HIGH PRESSURE COOLANT INJECTION SYSTEM
DESC : THE HIGH PRESSURE COOLANT INJECTION SYSTEM WAS DECLARED INOPERABLE DUE TO A FAILED FLOW CONTROLLER.

SSF 01/25/93 LER# 27893001 50.72#: 24942
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : HIGH PRESSURE COOLANT INJECTION SYSTEM
DESC : THE HPCI SYSTEM WAS DECLARED INOPERABLE AFTER THE HPCI PUMP DISCHARGE VALVE FAILED TO STROKE OPEN DURING A SURVEILLANCE TEST.

SCRAM 03/07/93 LER# 27893002 50.72#: 25205 PWR HIST: POWER OPERATIONS AT 25%
DESC : AN AUTO REACTOR SCRAM OCCURRED ON LOW RPV LEVEL WHEN A FEED PUMP TRIPPED ON HIGH VIBRATION. THE FEED PUMP TRIP WAS CAUSED BY A DAMAGED VIBRATION ELEMENT IN CONJUNCTION WITH A ROUGH PUMP SHAFT.

SSA 07/30/93 LER# 27893004 50.72#: 25859 PWR HIST: HOT SHUTDOWN FOLLOWING SCRAM FROM 72% POWER
DESC : THE HPCI SYSTEM WAS MANUALLY STARTED TO CONTROL REACTOR VESSEL WATER LEVEL FOLLOWING A MANUAL SCRAM.

SSF 08/09/93 LER# 27893005 50.72#: 25900
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : HIGH PRESSURE COOLANT INJECTION SYSTEM
DESC : THE HPCI SYSTEM WAS DECLARED INOPERABLE WHEN ITS FLOW CONTROLLER OUTPUT SIGNAL STARTED OSCILLATING. IT IS BELIEVED THAT THE FLOW CONTROLLER DRIFTED OUT OF SPECIFICATION.

SSF 08/14/93 LER# 27893006 50.72#: 25920
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 98% POWER.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : LOW PRESSURE COOLANT INJECTION SYSTEM
DESC : WITH ONE OF FOUR RHR PUMPS INOPERABLE DUE TO A FAILED SURVEILLANCE, TWO MORE PUMPS WERE RENDERED INOPERABLE WHEN THEY RECEIVED TRIP SIGNALS FROM UNIT 2. WITH ONLY ONE RHR PUMP OPERABLE, LPCI WAS DECLARED INOPERABLE.

TABLE 8.73

PERRY

SSF 10/09/92 LER# 44092019 50.72#: 24399
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : STANDBY LIQUID CONTROL SYSTEM GROUP
SYSTEM : STANDBY LIQUID CONTROL SYSTEM
DESC : PERSONNEL ERROR DURING A SURVEILLANCE ON THE STANDBY LIQUID CONTROL SYSTEM RENDERED BOTH PUMPS INOPERABLE FOR ABOUT 10 MINUTES.

SSF 04/19/93 LER# 44093011 50.72#: 25415
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : LOW PRESSURE COOLANT INJECTION SYSTEM
DESC : TRAIN "A" AND "B" LPCI/RHR PUMP SUCTION STRAINERS IN THE SUPPRESSION POOL WERE PLUGGED AND PARTIALLY COLLAPSED. AN ENGINEERING EVALUATION CONCLUDED THAT THE PERFORMANCE OF THE PUMPS THROUGHOUT A POSTULATED LOCA MAY HAVE PREVIOUSLY BEEN COMPROMISED.

SE 04/19/93 LER# 44093011 50.72#: 25415
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME.
DESC : TWO RHR SUCTION STRAINERS WERE FOUND TO HAVE COLLECTED DEBRIS. AFTER THEY WERE CLEANED, THE LICENSEE OBSERVED THAT THE CONICALLY SHAPED STRAINERS HAD BEEN DEFORMED, AND ONE HAD CRACKS.

SSA 06/07/93 LER# 44093012 50.72#: 25615 PWR HIST: POWER OPERATIONS AT 82%
DESC : HPCS STARTED WHEN POWER WAS LOST TO THE DIVISION 3 INSTRUMENT BUS DUE TO A FAILED 125VDC BATTERY CHARGER.

SSF 06/07/93 LER# 44093012 50.72#: 25615
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 82% POWER.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : HIGH PRESSURE CORE SPRAY SYSTEM
DESC : HPCS WAS DECLARED INOPERABLE DUE TO A LOSS OF MONITORING CAPABILITY. THIS OCCURRED WHEN THE 125VDC CHARGER FAILED RESULTING IN THE INSTRUMENT BUS BECOMING DEENERGIZED.

SSF 06/08/93 LER# 44093013 50.72#: 25618
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 95% POWER.
GROUP : CONTROL ROOM EMERGENCY VENTILATION SYSTEM GROUP
SYSTEM : CONTROL BUILDING/CONTROL COMPLEX ENVIRONMENTAL CONTROL SYSTEM
DESC : BOTH CONTROL ROOM VENTILATION SYSTEMS WERE INOPERABLE SIMULTANEOUSLY. THIS CONDITION OCCURRED WHEN ONE FAN DEVELOPED A PHASE TO PHASE FAULT WHILE THE OTHER FAN HAD BEEN REMOVED FROM SERVICE FOR MAINTENANCE.

TABLE 8.74

PILGRIM

SSF 11/25/92 LER# 29392015 50.72#: 24653
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 22% POWER.
GROUP : REACTOR CORE ISOLATION COOLING SYSTEMS GROUP
SYSTEM : REACTOR CORE ISOLATION COOLING SYSTEM
DESC : REACTOR CORE ISOLATION COOLING WAS ISOLATED AND OUT OF SERVICE DUE TO A PERSONNEL ERROR THAT RESULTED IN THE ISOLATION OF THE STEAM SUPPLY.

SCRAM 12/13/92 LER# 29392016 50.72#: 24749 PWR HIST: POWER OPERATIONS AT 50%
DESC : THE REACTOR SCRAMMED DUE TO A GENERATOR LOAD REJECT SIGNAL DURING HARSH WEATHER. THIS EVENT WAS CAUSED BY A FLASH-OVER IN THE SWITCHYARD RESULTING FROM SALT DEPOSITS.

SCRAM 12/20/92 LER# 29392018 50.72#: 24783 PWR HIST: POWER OPERATIONS AT 75%
DESC : A REACTOR SCRAM OCCURRED ON HIGH MAIN STEAM RADIATION DURING A HYDROGEN ADDITION. A TECHNICIAN HAD LOWERED THE SCRAM SETPOINT INSTEAD OF RAISING THE SETPOINT PRIOR TO THE EVOLUTION.

SSA 12/20/92 LER# 29392018 50.72#: 24783 PWR HIST: HOT SHUTDOWN FOLLOWING SCRAM
DESC : THE HPCI SYSTEM WAS STARTED FOLLOWING A REACTOR SCRAM TO CONTROL REACTOR PRESSURE.

TABLE 8.74 (CONT.)

PILGRIM

SSF 01/26/93 LER# 29393001 50.72#: 24945
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : HIGH PRESSURE COOLANT INJECTION SYSTEM
DESC : THE HIGH PRESSURE COOLANT INJECTION SYSTEM WAS DECLARED INOPERABLE WHEN A FLOW CONTROLLER FAILED DURING SURVEILLANCE TESTING. THIS CONDITION WAS CAUSED BY A BLOWN POWER SUPPLY FUSE.

SSF 02/25/93 LER# 29393002 50.72#: 25132
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : REACTOR CORE ISOLATION COOLING SYSTEMS GROUP
SYSTEM : REACTOR CORE ISOLATION COOLING SYSTEM
DESC : THE RCIC SYSTEM WAS DECLARED INOPERABLE WHEN THE TURBINE STEAM ADMISSION VALVE FAILED TO OPEN PROPERLY DURING A SURVEILLANCE TEST.

SSF 03/01/93 LER# 29393003 50.72#:
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : CONTAINMENT ISOLATION CONTROL SYSTEM
DESC : THE RWCU HIGH FLOW SENSORS, WHICH PROVIDE AN INPUT TO PRIMARY CONTAINMENT ISOLATION VALVES, WERE FOUND WITH TRIP SETTINGS GREATER THAN THE LIMIT DUE TO SETPOINT DRIFT.

SCRAM 03/13/93 LER# 29393004 50.72#: 25248 PWR HIST: POWER OPERATIONS AT 100%
DESC : THE REACTOR SCRAMMED ON A LOAD REJECTION SIGNAL CAUSED BY LOSS OF OFFSITE POWER DURING A WINTER STORM.

SSA 03/13/93 LER# 29393004 50.72#: 25248 PWR HIST: HOT SHUTDOWN FOLLOWING THE SCRAM
DESC : THE HPCI SYSTEM WAS MANUALLY STARTED IN THE TEST MODE TO CONTROL REACTOR PRESSURE FOLLOWING A SCRAM.

SSA 03/13/93 LER# 29393004 50.72#: 25248 PWR HIST: POWER OPERATIONS AT 100%
DESC : BOTH EMERGENCY DIESEL GENERATORS AUTO-STARTED ON A LOSS OF OFFSITE POWER DURING A WINTER STORM.

SSF 03/13/93 LER# 29393004 50.72#: 25248
PWR HIST: CONDITION EXISTED SINCE 1992.
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : LOW-VOLTAGE POWER SYSTEM - CLASS 1E
DESC : TWO SAFETY RELATED BUSES DEENERGIZED FOLLOWING A REACTOR SCRAM, RESULTING IN LOSS OF CONTROL POWER TO SEVERAL COOLING WATER PUMPS. THIS WAS CAUSED BY INCORRECT TRIP SETPOINTS ON THE SUPPLY BREAKERS.

SSF 03/17/93 LER# 29393007 50.72#:
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE NOVEMBER 1992.
GROUP : REACTOR CORE ISOLATION COOLING SYSTEMS GROUP
SYSTEM : REACTOR CORE ISOLATION COOLING SYSTEM
DESC : THE RCIC STEAM SUPPLY INBOARD ISOLATION VALVE MAY NOT HAVE AUTOMATICALLY OPENED BECAUSE THE TORQUE SWITCH WAS NOT BYPASSED AS REQUIRED.

SSA 05/19/93 LER# 29393010 50.72#: 25532 PWR HIST: COLD SHUTDOWN
DESC : THE EMERGENCY DIESEL GENERATORS AUTO-STARTED AND LOADED THEIR RESPECTIVE EMERGENCY BUSES. THE LOSS OF POWER OCCURRED WHEN A TECHNICIAN INADVERTENTLY ACTIVATED A LOCKOUT RELAY DURING MAINTENANCE.

SSF 05/30/93 LER# 29393013 50.72#: 25590
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 19% POWER.
GROUP : REACTOR CORE ISOLATION COOLING SYSTEMS GROUP
SYSTEM : REACTOR CORE ISOLATION COOLING SYSTEM
DESC : THE RCIC SYSTEM WAS DECLARED INOPERABLE DURING SURVEILLANCE TESTING. OSCILLATIONS IN TURBINE RPM, PUMP DISCHARGE PRESSURE, AND FLOW CONTROL VALVE POSITION WERE OBSERVED, POSSIBLY CAUSED BY TURBINE SPEED CONTROLLER PROBLEMS.

SCRAM 05/31/93 LER# 29393014 50.72#: 25594 PWR HIST: POWER OPERATIONS AT 25%
DESC : A REACTOR SCRAM OCCURRED FOLLOWING A GENERATOR TRIP/TURBINE TRIP. THE GENERATOR TRIP RESULTED FROM A PHASE DIFFERENTIAL PROTECTIVE RELAY LOCKOUT ON AN AUXILIARY TRANSFORMER.

TABLE 8.74 (CONT.)

PILGRIM

SSF 06/30/93 LER# 29393015 50.72#: 25716
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : HIGH PRESSURE COOLANT INJECTION SYSTEM
DESC : THE HIGH PRESSURE COOLANT INJECTION SYSTEM WAS DECLARED INOPERABLE WHEN THE SYSTEM WAS UNABLE TO OBTAIN THE REQUIRED FLOW RATE DURING A SURVEILLANCE TEST. FOREIGN MATERIAL PARTIALLY PLUGGED A RESTRICTING ORIFICE LOCATED IN THE FULL FLOW TEST PIPELINE.

SSF 07/19/93 LER# 29393016 50.72#: 25805
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : HIGH PRESSURE COOLANT INJECTION SYSTEM
DESC : THE HIGH PRESSURE COOLANT INJECTION SYSTEM WAS DECLARED INOPERABLE AS A RESULT OF A PRESSURE SWITCH IN THE HPCI DISCHARGE LINE FAILING A MONTHLY CALIBRATION TEST.

SSF 07/21/93 LER# 29393017 50.72#: 25813
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : HIGH PRESSURE COOLANT INJECTION SYSTEM
DESC : THE HPCI SYSTEM WAS DECLARED INOPERABLE WHEN ITS TURBINE STEAM SUPPLY VALVES CLOSED DURING TESTING. THIS EVENT WAS CAUSED BY AN INADEQUATE TEST PROCEDURE.

SCRAM 09/10/93 LER# 29393022 50.72#: 26044 PWR HIST: POWER OPERATIONS AT 100%
DESC : A LIGHTNING STRIKE CAUSED A LOAD REJECTION AND REACTOR SCRAM.

SSA 09/10/93 LER# 29393022 50.72#: 26044 PWR HIST: POWER OPERATIONS AT 100%
DESC : WITH ONE STARTUP TRANSFORMER SUPPLY BREAKER INOPERABLE, A LIGHTNING STRIKE CAUSED THE OTHER BREAKER TO OPEN RESULTING IN AN EDG START ON A LOSS OF OFFSITE POWER.

SSA 09/10/93 LER# 29393022 50.72#: 26044 PWR HIST: HOT SHUTDOWN FOLLOWING A SCRAM FROM 100% POWER
DESC : THE HPCI SYSTEM WAS MANUALLY INITIATED FOLLOWING A SCRAM TO MAINTAIN REACTOR VESSEL PRESSURE.

SSF 09/30/93 LER# 29393024 50.72#: 26143
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : HIGH PRESSURE COOLANT INJECTION SYSTEM
DESC : THE HIGH PRESSURE COOLANT INJECTION SYSTEM WAS DECLARED INOPERABLE, WHEN IT WAS DETERMINED THAT A MOTOR OPERATED VALVE HAD INSUFFICIENT THRUST TO CLOSE AGAINST A HPCI STEAM LINE BREAK.

TABLE 8.75

POINT BEACH 1

SCRAM 10/05/92 LER# 26692008 50.72#: 24377 PWR HIST: POWER OPERATIONS AT 100%
DESC : WHILE TESTING AN MSIV, THE AIR SOLENOID VENT ON THE VALVE OPENED, RESULTING IN THE CLOSURE OF THE MSIV. A TURBINE TRIP/REACTOR TRIP RESULTED.

SSF 10/12/92 LER# 26692009 50.72#:
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : REACTOR CONTAINMENT BUILDING
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : COMPONENT COOLING WATER SYSTEM SURGE TANK VENT VALVES IN A REQUIRED CLOSED SYSTEM OUTSIDE CONTAINMENT DID NOT HAVE A SAFETY RELATED ISOLATION SIGNAL.

SSF 11/15/92 LER# 26692010 50.72#: 24717
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : MULTIPLE SYSTEMS GROUP
SYSTEM : MULTIPLE SYSTEMS
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : BOTH TRAINS OF SAFETY INJECTION AND CONTAINMENT SPRAY PUMPS WOULD HAVE BEEN DAMAGED IF A SAFETY INJECTION SIGNAL HAD OCCURRED DURING INSERVICE TESTING OF VALVES IN THEIR FLOW PATH.

TABLE 8.75 (CONT.)

POINT BEACH 1

SSF 01/07/93 LER# 26693001 50.72#: 24845
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : MEDIUM-VOLTAGE POWER SYSTEM - CLASS 1E
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : AN EVALUATION REVEALED THAT THE SETTINGS FOR THE DEGRADED GRID VOLTAGE RELAYS ON THE 4160V SAFETY-RELATED BUSES WERE TOO LOW TO PROVIDE ADEQUATE PROTECTION FOR ALL SAFETY-RELATED EQUIPMENT.

SSF 02/18/93 LER# 26693002 50.72#:
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : EMERGENCY ONSITE POWER SUPPLY SYSTEM
DESC : BOTH EMERGENCY DIESEL GENERATORS WERE SIMULTANEOUSLY INOPERABLE DUE TO A BLOWN FUSE ON A CONTROL CIRCUIT FOR EDG G-02 AND MAINTENANCE ON EDG G-01.

SSF 03/19/93 LER# 26693003 50.72#: 25284
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : LOW TEMPERATURE/OVERPRESSURE PROTECTION GROUP
SYSTEM : LOW TEMP/OVERPRESSURE PROTECTION SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : THE COLD OVERPRESSURE MITIGATING SYSTEM SETPOINTS WERE 63 PSIG NONCONSERVATIVE UNDER CERTAIN RCP OPERATING CONFIGURATIONS.

SSA 07/26/93 LER# 26693007 50.72#: 25840 PWR HIST: POWER OPERATIONS AT 100%
DESC : AN EDG STARTED AND LOADED ITS EMERGENCY BUS WHEN POWER WAS LOST DUE TO A PERSONNEL ERROR DURING CALIBRATION OF THE BUS VOLTMETER.

TABLE 8.76

POINT BEACH 2

SSF 10/12/92 LER# 26692009 50.72#:
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : REACTOR CONTAINMENT BUILDING
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : COMPONENT COOLING WATER SYSTEM SURGE TANK VENT VALVES IN A REQUIRED CLOSED SYSTEM OUTSIDE CONTAINMENT DID NOT HAVE A SAFETY RELATED ISOLATION SIGNAL.

SSA 10/26/92 LER# 30192007 50.72#: 24496 PWR HIST: REFUELING
DESC : A LOSS OF POWER TO A 4160 VAC AND A 480 VAC SAFEGUARDS BUS OCCURRED WHEN THEIR SUPPLY BREAKER TRIPPED ON UNDERVOLTAGE DURING A SURVEILLANCE TEST.

SSF 11/19/92 LER# 26692010 50.72#: 24717
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : MULTIPLE SYSTEMS GROUP
SYSTEM : MULTIPLE SYSTEMS
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : BOTH TRAINS OF SAFETY INJECTION AND CONTAINMENT SPRAY PUMPS WOULD HAVE BEEN DAMAGED IF A SAFETY INJECTION SIGNAL HAD OCCURRED DURING INSERVICE TESTING OF VALVES IN THEIR FLOW PATH.

SSF 01/07/93 LER# 26693001 50.72#: 24845
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : MEDIUM-VOLTAGE POWER SYSTEM - CLASS 1E
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : AN EVALUATION REVEALED THAT THE SETTINGS FOR THE DEGRADED GRID VOLTAGE RELAYS ON THE 4160V SAFETY-RELATED BUSES WERE TOO LOW TO PROVIDE ADEQUATE PROTECTION FOR ALL SAFETY-RELATED EQUIPMENT.

SSF 01/27/93 LER# 30193001 50.72#:
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : REACTOR CONTAINMENT BUILDING
DESC : CONTAINMENT INTEGRITY WAS LOST WHEN A S/G SAMPLE ISOLATION VALVE FAILED TO FULLY SHUT. THIS CONDITION WAS CAUSED BY INADEQUATE COMPRESSION OF THE OPERATOR SPRING WHICH CLOSES THE VALVE.

TABLE 8.76 (CONT.)

POINT BEACH 2

SSF 03/19/93 LER# 26693003 50.72#: 25284
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : LOW TEMPERATURE/OVERPRESSURE PROTECTION GROUP
SYSTEM : LOW TEMP/OVERPRESSURE PROTECTION SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : THE COLD OVERPRESSURE MITIGATING SYSTEM SETPOINTS WERE 63 PSIG NONCONSERVATIVE UNDER CERTAIN RCP OPERATING CONFIGURATIONS.

SCRAM 03/28/93 LER# 30193002 50.72#: 25322 PWR HIST: POWER OPERATIONS AT 100%
DESC : THE REACTOR SCRAMMED FROM A TURBINE TRIP SIGNAL WHILE PERFORMING A TURBINE THRUST BEARING TRIP TEST. THIS WAS CAUSED BY OPERATOR ERROR DURING THE TEST.

TABLE 8.77

PRAIRIE ISLAND 1

SSF 01/22/93 LER# 28293003 50.72#: 25026
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : REACTOR TRIP INSTRUMENTATION
SYSTEM : PLANT PROTECTION SYSTEM
DESC : THE DELTA FLUX INPUTS TO ALL FOUR OF THE OVERPOWER AND OVER TEMPERATURE DELTA-TEMPERATURE REACTOR TRIP SETPOINTS WERE CALIBRATED TO A NONCONSERVATIVE VALUE.

SCRAM LER# 28293005 50.72#: 25097 PWR HIST: POWER OPERATIONS AT 100%
DESC : THE SCRAM OCCURRED WHEN A RCP TRIPPED. THE RCP TRIPPED WHEN A JANITOR BUMPED THE RCP BREAKER CABINET WITH A FLOOR POLISHER.

TABLE 8.78

PRAIRIE ISLAND 2

NONE

TABLE 8.79

QUAD CITIES 1

SSF 10/02/92 LER# 25492025 50.72#: 24368
PWR HIST: EVENT DISCOVERED DURING REFUELING.
GROUP : CONTROL ROOM EMERGENCY VENTILATION SYSTEM GROUP
SYSTEM : CONTROL BUILDING/CONTROL COMPLEX ENVIRONMENTAL CONTROL SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : THE CONTROL ROOM TOXIC GAS ANALYZER SAMPLE PUMP BELT FAILED. CONTROL ROOM VENTILATION COULD NOT HAVE RECEIVED AN ISOLATION SIGNAL FROM THIS ANALYZER AS A RESULT.

SSF 10/09/92 LER# 25492027 50.72#: 24398
PWR HIST: EVENT DISCOVERED IN COLD SHUTDOWN.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : HIGH PRESSURE COOLANT INJECTION SYSTEM
DESC : A FOULED ROOM COOLER RESULTED IN HPCI BEING DECLARED INOPERABLE.

SSF 10/16/92 LER# 26592028 50.72#: 24444
PWR HIST: EVENT DISCOVERED DURING REFUELING.
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : EMERGENCY/STANDBY GAS TREATMENT SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : REVIEW OF AN SBGT SYSTEM TECHNICAL SPECIFICATION REVISION REVEALED THAT ON A LOSS OF INSTRUMENT AIR THE CONTROL ROOM DOSE WOULD EXCEED GENERAL DESIGN CRITERIA LIMITS.

TABLE 8.79 (CONT.)

QUAD CITIES 1

SSF 10/27/92 LER# 25492026 50.72#: 24506
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : REACTOR CORE ISOLATION COOLING SYSTEMS GROUP
SYSTEM : REACTOR CORE ISOLATION COOLING SYSTEM
DESC : THE RCIC FLOW TRANSMITTER DRIFTED OUT OF CALIBRATION SUCH THAT THE RCIC DESIGN FLOW WOULD NOT HAVE BEEN ACHIEVED WITHIN THE ACCEPTANCE CRITERIA.

SSF 02/04/93 LER# 25493001 50.72#: 25017
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : HIGH PRESSURE COOLANT INJECTION SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : THE HIGH PRESSURE COOLANT INJECTION SYSTEM WAS DECLARED INOPERABLE DUE TO A FAILED CHECK VALVE IN EACH OF THE SUCTION LINES FROM THE TORUS.

SSF 03/31/93 LER# 25493004 50.72#: 25342
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 99% POWER.
GROUP : REACTOR CORE ISOLATION COOLING SYSTEMS GROUP
SYSTEM : REACTOR CORE ISOLATION COOLING SYSTEM
DESC : THE RCIC SYSTEM WAS DECLARED INOPERABLE DUE TO POTENTIAL FLOODING OF THE RCIC ROOM. TO FACILITATE HYDROLASING OF THE DRAIN LINES, ISOLATION VALVES HAD BEEN REMOVED. HOWEVER, THE REQUIRED FLOOR DRAIN PLUGS WERE NOT INSTALLED.

SSF 06/09/93 LER# 25493005 50.72#: 25628
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 72% POWER.
GROUP : MULTIPLE SYSTEMS GROUP
SYSTEM : MULTIPLE SYSTEMS
DESC : HPCI BECAME INOPERABLE WHEN THE TURBINE EXHAUST LINE RUPTURE DISK RUPTURED DURING A SURVEILLANCE TEST. THE RESULTING HIGH PRESSURE DAMAGED SECONDARY CONTAINMENT DOORS ENOUGH TO CREATE A BREECH OF SECONDARY CONTAINMENT.

SSF 06/24/93 LER# 25493007 50.72#: 25692
PWR HIST: EVENT DISCOVERED IN COLD SHUTDOWN.
GROUP : CONTROL ROOM EMERGENCY VENTILATION SYSTEM GROUP
SYSTEM : CONTROL BUILDING/CONTROL COMPLEX ENVIRONMENTAL CONTROL SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : THE CONTROL ROOM VENTILATION TOXIC GAS MONITOR WAS INOPERABLE FOR ABOUT EIGHT HOURS. THE PUMP TRIPPED DURING AN ATTEMPTED POWER TRANSFER.

SSF 07/09/93 LER# 25493008 50.72#:
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER DURING THE LAST FIVE YEARS.
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : REACTOR BUILDING
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : THE REACTOR BUILDING VENTILATION RADIATION MONITOR SETPOINTS HAVE BEEN SET NONCONSERVATIVELY FOUR TIMES OVER THE LAST FIVE YEARS. THE CAUSE WAS AN ERROR IN THE INSTRUMENT MAINTENANCE COMPUTER PROGRAM.

SSF 07/14/93 LER# 25493009 50.72#: 25783
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : EMERGENCY/STANDBY GAS TREATMENT SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : BOTH TRAINS OF THE STANDBY GAS TREATMENT SYSTEM WERE DETERMINED TO BE INOPERABLE AS A RESULT OF FAILING TO MEET TEST ACCEPTANCE CRITERIA FOR METHYL IODIDE REMOVAL EFFICIENCY.

SSF 07/26/93 LER# 25493012 50.72#: 25834
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : HIGH PRESSURE COOLANT INJECTION SYSTEM
DESC : HPCI CONTROL POWER WAS LOST DUE TO AN ELECTRICAL SHORT CIRCUIT WHICH OCCURRED WHEN A LIGHT FAILED DURING A CALIBRATION AND FUNCTIONAL TEST.

TABLE 8.80

QUAD CITIES 2

SSF 10/02/92 LER# 25492025 50.72#: 24368
PWR HIST: EVENT DISCOVERED DURING REFUELING.
GROUP : CONTROL ROOM EMERGENCY VENTILATION SYSTEM GROUP
SYSTEM : CONTROL BUILDING/CONTROL COMPLEX ENVIRONMENTAL CONTROL SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : THE CONTROL ROOM TOXIC GAS ANALYZER SAMPLE PUMP BELT FAILED. CONTROL ROOM VENTILATION COULD NOT HAVE RECEIVED AN ISOLATION SIGNAL FROM THIS ANALYZER AS A RESULT.

SSF 10/16/92 LER# 26592028 50.72#: 24444
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 26% POWER.
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : EMERGENCY/STANDBY GAS TREATMENT SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : REVIEW OF AN SBGT SYSTEM TECHNICAL SPECIFICATION REVISION REVEALED THAT ON A LOSS OF INSTRUMENT AIR THE CONTROL ROOM DOSE WOULD EXCEED GENERAL DESIGN CRITERIA LIMITS.

SCRAM 01/07/93 LER# 26593001 50.72#: 24842 PWR HIST: POWER OPERATIONS AT 100%
DESC : THE REACTOR SCRAMMED DUE TO AN MSIV CLOSURE THAT RESULTED FROM A FAILED SOLENOID DURING AN MSIV FUNCTIONAL TEST.

SSF 01/13/93 LER# 26593002 50.72#: 24870
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 7% POWER.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : HIGH PRESSURE COOLANT INJECTION SYSTEM
DESC : THE HIGH PRESSURE COOLANT INJECTION SYSTEM WAS DECLARED INOPERABLE DUE TO A FAILURE OF THE MOTOR SPEED CHANGER CAUSED BY DIRTY CONTACTS ON AN OIL PRESSURE SWITCH.

SCRAM 01/29/93 LER# 26593005 50.72#: 24974 PWR HIST: POWER OPERATIONS AT 100%
DESC : THE REACTOR SCRAMMED DUE TO A HIGH REACTOR PRESSURE SIGNAL CAUSED BY A CONTRACTOR BUMPING ONE OF THE REACTOR VESSEL PRESSURE SENSING LINES.

SSF 02/04/93 LER# 25493001 50.72#: 25017
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : HIGH PRESSURE COOLANT INJECTION SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : THE HIGH PRESSURE COOLANT INJECTION SYSTEM WAS DECLARED INOPERABLE DUE TO A FAILED CHECK VALVE IN EACH OF THE SUCTION LINES FROM THE TORUS.

SSF 06/01/93 LER# 26593012 50.72#:
PWR HIST: CONDITION EXISTED IN ALL MODES FROM 2/16/93 TO 3/15/93.
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : EMERGENCY ONSITE POWER SUPPLY SYSTEM
DESC : ON 6/1/93, THE LICENSEE CONCLUDED THAT NO EDGS WERE OPERABLE DURING THE PERIOD OF 2/16/93 TO 3/15/93. ONE EDG WAS INOPERABLE BECAUSE OF A DESIGN DEFICIENCY. THE OTHER EDG WAS INOPERABLE BECAUSE ITS COOLING WATER PUMP OILER WAS INCORRECTLY ASSEMBLED.

SSF 06/02/93 LER# 26593011 50.72#: 25602
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 72% POWER.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : HIGH PRESSURE COOLANT INJECTION SYSTEM
DESC : THE HPCI SYSTEM WAS DECLARED INOPERABLE. DURING A SURVEILLANCE TEST, THE PUMP WAS UNABLE TO ACHIEVE THE REQUIRED FLOW RATE IN THE ALLOTTED TIME. THE MOTOR SPEED CHANGER GEARBOX COMPONENTS WERE BINDING, CAUSING THE PUMP TO RAMP UP AT A SLOWER RATE.

SCRAM 06/13/93 LER# 26593013 50.72#: 25647 PWR HIST: POWER OPERATIONS AT 57%
DESC : AN AUTOMATIC REACTOR SCRAM OCCURRED WHEN A GENERATOR EXCITER TRANSFORMER FAILED. THE FAILED TRANSFORMER INITIATED A GENERATOR/TURBINE TRIP AND SUBSEQUENT REACTOR SCRAM.

SSF 06/24/93 LER# 25493007 50.72#: 25692
PWR HIST: EVENT DISCOVERED IN COLD SHUTDOWN.
GROUP : CONTROL ROOM EMERGENCY VENTILATION SYSTEM GROUP
SYSTEM : CONTROL BUILDING/CONTROL COMPLEX ENVIRONMENTAL CONTROL SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : THE CONTROL ROOM VENTILATION TOXIC GAS MONITOR WAS INOPERABLE FOR ABOUT EIGHT HOURS. THE PUMP TRIPPED DURING AN ATTEMPTED POWER TRANSFER.

TABLE 8.80 (CONT.)

QUAD CITIES 2

SSF 07/09/93 LER# 25493008 50.72#:
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER DURING THE LAST FIVE YEARS.
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : REACTOR BUILDING
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : THE REACTOR BUILDING VENTILATION RADIATION MONITOR SETPOINTS HAVE BEEN SET NONCONSERVATIVELY FOUR TIMES OVER THE LAST FIVE YEARS. THE CAUSE WAS AN ERROR IN THE INSTRUMENT MAINTENANCE COMPUTER PROGRAM.

SSF 07/14/93 LER# 25493009 50.72#: 25783
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : EMERGENCY/STANDBY GAS TREATMENT SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : BOTH TRAINS OF THE STANDBY GAS TREATMENT SYSTEM WERE DETERMINED TO BE INOPERABLE AS A RESULT OF FAILING TO MEET TEST ACCEPTANCE CRITERIA FOR METHYL IODIDE REMOVAL EFFICIENCY.

SSF 08/15/93 LER# 26593015 50.72#: 25923
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : HIGH PRESSURE COOLANT INJECTION SYSTEM
DESC : HPCI WAS DECLARED INOPERABLE UPON RECEIPT OF A DRAIN POT HIGH LEVEL ALARM WHICH DID NOT CLEAR. THIS EVENT WAS CAUSED BY A SURVEILLANCE PROCEDURE PROBLEM.

SSF 08/28/93 LER# 26593018 50.72#: 25987
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : REACTOR CORE ISOLATION COOLING SYSTEMS GROUP
SYSTEM : REACTOR CORE ISOLATION COOLING SYSTEM
DESC : THE RCIC SYSTEM WAS DECLARED INOPERABLE BECAUSE THE TURBINE STEAM SUPPLY VALVE MOTOR HAD BROKEN END BELL TIE BOLTS.

TABLE 8.81

RIVER BEND

SE 10/01/92 LER# 45892020 50.72#:
PWR HIST: CONDITION RESULTED FROM AN IMPROPER RADIATION SURVEY PERFORMED ON 9/4/92.
DESC : POOR RADIATION PRACTICES DURING THE REFUELING OUTAGE RESULTED IN THE EXPOSURE OF WORKERS, DUE TO AN UNPOSTED HIGH RADIATION AREA AND THE TRANSFER OF LOW LEVEL RADIOACTIVE MATERIAL OFFSITE TO AN UNAUTHORIZED RECIPIENT. NO OTHER PIS WERE INVOLVED.

SSF 10/06/92 LER# 45892022 50.72#: 24391
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 79% POWER.
GROUP : CONTROL ROOM EMERGENCY VENTILATION SYSTEM GROUP
SYSTEM : CONTROL BUILDING/CONTROL COMPLEX ENVIRONMENTAL CONTROL SYSTEM
DESC : BOTH TRAINS OF CONTROL ROOM HVAC WERE REMOVED FROM SERVICE AT THE SAME TIME. ONE TRAIN FAILED A CHARCOAL ANALYSIS TEST AND THE OTHER HAD BEEN PREVIOUSLY REMOVED FROM SERVICE FOR MAINTENANCE.

SSF 10/18/92 LER# 45892024 50.72#: 24449
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : CONTROL ROOM EMERGENCY VENTILATION SYSTEM GROUP
SYSTEM : CONTROL BUILDING/CONTROL COMPLEX ENVIRONMENTAL CONTROL SYSTEM
DESC : WITH THREE OF FOUR CONTROL ROOM CHILLERS OUT OF SERVICE, THE ONLY OPERABLE CHILLER TRIPPED UNEXPECTEDLY FOR UNKNOWN REASONS. THIS RENDERED CONTROL ROOM VENTILATION INOPERABLE.

SSF 11/10/92 LER# 45892025 50.72#: 24579
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : CONTROL ROOM EMERGENCY VENTILATION SYSTEM GROUP
SYSTEM : CONTROL BUILDING/CONTROL COMPLEX ENVIRONMENTAL CONTROL SYSTEM
DESC : BOTH DIVISIONS OF THE CONTROL ROOM VENTILATION SYSTEM WERE DECLARED INOPERABLE DUE TO EQUIPMENT PROBLEMS.

TABLE 8.81 (CONT.)

RIVER BEND

SCRAM 11/24/92 LER# 45892026 50.72#: 24648 PWR HIST: POWER OPERATIONS AT 95%
DESC : A REACTOR SCRAM OCCURRED ON HIGH NEUTRON FLUX FOLLOWING A PRESSURE SPIKE WHILE SHIFTING TO THE STANDBY STEAM PRESSURE REGULATOR.

SSF 11/25/92 LER# 45892027 50.72#:
PWR HIST: EVENT DISCOVERED DURING STARTUP AT 0% POWER.
GROUP : REACTOR CORE ISOLATION COOLING SYSTEMS GROUP
SYSTEM : REACTOR CORE ISOLATION COOLING SYSTEM
DESC : REACTOR CORE ISOLATION COOLING WAS NOT PLACED IN THE STANDBY LINEUP PRIOR TO REACTOR VESSEL PRESSURE INCREASING ABOVE 150 PSIG. THE CAUSE WAS OPERATOR ERROR.

SSF 02/25/93 LER# 45893003 50.72#: 25195
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : PRIMARY CONTAINMENT
DESC : PRIMARY CONTAINMENT INTEGRITY WAS BREACHED WHEN PERSONNEL INADVERTENTLY OPENED ONE AIRLOCK DOOR WHILE THE OTHER DOOR WAS NOT PROPERLY SEALED. THIS WAS ONE OF TWO SIMILAR EVENTS ON THIS DATE.

SSF 02/25/93 LER# 45893003 50.72#: 25195
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : PRIMARY CONTAINMENT
DESC : PRIMARY CONTAINMENT INTEGRITY WAS BREACHED WHEN PERSONNEL INADVERTENTLY OPENED BOTH AIRLOCK DOORS SIMULTANEOUSLY. THIS IS THE SECOND OF TWO SIMILAR EVENTS ON THIS DATE.

SSF 06/29/93 LER# 45893013 50.72#: 25770
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : HIGH PRESSURE CORE SPRAY SYSTEM
DESC : THE HIGH PRESSURE CORE SPRAY SYSTEM WAS DECLARED INOPERABLE AFTER FAILING A SURVEILLANCE TEST. THE PUMP MOTOR BREAKER TRIPPED DURING AN ATTEMPTED START AS A RESULT OF A FAILED OVER-FREQUENCY RELAY.

SSA 07/27/93 LER# 45893016 50.72#: 25844 PWR HIST: COLD SHUTDOWN
DESC : THE HPCS DIESEL AND PUMP UNEXPECTEDLY ACTUATED DURING A SURVEILLANCE TEST. HOWEVER, THE INJECTION VALVE REMAINED CLOSED. THIS EVENT WAS CAUSED BY A PROCEDURE DEFICIENCY.

SCRAM 08/10/93 LER# 45893017 50.72#: 25906 PWR HIST: POWER OPERATIONS AT 75%
DESC : A SHORT CIRCUIT WHILE CONNECTING TEST EQUIPMENT CAUSED STEAM BYPASS VALVES TO OPEN, LEADING TO MSIV CLOSURE ON LOW REACTOR PRESSURE AND A SUBSEQUENT SCRAM.

SSF 08/21/93 LER# 45893020 50.72#: 25953
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION.
GROUP : MULTIPLE SYSTEMS GROUP
SYSTEM : MULTIPLE SYSTEMS
DESC : TORNADO DAMPERS MAY NOT REOPEN FOLLOWING CLOSURE IF VENTILATION EXHAUST FANS ARE IN OPERATION WHEN THE DAMPERS CLOSE. THIS POTENTIALLY AFFECTS THE EDG'S, CONTROL ROOM VENTILATION, AND THE STANDBY SERVICE WATER SYSTEM.

TABLE 8.82

ROBINSON 2

SSF 09/27/93 LER# 26193011 50.72#: 26124
PWR HIST: EVENT DISCOVERED DURING REFUELING.
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : REACTOR CONTAINMENT BUILDING
DESC : CONTAINMENT INTEGRITY WAS NOT IN ACCORDANCE WITH PLANT TECHNICAL SPECIFICATIONS DURING FUEL MOVEMENT, AS A RESULT OF MINOR LEAKAGE THROUGH THE CONTAINMENT BUILDING EQUIPMENT HATCH.

TABLE 8.83

SALEM 1

SSF 11/23/92 LER# 27292024 50.72#: 24643
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : LOW PRESSURE SAFETY INJECTION SYSTEM
DESC : BOTH SAFETY INJECTION SYSTEM PUMPS WERE DECLARED INOPERABLE WHEN A ROOM COOLER LEAK SPRAYED WATER ON #11 SI PUMP MOTOR WITH #12 SI PUMP TAGGED OUT OF SERVICE FOR MAINTENANCE.

TABLE 8.83 (CONT.)

SALEM 1

SCRAM 02/16/93 LER# 27293004 50.72#: 25082 PWR HIST: POWER OPERATIONS AT 100%
DESC : AN AUTOMATIC REACTOR SCRAM OCCURRED ON OVER TEMPERATURE/DELTA TEMPERATURE WHILE PERFORMING A POWER RANGE CHANNEL CALIBRATION.

SSF 04/07/93 LER# 27293010 50.72#: 25367
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : EMERGENCY ONSITE POWER SUPPLY SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : SERVICE WATER FLOW TO THE EDG JACKET WATER AND LUBE OIL COOLERS WAS LESS THAN DESIGN. THIS WAS DUE TO AN INCORRECT SETPOINT FOR THE DIFFERENTIAL PRESSURE CONTROLLERS THAT MODULATE FLOW. EDG OPERABILITY WAS COMPROMISED UNDER CERTAIN OPERATING CONDITIONS.

SCRAM 06/08/93 LER# 27293011 50.72#: 25621 PWR HIST: POWER OPERATIONS AT 100%
DESC : A REACTOR SCRAM OCCURRED DUE TO A LOSS OF CIRCULATING WATER PUMPS. THE CIRCULATING WATER PUMPS TRIPPED WHEN SEA GRASS CLOGGED THE INTAKE SCREENS.

SSA 06/09/93 LER# 27293012 50.72#: 25630 PWR HIST: HOT STANDBY
DESC : AN EMERGENCY DIESEL GENERATOR STARTED AND LOADED ITS EMERGENCY BUS. THE DIESEL START WAS CAUSED BY AN ELECTRICIAN INADVERTENTLY TRIPPING THE BUS.

SCRAM 07/11/93 LER# 27293013 50.72#: 25777 PWR HIST: REACTOR TRIP AT 97% POWER DURING A SHUTDOWN
DESC : THE REACTOR TRIPPED ON LOW SG WATER LEVEL COINCIDENT WITH A STEAM FLOW/FEED FLOW MISMATCH. AS A RESULT OF PERSONNEL ERROR, A FEEDWATER REGULATING VALVE TRIPPED SHUT DURING THE REMOVAL OF AN SPSS RELAY.

SSF 07/22/93 LER# 27293014 50.72#: 25823
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : MEDIUM-VOLTAGE POWER SYSTEM - CLASS 1E
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : VITAL BUS DEGRADED VOLTAGE PROTECTIVE RELAY SETPOINTS WERE NONCONSERVATIVE. THE AS-FOUND SETPOINTS WOULD NOT MEET MINIMUM REQUIRED TERMINAL VOLTAGE FOR SAFETY RELATED MOTORS.

TABLE 8.84

SALEM 2

SCRAM 03/16/93 LER# 31193005 50.72#: 25266 PWR HIST: POWER OPERATIONS AT 100%
DESC : THE REACTOR SCRAMMED ON A LOW STEAM GENERATOR WATER LEVEL SIGNAL CAUSED BY THE LOSS OF A MFP. THE FEED PUMP TRIPPED WHEN A LEAKING VALVE CAUSED A PRESSURE SWITCH TO FAIL DUE TO WATER INTRUSIONS.

SSF 04/07/93 LER# 27293010 50.72#: 25367
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : EMERGENCY ONSITE POWER SUPPLY SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : SERVICE WATER FLOW TO THE EDG JACKET WATER AND LUBE OIL COOLERS WAS LESS THAN DESIGN. THIS WAS DUE TO AN INCORRECT SETPOINT FOR THE DIFFERENTIAL PRESSURE CONTROLLERS THAT MODULATE FLOW. EDG OPERABILITY WAS COMPROMISED UNDER CERTAIN OPERATING CONDITIONS.

SSA 04/15/93 LER# 31193006 50.72#: 25400 PWR HIST: REFUELING
DESC : AN INADVERTENT PARTIAL SAFETY INJECTION SYSTEM ACTUATION OCCURRED DURING TIME RESPONSE TESTING. THIS WAS CAUSED BY AN INADEQUATE TEST PROCEDURE.

SE 05/27/93 LER# 31193008 50.72#: 25609
PWR HIST: CONDITION DISCOVERED DURING STARTUP ACTIVITIES.
DESC : A SINGLE FAILURE IN THE ROD CONTROL SYSTEM RESULTED IN THE INADVERTENT WITHDRAWAL OF A CONTROL ROD. NO OTHER PERFORMANCE INDICATORS WERE INVOLVED.

TABLE 8.84 (CONT.)

SALEM 2

SSF 07/22/93 LER# 27293014 50.72#: 25823
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : MEDIUM-VOLTAGE POWER SYSTEM - CLASS 1E
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : VITAL BUS DEGRADED VOLTAGE PROTECTIVE RELAY SETPOINTS WERE NONCONSERVATIVE. THE AS-FOUND SETPOINTS WOULD NOT MEET MINIMUM REQUIRED TERMINAL VOLTAGE FOR SAFETY RELATED MOTORS.

TABLE 8.85

SAN ONOFRE 2

SE 02/26/93 LER# 50.72#:
PWR HIST: CONDITION EXISTED FOR SEVERAL FUEL CYCLES.
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 2 AND 3.
DESC : BECAUSE OF A POWER DISTRIBUTION MODELING ERROR, DNB RATIOS CALCULATED BY THE CORE PROTECTION CALCULATOR WERE NONCONSERVATIVE OVER SEVERAL FUEL CYCLES. THIS ERROR WOULD HAVE PREVENTED THE ACTUATION OF A DNBR TRIP SIGNAL AT THE DESIRED SETPOINT.

SSF 08/10/93 LER# 36193005 50.72#:
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : MAIN STEAM ISOLATION VALVES GROUP
SYSTEM : MAIN STEAM ISOLATION VALVES
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 2 AND 3.
DESC : A MANAGEMENT WALKDOWN IDENTIFIED THAT SOME RETAINING BOLTS OF THE MSIV ENCLOSURE BLOWOUT PANELS WERE EITHER MISSING, BROKEN, OR IMPROPERLY ENGAGED.

TABLE 8.86

SAN ONOFRE 3

SCRAM 01/16/93 LER# 36293001 50.72#: 24897 PWR HIST: POWER OPERATIONS AT 75%
DESC : A REACTOR SCRAM OCCURRED ON A TURBINE/GENERATOR TRIP THAT RESULTED FROM FLOODING OF THE TURBINE BUILDING FROM TORRENTIAL RAINS.

SE 02/26/93 LER# 50.72#:
PWR HIST: CONDITION EXISTED FOR SEVERAL FUEL CYCLES.
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 2 AND 3.
DESC : BECAUSE OF A POWER DISTRIBUTION MODELING ERROR, DNB RATIOS CALCULATED BY THE CORE PROTECTION CALCULATOR WERE NONCONSERVATIVE OVER SEVERAL FUEL CYCLES. THIS ERROR WOULD HAVE PREVENTED THE ACTUATION OF A DNBR TRIP SIGNAL AT THE DESIRED SETPOINT.

SSF 05/27/93 LER# 36293003 50.72#:
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : REACTOR CONTAINMENT BUILDING
DESC : MOTOR OPERATOR SWITCH SETTINGS ON TWO COMPONENT COOLING WATER CONTAINMENT ISOLATION VALVES AND ONE PRESSURIZER STEAM SAMPLE ISOLATION VALVE WERE INSUFFICIENT TO ENSURE VALVE CLOSURE.

SCRAM 07/05/93 LER# 36293004 50.72#: 25742 PWR HIST: POWER OPERATIONS AT 100%
DESC : A REACTOR SCRAM OCCURRED FOLLOWING A TURBINE TRIP THAT RESULTED WHEN INSTRUMENT AIR TUBING SUPPLYING AIR TO MAIN TURBINE GLAND SEAL SYSTEM FAILED.

SSF 08/10/93 LER# 36193005 50.72#:
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : MAIN STEAM ISOLATION VALVES GROUP
SYSTEM : MAIN STEAM ISOLATION VALVES
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 2 AND 3.
DESC : A MANAGEMENT WALKDOWN IDENTIFIED THAT SOME RETAINING BOLTS OF THE MSIV ENCLOSURE BLOWOUT PANELS WERE EITHER MISSING, BROKEN, OR IMPROPERLY ENGAGED.

TABLE 8.87

SEABROOK

SCRAM 11/27/92 LER# 44392024 50.72#: 24667 PWR HIST: POWER OPERATIONS AT 100%
DESC : A REACTOR TRIP OCCURRED ON A SPURIOUS OVERPOWER DELTA-T SIGNAL DURING TESTING OF A TRIP CHANNEL.

SSF 01/07/93 LER# 44393002 50.72#: 24849
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : MULTIPLE SYSTEMS GROUP
SYSTEM : MULTIPLE SYSTEMS
DESC : DURING RWST LEVEL TRANSMITTER SURVEILLANCE, THE POTENTIAL EXISTS TO AIR BIND THE LPSI AND CONTAINMENT BUILDING SPRAY PUMPS.

SCRAM 01/14/93 LER# 44393003 50.72#: 24816 PWR HIST: POWER OPERATIONS AT 100%
DESC : THE REACTOR SCRAMMED ON A TURBINE TRIP CAUSED BY A PHASE TO GROUND SHORT ON THE MAIN GENERATOR OUTPUT WHEN A VENTILATION DAMPER BROKE LOOSE.

SSF 05/18/93 LER# 44393008 50.72#: 25528
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : EMERGENCY ONSITE POWER SUPPLY SYSTEM
DESC : OVER-COOLING COULD RENDER THE EDGS INOPERABLE, SHOULD CONTROL AIR BE LOST TO JACKET COOLING WATER TEMPERATURE CONTROL VALVES DURING A SEISMIC EVENT.

SCRAM 07/27/93 LER# 44393012 50.72#: 25837 PWR HIST: POWER OPERATIONS AT 100%
DESC : A REACTOR TRIP OCCURRED WHILE TESTING THE SOLID STATE PROTECTION SYSTEM. THE CAUSE WAS A SHORT ON A SOLID STATE PROTECTION SYSTEM CARD DUE TO A FAULTY LAMP TEST ASSEMBLY.

SSF 09/09/93 LER# 44393016 50.72#: 26040
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : AUXILIARY/EMERGENCY FEEDWATER SYSTEMS GROUP
SYSTEM : AUXILIARY/EMERGENCY FEEDWATER SYSTEM
DESC : IT WAS DETERMINED THAT A FAILURE OF HEAT TRACING ON A COMMON RECIRCULATION LINE DURING FREEZING METEOROLOGICAL CONDITIONS COULD POTENTIALLY RENDER THE AFW SYSTEM INOPERABLE.

SCRAM 09/22/93 LER# 44393018 50.72#: 26103 PWR HIST: POWER OPERATIONS AT 100%
DESC : ALL FOUR REACTOR COOLANT PUMPS TRIPPED ON UNDERVOLTAGE FOLLOWING A LOSS OF MAIN GENERATOR EXCITATION, RESULTING IN A REACTOR TRIP.

TABLE 8.88

SEQUOYAH 1

SCRAM 10/26/92 LER# 32792018 50.72#: 24502 PWR HIST: POWER OPERATIONS AT 100%
DESC : WATER ENTRAINED IN THE CONTROL AIR SYSTEM CAUSED THE FAILURE OF A FRV, RESULTING IN A HIGH SG LEVEL TURBINE TRIP. A REACTOR TRIP FOLLOWED.

SE 10/26/92 LER# 32792018 50.72#: 24502
PWR HIST: POWER OPERATIONS AT 100%
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : WATER ENTRAINED IN THE CONTROL AIR SYSTEM RESULTED IN TURBINE RUNBACKS AT BOTH UNITS AND A SCRAM AT UNIT 1.

SSF 11/06/92 LER# 32792019 50.72#:
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : MULTIPLE SYSTEMS GROUP
SYSTEM : MULTIPLE SYSTEMS
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : CONTAINMENT AND CONTROL ROOM ISOLATION ON HIGH GASEOUS ACTIVITY WOULD HAVE OCCURRED AT SETPOINTS GREATER THAN THE ALLOWED VALUES. THE RADIATION MONITORS WERE NOT VACUUM COMPENSATED.

SCRAM 12/31/92 LER# 32792027 50.72#: 24819 PWR HIST: POWER OPERATIONS AT 100%
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : A REACTOR TRIP OCCURRED AT BOTH UNITS DUE TO A FAULT IN THEIR 500 KV SWITCHYARD. THE FAULT OCCURRED AS A RESULT OF AN INADEQUATE TESTING PROCEDURE.

TABLE 8.88 (CONT.)

SEQUOYAH 1

SSA 12/31/92 LER# 32792027 50.72#: 24819 PWR HIST: HOT STANDBY FOLLOWING THE SCRAM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : ALL EMERGENCY DIESEL GENERATORS STARTED AND PROVIDED POWER TO THEIR RESPECTIVE BUSES AFTER A LOSS OF THE 500 KV SWITCHYARD.

SCRAM 02/18/93 LER# 32793003 50.72#: 25101 PWR HIST: POWER OPERATIONS AT 100%
DESC : THE REACTOR SCRAMMED DUE TO A TURBINE TRIP. AN INSTRUCTOR INADVERTENTLY TRIPPED THE EXCITER FIELD BREAKER WHILE EXPLAINING ITS OPERATION.

SSF 04/30/93 LER# 32793010 50.72#: 25470
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : CONTAINMENT ISOLATION CONTROL SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : A DESIGN REVIEW DETERMINED THAT THE LTOP SETPOINTS WERE NONCONSERVATIVE DUE TO A VENDOR SETPOINT CALCULATION ERROR.

SSF 06/11/93 LER# 32793014 50.72#: 25641
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : MEDIUM-VOLTAGE POWER SYSTEM - CLASS 1E
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : A SINGLE FAILURE IN THE VENTILATION COOLING SYSTEM FOR THE VITAL AC INVERTERS AND VITAL BATTERY CHARGERS COULD CAUSE THESE ELECTRICAL COMPONENTS TO EXCEED THEIR TEMPERATURE LIMITS AND RESULT IN THE FAILURE OF BOTH VITAL AC POWER TRAINS.

SSA 06/14/93 LER# 32793015 50.72#: 25649 PWR HIST: COLD SHUTDOWN
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : FOUR EMERGENCY DIESEL GENERATORS AUTO-STARTED AND LOADED A SHUTDOWN POWER BOARD. THIS WAS THE RESULT OF THE 6.9KV BREAKER TRIPPING ON HIGH CURRENT DURING RCP MOTOR TESTING.

SSF 09/17/93 LER# 32793026 50.72#: 26080
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : MULTIPLE SYSTEMS
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : UNQUALIFIED PAINT WAS USED IN THE CONTAINMENT. THE POTENTIAL EXISTS FOR THE PAINT TO PEEL OFF AND PLUG THE SUMP SCREENS, CAUSING INOPERABILITY OF THE ECCS.

TABLE 8.89

SEQUOYAH 2

SE 10/26/92 LER# 32792018 50.72#: 24502
PWR HIST: POWER OPERATIONS AT 100%
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : WATER ENTRAINED IN THE CONTROL AIR SYSTEM RESULTED IN TURBINE RUNBACKS AT BOTH UNITS AND A SCRAM AT UNIT 1.

SSF 11/06/92 LER# 32792019 50.72#:
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : MULTIPLE SYSTEMS GROUP
SYSTEM : MULTIPLE SYSTEMS
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : CONTAINMENT AND CONTROL ROOM ISOLATION ON HIGH GASEOUS ACTIVITY WOULD HAVE OCCURRED AT SETPOINTS GREATER THAN THE ALLOWED VALUES. THE RADIATION MONITORS WERE NOT VACUUM COMPENSATED.

SCRAM 12/31/92 LER# 32792027 50.72#: 24819 PWR HIST: POWER OPERATIONS AT 100%
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : A REACTOR TRIP OCCURRED AT BOTH UNITS DUE TO A FAULT IN THEIR 500KV SWITCHYARD. THE FAULT OCCURRED AS A RESULT OF AN INADEQUATE TESTING PROCEDURES.

TABLE 8.89 (CONT.)

SEQUOYAH 2

SSA 12/31/92 LER# 32792027 50.72#: 24819 PWR HIST: HOT STANDBY FOLLOWING THE SCRAM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : ALL EMERGENCY DIESEL GENERATORS STARTED AND PROVIDED POWER TO THEIR RESPECTIVE BUSES AFTER A LOSS OF THE 500KV SWITCHYARD.

SSF 12/31/92 LER# 32792027 50.72#: 24820
PWR HIST: EVENT DISCOVERED IN HOT STANDBY.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : HIGH PRESSURE SAFETY INJECTION SYSTEM
DESC : THE SUCTION PATH FOR BOTH CHARGING PUMPS WAS LOST FOR APPROXIMATELY ONE MINUTE, DURING THE TRANSIENT FOLLOWING A SCRAM, DUE TO OPERATOR ERROR. THIS WAS THE FIRST OF TWO SIMILAR EVENTS.

SSF 12/31/92 LER# 32792027 50.72#: 24820
PWR HIST: EVENT DISCOVERED IN HOT STANDBY.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : HIGH PRESSURE SAFETY INJECTION SYSTEM
DESC : ALL CENTRIFUGAL CHARGING PUMPS WERE RENDERED INOPERABLE WHEN ALL OF THE SUCTION SOURCES ISOLATED SIMULTANEOUSLY. THIS IS THE SECOND OF TWO SIMILAR EVENTS.

SE 12/31/92 LER# 32792027 50.72#: 24820
PWR HIST: EVENT OCCURRED DURING OPERATION AT 100% POWER.
DESC : BOTH UNIT 1 AND 2 REACTORS SCRAMMED BECAUSE OF AN INTERNAL FAULT IN A SWITCHYARD BREAKER. AS A RESULT OF LIMITED STAFFING, BOTH UNIT 2 CENTRIFUGAL CHARGING PUMP SUCTIONS ISOLATED FOR APPROXIMATELY ONE MINUTE. OTHER COMPLICATIONS OCCURRED.

SSF 04/30/93 LER# 32793010 50.72#: 25470
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : CONTAINMENT ISOLATION CONTROL SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : A DESIGN REVIEW DETERMINED THAT THE LTOP SETPOINTS WERE NONCONSERVATIVE DUE TO A VENDOR SETPOINT CALCULATION ERROR.

SSF 06/11/93 LER# 32793014 50.72#: 25641
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : MEDIUM-VOLTAGE POWER SYSTEM - CLASS 1E
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : A SINGLE FAILURE IN THE VENTILATION COOLING SYSTEM FOR THE VITAL AC INVERTERS AND VITAL BATTERY CHARGERS COULD CAUSE THESE ELECTRICAL COMPONENTS TO EXCEED THEIR TEMPERATURE LIMITS AND RESULT IN THE FAILURE OF BOTH VITAL AC POWER TRAINS.

SSA 06/14/93 LER# 32793015 50.72#: 25649 PWR HIST: COLD SHUTDOWN
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : FOUR EMERGENCY DIESEL GENERATORS AUTO-STARTED AND LOADED A SHUTDOWN POWER BOARD. THIS WAS THE RESULT OF THE 6.9KV BREAKER TRIPPING ON HIGH CURRENT DURING RCP MOTOR TESTING.

SSF 09/17/93 LER# 32793026 50.72#: 26080
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : MULTIPLE SYSTEMS
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : UNQUALIFIED PAINT WAS USED IN THE CONTAINMENT. THE POTENTIAL EXISTS FOR THE PAINT TO PEEL OFF AND PLUG THE SUMP SCREENS, CAUSING INOPERABILITY OF THE ECCS.

TABLE 8.90

SOUTH TEXAS 1

SSF 01/05/93 LER# 49893001 50.72#:
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 77% POWER.
GROUP : REACTOR TRIP INSTRUMENTATION
SYSTEM : PLANT PROTECTION SYSTEM
DESC : TWO RCS DELTA-T CHANNELS WERE INOPERABLE AT THE SAME TIME. WITH ONE CHANNEL INOPERABLE FOR CORRECTIVE MAINTENANCE, THE OTHER WAS DETERMINED TO BE OUT OF TOLERANCE.

TABLE 8.90 (CONT.)

SOUTH TEXAS 1

SSF 01/12/93 LER# 49893003 50.72#: 24867
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : ENGINEERED SAFETY FEATURES INSTRUMENTATION
SYSTEM : ENGINEERED SAFETY FEATURES ACTUATION SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : MULTIPLE STEAM LINE PRESSURE CHANNELS WERE DISCOVERED MISCALIBRATED AND INOPERABLE BECAUSE OF INADEQUATE CALIBRATION PROCEDURES. THIS CONDITION ADVERSELY AFFECTED SAFETY INJECTION AND MSIV CLOSURE ON A MAIN STEAM LINE BREAK.

SE 02/03/93 LER# 49893007 50.72#: 25008
PWR HIST: UNIT 1 TDAFWP #14 WAS INOPERABLE SINCE THE FOURTH REFUELING OUTAGE ENDED (DECEMBER 1992).
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : UNIT 1 TDAFWP #14 EXPERIENCED THREE OVERSPEED TRIPS BETWEEN 12/27/92 AND 2/1/93. UNIT 1 SHUTDOWN AFTER UNIT 2 TDAFWP #24 TRIPPED ON OVERSPEED DURING A SCRAM ON 2/3/93. THE CAUSE OF THE OVERSPEED TRIPS WAS WATER INTRUSION INTO THE TDAFWP TURBINES.

SSF 02/17/93 LER# 49893009 50.72#: 25090
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : ENGINEERED SAFETY FEATURES INSTRUMENTATION
SYSTEM : ENGINEERED SAFETY FEATURES ACTUATION SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : THE ESF ACTUATION TRAIN'S POWER SUPPLY FUSES WERE UNDERSIZED FOR CERTAIN POSTULATED ACCIDENTS. THIS CONDITION CAUSED ALL ACTUATION TRAINS AT BOTH UNITS TO BE DECLARED INOPERABLE.

SE 04/26/93 LER# 50.72#:
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME.
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : ESCALATED ENFORCEMENT ACTIONS BASED ON PERSONNEL, MAINTENANCE AND PROCEDURAL PROBLEMS. NO OTHER PERFORMANCE INDICATORS WERE INVOLVED.

SSF 05/03/93 LER# 49893016 50.72#: 25483
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : ACCIDENT MONITORING INSTRUMENTATION
SYSTEM : POST-ACCIDENT MONITORING SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : BECAUSE OF MISSING SCREWS, PORTIONS OF THE QUALIFIED DISPLAY PROCESSING SYSTEM DID NOT MEET SEISMIC QUALIFICATION REQUIREMENTS.

SSF 08/13/93 LER# 49893020 50.72#: 25917
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : REACTOR CONTAINMENT BUILDING
DESC : SPRINGS ON FEEDWATER BYPASS ISOLATION VALVES WERE INSUFFICIENT TO MAINTAIN THE VALVES CLOSED SHOULD THEIR ASSOCIATED CHECK VALVES LEAK. THIS WAS DISCOVERED DURING AN ACTUAL CHECK VALVE LEAKAGE EVENT.

TABLE 8.91

SOUTH TEXAS 2

SSF 01/12/93 LER# 49893003 50.72#: 24867
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : ENGINEERED SAFETY FEATURES INSTRUMENTATION
SYSTEM : ENGINEERED SAFETY FEATURES ACTUATION SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : MULTIPLE STEAM LINE PRESSURE CHANNELS WERE DISCOVERED MISCALIBRATED AND INOPERABLE BECAUSE OF INADEQUATE CALIBRATION PROCEDURES. THIS CONDITION ADVERSELY AFFECTED SAFETY INJECTION AND MSIV CLOSURE ON A MAIN STEAM LINE BREAK.

SCRAM 01/23/93 LER# 49993001 50.72#: 24935 PWR HIST: POWER OPERATIONS AT 100%
DESC : A REACTOR SCRAM OCCURRED ON A TURBINE TRIP CAUSED BY AN ELECTROHYDRAULIC CONTROL SYSTEM LINE SHEAR.

TABLE 8.91 (CONT.)

SOUTH TEXAS 2

SE 02/03/93 LER# 49893007 50.72#: 25008
PWR HIST: UNIT 2 SCRAM OCCURRED DURING OPERATION AT 100% POWER.
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : UNIT 1 TDAFWP #14 EXPERIENCED THREE OVERSPEED TRIPS BETWEEN 12/27/92 AND 2/1/93. UNIT 1 SHUTDOWN AFTER UNIT 2 TDAFWP #24 TRIPPED ON OVERSPEED DURING A SCRAM ON 2/3/93. THE CAUSE OF THE OVERSPEED TRIPS WAS WATER INTRUSION INTO THE TDAFWP TURBINES.

SCRAM 02/03/93 LER# 49993004 50.72#: 25008 PWR HIST: POWER OPERATIONS AT 50%
DESC : THE REACTOR SCRAMMED ON LOW-LOW STEAM GENERATOR LEVEL FOLLOWING A SEQUENTIAL LOSS OF THE MAIN AND STARTUP FEED PUMPS DUE TO LOW OIL PRESSURE.

SSF 02/17/93 LER# 49893009 50.72#: 25090
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : ENGINEERED SAFETY FEATURES INSTRUMENTATION
SYSTEM : ENGINEERED SAFETY FEATURES ACTUATION SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : THE ESF ACTUATION TRAIN'S POWER SUPPLY FUSES WERE UNDERSIZED FOR CERTAIN POSTULATED ACCIDENTS. THIS CONDITION CAUSED ALL ACTUATION TRAINS AT BOTH UNITS TO BE DECLARED INOPERABLE.

SE 04/26/93 LER# 50.72#:
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME.
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : ESCALATED ENFORCEMENT ACTIONS BASED ON PERSONNEL, MAINTENANCE AND PROCEDURAL PROBLEMS. NO OTHER PERFORMANCE INDICATORS WERE INVOLVED.

SSF 05/03/93 LER# 49893016 50.72#:
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : ACCIDENT MONITORING INSTRUMENTATION
SYSTEM : POST-ACCIDENT MONITORING SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : BECAUSE OF MISSING SCREWS, PORTIONS OF THE QUALIFIED DISPLAY PROCESSING SYSTEM DID NOT MEET SEISMIC QUALIFICATION REQUIREMENTS.

SSF 05/26/93 LER# 49993010 50.72#: 25572
PWR HIST: EVENT DISCOVERED DURING REFUELING OUTAGE.
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : EMERGENCY ONSITE POWER SUPPLY SYSTEM
DESC : ALL THREE EMERGENCY DIESEL GENERATORS WERE INOPERABLE SIMULTANEOUSLY, DUE TO SCHEDULED MAINTENANCE ON TWO OF THE DIESELS, AND FAILURE OF A DRIVE FLEX COUPLING ON THE COOLING WATER TRAVELING SCREEN FOR THE THIRD.

TABLE 8.92

ST. LUCIE 1

SSF 04/09/93 LER# 33593004 50.72#:
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE AUGUST, 1988.
GROUP : REACTOR TRIP INSTRUMENTATION
SYSTEM : PLANT PROTECTION SYSTEM
DESC : THE RCS LOW FLOW REACTOR TRIP SETPOINT HAS BEEN APPROXIMATELY 3% NONCONSERVATIVE SINCE AUGUST 1988. THE CAUSE WAS A TYPOGRAPHICAL ERROR IN THE REPORT USED TO DETERMINE THE SETPOINT.

TABLE 8.93

ST. LUCIE 2

SSA 02/01/93 LER# 38993003 50.72#: 25121 PWR HIST: HOT SHUTDOWN
DESC : THE FOUR SAFETY INJECTION TANK ISOLATION VALVES WERE INADVERTENTLY LEFT OPEN DURING A PLANT COOLDOWN RESULTING IN A 1000 GAL INJECTION TO THE REACTOR COOLANT SYSTEM.

TABLE 8.94

SUMMER

SSA 11/14/92 LER# 39592008 50.72#: 24607 PWR HIST: POWER OPERATIONS AT 100%
DESC : THE "B" EDG AUTO-STARTED AND LOADED THE "B" TRAIN ESF BUS DUE TO A LOSS OF ONE SOURCE OF OFFSITE POWER.

SCRAM 01/12/93 LER# 39592001 50.72#: 24862 PWR HIST: POWER OPERATIONS AT 100%
DESC : A REACTOR TRIP OCCURRED ON A POWER RANGE HIGH RATE SIGNAL. THE CAUSE WAS A BUS FREQUENCY RISE INITIATED WHEN A SWITCHYARD BREAKER OPENED.

SSF 06/28/93 LER# 39593003 50.72#:
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : REACTOR CONTAINMENT BUILDING
DESC : CONTAINMENT PURGE SUPPLY VALVES WERE OPENED, WHEN REQUIRED TO BE CLOSED, BECAUSE OF AN INOPERABLE RADIATION MONITOR.

TABLE 8.95

SURRY 1

SCRAM 01/08/93 LER# 28093001 50.72#: 24852 PWR HIST: POWER OPERATIONS AT 100%
DESC : THE REACTOR TRIPPED ON A SPURIOUS HIGH CONTAINMENT PRESSURE SIGNAL WHEN A RELAY FAILED DURING TESTING.

SSA 01/08/93 LER# 28093001 50.72#: 24852 PWR HIST: HOT STANDBY FOLLOWING THE SCRAM
DESC : A SAFETY INJECTION OCCURRED ON A SPURIOUS HIGH CONTAINMENT PRESSURE SIGNAL WHEN A RELAY FAILED DURING TESTING.

SSA 01/09/93 LER# 28093001 50.72#: 24853 PWR HIST: HOT SHUTDOWN
DESC : A SAFETY INJECTION OF APPROXIMATELY 2600 GALLONS OCCURRED DUE TO PERSONNEL ERROR DURING TROUBLESHOOTING OF THE ESF CIRCUITRY.

SCRAM 02/09/93 LER# 28093002 50.72#: 25046 PWR HIST: POWER OPERATIONS AT 100%
DESC : A REACTOR TRIP AND TURBINE TRIP OCCURRED DURING SURVEILLANCE TESTING WHEN A REACTOR TRIP BREAKER SHUNT TRIP RELAY FAILED.

SSF 02/13/93 LER# 28093003 50.72#:
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : CONTAINMENT ISOLATION CONTROL SYSTEM
DESC : THE CONTAINMENT RADIATION MONITORS WERE INOPERABLE BECAUSE THE AIR RECIRCULATION FANS WERE SECURED. THIS RENDERED THE CONTAINMENT PURGE AND EXHAUST ISOLATION SYSTEM INOPERABLE.

SSF 03/25/93 LER# 28093005 50.72#:
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 60% POWER.
GROUP : CONTROL ROOM EMERGENCY VENTILATION SYSTEM GROUP
SYSTEM : CONTROL BUILDING/CONTROL COMPLEX ENVIRONMENTAL CONTROL SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : TWO OF THREE MAIN CONTROL ROOM CHILLERS BECAME INOPERABLE WHEN A PERSON FAILED TO OPEN THE BACKWASH STRAINER VALVES.

TABLE 8.96

SURRY 2

SSF 03/25/93 LER# 28093005 50.72#:
PWR HIST: EVENT DISCOVERED DURING REFUELING.
GROUP : CONTROL ROOM EMERGENCY VENTILATION SYSTEM GROUP
SYSTEM : CONTROL BUILDING/CONTROL COMPLEX ENVIRONMENTAL CONTROL SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : TWO OF THREE MAIN CONTROL ROOM CHILLERS BECAME INOPERABLE WHEN A PERSON FAILED TO OPEN THE BACKWASH STRAINER VALVES.

TABLE 8.96 (CONT.)

SURRY 2

SCRAM 06/20/93 LER# 28193002 50.72#: 25674 PWR HIST: POWER OPERATIONS AT 100%
DESC : AN AUTOMATIC REACTOR TRIP OCCURRED ON A LOW STEAM GENERATOR WATER LEVEL COINCIDENT WITH A STEAM/FEEDWATER FLOW MISMATCH. A MAIN FEEDWATER PUMP TRIPPED DUE TO AN INSTANTANEOUS MOTOR GROUND.

SCRAM 08/03/93 LER# 28193003 50.72#: 25876 PWR HIST: POWER OPERATIONS AT 98%
DESC : A REACTOR SCRAM OCCURRED ON A LOW STEAM GENERATOR LEVEL COINCIDENT WITH A STEAM/FEEDWATER FLOW MISMATCH. THE "A" MAIN FEEDWATER REGULATING VALVE SHUT DUE TO AN ERRATIC POWER SUPPLY.

SCRAM 08/23/93 LER# 28193004 50.72#: 25958 PWR HIST: POWER OPERATIONS AT 97%
DESC : THE REACTOR TRIPPED WHEN THE TURBINE TRIPPED ON A LOSS OF GENERATOR EXCITATION FIELD BELIEVED TO HAVE BEEN CAUSED BY A VOLTAGE REGULATOR FAILURE.

SCRAM 08/27/93 LER# 28193005 50.72#: 25983 PWR HIST: POWER OPERATIONS AT 97%
DESC : THE REACTOR AUTOMATICALLY TRIPPED WHEN THE SAFETY INJECTION MASTER RELAY FAILED DURING TESTING.

TABLE 8.97

SUSQUEHANNA 1

SCRAM 11/12/92 LER# 38792017 50.72#: 24586 PWR HIST: POWER OPERATIONS AT 100%
DESC : THE MAIN TURBINE TRIPPED DURING A SURVEILLANCE WHEN A RELAY FAILED. A REACTOR TRIP FOLLOWED.

SCRAM 07/12/93 LER# 38793008 50.72#: 25779 PWR HIST: POWER OPERATIONS AT 100%
DESC : A REACTOR SCRAM OCCURRED ON A TURBINE TRIP SIGNAL. HIGH TURBINE VIBRATION OCCURRED WHEN TWO TURBINE BLADES FAILED FROM HIGH CYCLE FATIGUE.

SSA 09/12/93 LER# 38793011 50.72#: 26055 PWR HIST: POWER OPERATIONS AT 96%
DESC : AN EDG STARTED ON A MOMENTARY LOSS OF AN EMERGENCY BUS. THE SUSPECTED CAUSE IS A FAILURE OF THE UNDERVOLTAGE TRIP CIRCUIT.

TABLE 8.98

SUSQUEHANNA 2

NONE

TABLE 8.99

THREE MILE ISL 1

SSF 01/29/93 LER# 28993002 50.72#: 24970
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : MULTIPLE SYSTEMS GROUP
SYSTEM : MULTIPLE SYSTEMS
DESC : WHILE PERFORMING A SURVEILLANCE TEST, AN OPERATOR MISINTERPRETED THE PROCEDURE AND REMOVED BOTH TRAINS OF THE DECAY HEAT RIVER WATER SYSTEM FROM SERVICE.

SE 02/07/93 LER# 50.72#: 25035
PWR HIST: THIS EVENT OCCURRED DURING POWER OPERATIONS AT 100% POWER.
DESC : A SITE AREA EMERGENCY WAS DECLARED AFTER A BREACH OF PLANT SECURITY. NO OTHER PERFORMANCE INDICATORS WERE INVOLVED.

SCRAM 03/12/93 LER# 28993003 50.72#: 25232 PWR HIST: POWER OPERATIONS AT 100%
DESC : A REACTOR SCRAM OCCURRED DUE TO A FALSE REACTOR COOLANT PUMP TRIP SIGNAL DURING A HEAT SINK PROTECTION SYSTEM SURVEILLANCE TEST.

TABLE 8.100

TURKEY POINT 3

SSF 10/31/92 LER# 25092012 50.72#:
PWR HIST: EVENT DISCOVERED DURING REFUELING.
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : REACTOR CONTAINMENT BUILDING
DESC : CONTAINMENT WAS INADVERTENTLY NOT IN EFFECT DURING CORE ALTERATIONS. THE CONTAINMENT PERSONNEL AIRLOCK WAS OPEN TO ATMOSPHERE.

TABLE 8 100 (CONT.)

TURKEY POINT 3

SSF 01/16/93 LER# 25093003 50.72#: 24898
PWR HIST: EVENT DISCOVERED IN COLD SHUTDOWN.
GROUP : CONTAINMENT COOLING SYSTEMS GROUP
SYSTEM : CONTAINMENT SPRAY SYSTEM
DESC : THE CONTAINMENT SPRAY SYSTEM ISOLATION VALVES WERE SHUT IN MODE FOUR DURING A SHUTDOWN RENDERING THE SYSTEM INOPERABLE. THIS EVENT WAS CAUSED BY PERSONNEL ERROR.

SSF 03/25/93 LER# 25093005 50.72#: 25309
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : LOW TEMPERATURE/OVERPRESSURE PROTECTION GROUP
SYSTEM : LOW TEMP/OVERPRESSURE PROTECTION SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 3 AND 4.
DESC : THE OVERPRESSURE MITIGATING SYSTEM WAS DECLARED INOPERABLE DUE TO NONCONSERVATIVELY HIGH SETPOINTS DURING CERTAIN OPERATING CONDITIONS.

TABLE 8.101

TURKEY POINT 4

SSF 03/25/93 LER# 25093005 50.72#: 25309
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : LOW TEMPERATURE/OVERPRESSURE PROTECTION GROUP
SYSTEM : LOW TEMP/OVERPRESSURE PROTECTION SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 3 AND 4.
DESC : THE OVERPRESSURE MITIGATING SYSTEM WAS DECLARED INOPERABLE DUE TO NONCONSERVATIVELY HIGH SETPOINTS DURING CERTAIN OPERATING CONDITIONS.

SCRAM 06/22/93 LER# 25193002 50.72#: 25684 PWR HIST: POWER OPERATIONS AT 35%
DESC : AN AUTOMATIC REACTOR SCRAM RESULTED FROM AN ANTI-MOTORING TURBINE TRIP DURING OVERSPEED TESTING. THIS WAS DUE TO PERSONNEL ERROR DURING THE TEST.

SCRAM 08/16/93 LER# 25193003 50.72#: 25931 PWR HIST: EVENT OCCURRED FOLLOWING A LOAD REDUCTION FROM 25%
DESC : A REACTOR TRIP OCCURRED ON A HIGH SG LEVEL DUE TO A FEEDWATER TRANSIENT INITIATED BY OPERATOR ERROR WHILE RETURNING FEEDWATER HEATERS TO SERVICE.

TABLE 8.102

VERMONT YANKEE

SSF 04/06/93 LER# 27193005 50.72#:
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 60% POWER.
GROUP : PRIMARY REACTOR SYSTEMS GROUP
SYSTEM : CONTROL ROD DRIVE SYSTEM
DESC : DURING TESTING, CONTROL ROD DRIVE SCRAM TIMES WERE GREATER THAN THAT ALLOWED BY PLANT TECH SPECS. THE APPARENT CAUSE IS ATTRIBUTED TO THE SCRAM SOLENOID PILOT VALVES.

SSF 05/27/93 LER# 27193006 50.72#: 25580
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 100% POWER.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : HIGH PRESSURE CORE SPRAY SYSTEM
DESC : THE CORE SPRAY SYSTEM WAS DECLARED INOPERABLE WHEN A D/P GAGE FOR THE LINE BREAK MONITOR WAS FOUND OUT OF CALIBRATION AND READING INCORRECTLY.

SSF 09/18/93 LER# 27193013 50.72#: 26089
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : MULTIPLE SYSTEMS
DESC : SAFETY RELATED SWITCHGEAR FOR 4KV BUSES 3 AND 4 AND 480V BUSES 8 AND 9 WERE FOUND TO HAVE INSUFFICIENT SEISMIC RELATED ANCHORAGE.

TABLE 8.103

VOGTLE 1

SSF 11/09/92 LER# 42492009 50.72#:
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : REACTOR CONTAINMENT BUILDING
DESC : THE RCP THERMAL BARRIER ISOLATION VALVES HAD INADEQUATE CLOSING THRUST VALUES. THIS WAS CAUSED BY INADEQUATE VENDOR SUPPLIED TEST EQUIPMENT ACCURACIES.

SE 11/18/92 LER# 42492010 50.72#:
PWR HIST: CONDITION EXISTED IN ALL MODES TO 100% SINCE EDG 1A WAS ORIGINALLY INSTALLED.
DESC : FAILURE OF EDG 1A DURING SURVEILLANCE TESTING ULTIMATELY REVEALED A FABRICATION ERROR INVOLVING THE AIR DISTRIBUTOR. THIS RENDERED THE EDG TECHNICALLY INOPERABLE SINCE INSTALLATION. NO OTHER PERFORMANCE INDICATORS WERE INVOLVED.

SSF 03/03/93 LER# 42493001 50.72#: 25175
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 90% POWER.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : LOW PRESSURE SAFETY INJECTION SYSTEM
DESC : BOTH TRAINS OF THE RHR SYSTEM, INCLUDING THE LPSI MODE OF OPERATION, WERE RENDERED INOPERABLE WHEN VALVES WERE MISPOSITIONED DURING A SURVEILLANCE TEST.

SSA 04/10/93 LER# 42493004 50.72#: 25381 PWR HIST: REFUELING
DESC : THE "A" TRAIN EMERGENCY DIESEL GENERATOR AUTO-STARTED AND LOADED ITS VITAL BUS DURING A LOAD SEQUENCE TEST. THE CAUSE OF THE EDG START WAS A DESIGN FLAW IN AN ELECTRONIC FILTER.

SSA 04/18/93 LER# 42493006 50.72#: 25411 PWR HIST: COLD SHUTDOWN
DESC : THE HIGH PRESSURE SAFETY INJECTION SYSTEM AUTO-STARTED AND INJECTED INTO THE RCS DUE TO PERSONNEL ERROR DURING ESFAS TESTING.

SCRAM 05/03/93 LER# 42493008 50.72#: 25475 PWR HIST: POWER OPERATIONS AT 99%
DESC : A REACTOR SCRAM OCCURRED DUE TO A TURBINE TRIP. THE TURBINE TRIP WAS CAUSED BY A LOSS OF EHC HYDRAULIC PRESSURE DUE TO A FAILED PUMP, AND AN OUT OF CALIBRATION PRESSURE SWITCH.

SCRAM 07/28/93 LER# 42493009 50.72#: 25851 PWR HIST: POWER OPERATIONS AT 100%
DESC : A SPIKE ON A REACTOR PRESSURE TRANSMITTER OCCURRED WHILE VALVING IN ANOTHER TRANSMITTER, RESULTING IN A REACTOR TRIP.

TABLE 8.104

VOGTLE 2

SSF 01/29/93 LER# 42593001 50.72#:
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : LOW TEMPERATURE/OVERPRESSURE PROTECTION GROUP
SYSTEM : LOW TEMP/OVERPRESSURE PROTECTION SYSTEM
DESC : THE COLD OVERPRESSURE PROTECTION SYSTEM WAS INOPERABLE BECAUSE INCORRECT SETPOINTS WERE USED TO CALIBRATE THE RELIEF VALVES.

SSF 08/09/93 LER# 42593005 50.72#:
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 99% POWER.
GROUP : CONTROL ROOM EMERGENCY VENTILATION SYSTEM GROUP
SYSTEM : CONTROL BUILDING/CONTROL COMPLEX ENVIRONMENTAL CONTROL SYSTEM
DESC : BOTH CONTROL ROOM CHILLERS BECAME INOPERABLE DURING TESTING WHEN ONE TRAIN WAS TURNED OFF AND THE OTHER TRAIN TRIPPED MOMENTS AFTER BEING STARTED. THIS EVENT WAS CAUSED BY A CLOGGED PURGE SOLENOID VALVE.

SCRAM 09/08/93 LER# 42593006 50.72#: 26037 PWR HIST: EVENT OCCURRED AT 79% POWER, COASTDOWN TO REFUEL
DESC : ONE OF FOUR RUNNING REACTOR COOLANT PUMPS TRIPPED, RESULTING IN A REACTOR TRIP. THE CAUSE WAS RELATED TO A FUSE INSPECTION IN PROGRESS AT THE TIME.

TABLE 8.105

WASH. NUCLEAR 2

SSF 11/01/92 LER# 39792043 50.72#:
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : RESIDUAL HEAT REMOVAL SYSTEMS GROUP
SYSTEM : RESIDUAL HEAT REMOVAL SYSTEM
DESC : A DISCREPANCY BETWEEN PLANT PROCEDURES AND THE MONITORING RANGE OF RPV INSTRUMENTATION COULD HAVE DEGRADED THE ABILITY TO REMOVE RESIDUAL HEAT DURING A POST-FIRE PLANT SHUTDOWN.

TABLE 8.105 (CONT.)

WASH. NUCLEAR 2

SSF 01/13/93 LER# 39793001 50.72#: 24878
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : PRIMARY CONTAINMENT
DESC : BOTH TRAINS OF THE SUPPRESSION POOL COOLING MODE OF RHR WERE INOPERABLE AT TIMES IN THE PAST, DUE TO AN INADEQUATE RHR SYSTEM DESIGN, RESULTING IN THE POTENTIAL FOR WATER HAMMER.

SSF 01/14/93 LER# 39793004 50.72#: 25070
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : LOW PRESSURE COOLANT INJECTION SYSTEM
DESC : THE LOW PRESSURE COOLANT INJECTION MODE OF THE RHR SYSTEM MAY NOT HAVE FUNCTIONED UNDER DESIGN BASIS CONDITIONS BECAUSE TWO FUSES WERE INSTALLED WRONG.

SCRAM 01/21/93 LER# 39793002 50.72#: 24916 PWR HIST: POWER OPERATIONS AT 100%
DESC : A REACTOR SCRAM OCCURRED ON A REACTOR PRESSURE VESSEL LOW WATER LEVEL SIGNAL DUE TO THE TRIP OF A REACTOR FEED PUMP. THE REACTOR FEED PUMP TRIPPED BECAUSE OF WETTED VIBRATION SENSING CIRCUITRY WHEN THE FIRE DELUGE SYSTEM INADVERTENTLY ACTUATED.

SSF 01/21/93 LER# 39793003 50.72#: 24918
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : EMERGENCY AC/DC POWER SYSTEMS GROUP
SYSTEM : MEDIUM-VOLTAGE POWER SYSTEM - CLASS 1E
DESC : A FAULT ON A SAFETY BUS COULD RESULT IN THE LOSS OF OFFSITE POWER AND THE DELAYED LOADING OF A NON-FAULTED SAFETY BUS ONTO ITS ASSOCIATED EMERGENCY DIESEL GENERATOR.

SCRAM 02/10/93 LER# 39793007 50.72#: 25056 PWR HIST: POWER OPERATIONS AT 94%
DESC : THE FAILURE OF A REACTOR FEEDWATER PUMP GOVERNOR RESULTED IN A LOSS OF THE PUMP AND A REACTOR SCRAM ON LOW REACTOR VESSEL WATER LEVEL.

SSF 02/17/93 LER# 39793009 50.72#: 25094
PWR HIST: CONDITION EXISTED FOR AN INDETERMINATE PERIOD OF TIME
GROUP : RESIDUAL HEAT REMOVAL SYSTEMS GROUP
SYSTEM : RESIDUAL HEAT REMOVAL SYSTEM
DESC : THE CAPABILITY OF THE RHR SYSTEM TO REMOVE DECAY HEAT COULD BE DEGRADED DUE TO GAS ACCUMULATION IN RPV LEVEL INSTRUMENTATION DURING A MODERATE ENERGY PIPE CRACK EVENT.

SSF 03/18/93 LER# 39793013 50.72#: 25283
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : PRIMARY CONTAINMENT
DESC : A LOSS OF CONTAINMENT INTEGRITY COULD OCCUR BASED ON A POSTULATED SINGLE FAILURE OF THE RCIC PUMP SUCTION ISOLATION VALVE FROM THE SUPPRESSION POOL. THE VALVE COULD FAIL AS IS (OPEN), WHICH RESULTS IN AN UNISOLABLE RELEASE PATH.

SSF 03/31/93 LER# 39793015 50.72#: 25335
PWR HIST: EVENT DISCOVERED DURING OPERATION AT 97% POWER.
GROUP : EMERGENCY CORE COOLING SYSTEMS GROUP
SYSTEM : HIGH PRESSURE CORE SPRAY SYSTEM
DESC : THE HPCS SYSTEM WAS DECLARED INOPERABLE DUE TO DEGRADED SYSTEM FLOW RATES FOUND DURING A SURVEILLANCE TEST.

SSF 04/12/93 LER# 39793013 50.72#: 25387
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : REACTOR BUILDING
DESC : A LOSS OF SECONDARY CONTAINMENT INTEGRITY COULD OCCUR, BASED ON A POSTULATED SINGLE FAILURE OF TWO EQUIPMENT AND FLOOR DRAIN ISOLATION VALVES. THIS COULD RESULT IN AN UNISOLABLE RELEASE PATH.

SSF 04/28/93 LER# 39793018 50.72#: 25455
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : MULTIPLE SYSTEMS GROUP
SYSTEM : MULTIPLE SYSTEMS
DESC : A DESIGN BASIS REVIEW DETERMINED THAT UNDER CERTAIN LOCA CONDITIONS, THE SPENT FUEL POOL COULD OVERFLOW AND CAUSE THE LOSS OF MULTIPLE ECCS PUMPS.

TABLE 8.105 (CONT.)

WASH. NUCLEAR 2

SSA 05/10/93 LER# 39793019 50.72#: 25502 PWR HIST: REFUELING
DESC : AN AUTOSTART OF TWO EMERGENCY DIESEL GENERATORS OCCURRED ON A LOSS OF OFFSITE POWER, ONE EDG LOADED ITS RESPECTIVE BUS. THE LOOP WAS CAUSED BY A BREAKER TRIP FROM EXCESSIVE REACTIVE LOAD.

SSF 06/02/93 LER# 39793021 50.72#: 25600
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : MULTIPLE SYSTEMS GROUP
SYSTEM : MULTIPLE SYSTEMS
DESC : IN THE EVENT OF A SINGLE FAILURE OF A SERVICE WATER PUMP DURING POST LOCA CONDITIONS, THE SERVICE WATER SYSTEM COULD DRAIN AND CREATE A SECONDARY CONTAINMENT BYPASS LEAKAGE PATH FOR RADIOACTIVE MATERIAL.

SSF 06/05/93 LER# 39793023 50.72#:
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : CONTAINMENT COOLING SYSTEMS GROUP
SYSTEM : CONTAINMENT SPRAY SYSTEM
DESC : FLEXIBLE CONDUITS FOR TWO DRYWELL PRESSURE SWITCHES DID NOT MEET SEISMIC QUALIFICATION REQUIREMENTS. THEIR FAILURE COULD INHIBIT INITIATION OF UPPER DRYWELL SPRAY.

SCRAM 08/03/93 LER# 39793027 50.72#: 25871 PWR HIST: POWER OPERATIONS AT 100%
DESC : A REACTOR SCRAM OCCURRED WHEN ALL MSIVS CLOSED. THE "B" INBOARD MSIV CLOSED, CAUSING ALL OTHER MSIVS TO CLOSE. THE "B" MSIV PILOT VALVE HAD NOT BEEN REFURBISHED PROPERLY DURING THE LAST REFUELING OUTAGE.

TABLE 8.106

WATERFORD 3

SSA 10/02/92 LER# 38292012 50.72#: 24371 PWR HIST: REFUELING
DESC : AN IMPROPERLY LANDED JUMPER USED DURING RELAY REPLACEMENT RESULTED IN A PARTIAL SI SIGNAL. ALL REQUIRED EQUIPMENT ACTUATED AS DESIGNED.

SCRAM 03/04/93 LER# 38293001 50.72#: 25191 PWR HIST: POWER OPERATIONS AT 100%
DESC : AN AUTOMATIC REACTOR SCRAM OCCURRED AS RESULT OF A LOSS OF POWER TO TWO PLANT PROTECTION CHANNELS. THE LOSS OF POWER WAS CAUSED BY AGE RELATED DEGRADATION OF A FREQUENCY DETECTION CARD IN A UPS.

SCRAM 06/15/93 LER# 38293002 50.72#: 25656 PWR HIST: POWER OPERATIONS AT 100%
DESC : A REACTOR SCRAM OCCURRED DUE TO HIGH STEAM GENERATOR WATER LEVEL. THE HIGH WATER LEVEL WAS CAUSED BY A FEED CONTROL VALVE FAILING FULL OPEN.

TABLE 8.107

WOLF CREEK

SCRAM 11/10/92 LER# 48292016 50.72#: 24576 PWR HIST: POWER OPERATIONS AT 100%
DESC : PERSONNEL ERROR ON THE PART OF AN OFFSITE TRANSMISSION COMPANY EMPLOYEE RESULTED IN A GRID VOLTAGE DEGRADATION THAT CAUSED A TURBINE TRIP AND REACTOR TRIP.

SSF 03/14/93 LER# 48293003 50.72#:
PWR HIST: EVENT DISCOVERED DURING REFUELING.
GROUP : CONTAINMENT AND CONTAINMENT ISOLATION GROUP
SYSTEM : REACTOR CONTAINMENT BUILDING
DESC : CONTAINMENT INTEGRITY WAS NOT ESTABLISHED PRIOR TO CORE ALTERATIONS DUE TO PERSONNEL ERROR.

SSA 05/04/93 LER# 48293009 50.72#: 25485 PWR HIST: COLD SHUTDOWN
DESC : THE ECCS PUMPS ACTUATED DURING AN INTEGRATED SAFEGUARDS TEST ON SI LOGIC DUE TO PERSONNEL ERROR. NO INJECTION OCCURRED.

TABLE 8.108

ZION 1

SSA 10/08/92 LER# 29592019 50.72#: 24394 PWR HIST: POWER OPERATIONS AT 91%
DESC : WHILE RECOVERING FROM A SAFEGUARDS ACTUATIONS TEST, AN ESF ACTUATION SIGNAL OCCURRED. THE "1B" CHARGING PUMP AND THE "1A" SI PUMP AUTO STARTED.

TABLE 8.108 (CONT.)

ZION 1

SSA 12/30/92 LER# 29592024 50.72#: 24813 PWR HIST: POWER OPERATIONS AT 99%
DESC : A LPSI PUMP AUTO-STARTED DUE TO IMPROPER SETUP AND ADJUSTMENT OF THE SEQUENCE TIMERS DURING INSTALLATION.

SSA 12/31/92 LER# 29592024 50.72#: 24817 PWR HIST: POWER OPERATIONS AT 99%
DESC : A LPSI PUMP AUTO-STARTED DUE TO THE INADVERTENT MANIPULATION OF THE SEQUENCE TIMER CONTACTS. THIS WAS THE SECOND OF TWO EVENTS.

SSF 01/21/93 LER# 29593003 50.72#: 24915
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : LOW TEMPERATURE/OVERPRESSURE PROTECTION GROUP
SYSTEM : LOW TEMP/OVERPRESSURE PROTECTION SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : THE LOW TEMPERATURE OVERPRESSURE PROTECTION SYSTEM WAS INOPERABLE DO TO A NONCONSERVATIVE HIGH PRESSURE SETPOINT.

SCRAM 07/07/93 LER# 29593007 50.72#: 25751 PWR HIST: POWER OPERATIONS AT 100%
DESC : A REACTOR TRIP OCCURRED DURING SURVEILLANCE TESTING. THE TRIP WAS CAUSED BY A RCP TRIP RESULTING FROM AN INVALID LOOP STOP ISOLATION VALVE CLOSURE SIGNAL.

TABLE 8.109

ZION 2

SSF 01/21/93 LER# 29593003 50.72#: 24915
PWR HIST: CONDITION EXISTED IN ALL MODES UP TO 100% POWER SINCE INITIAL OPERATION
GROUP : LOW TEMPERATURE/OVERPRESSURE PROTECTION GROUP
SYSTEM : LOW TEMP/OVERPRESSURE PROTECTION SYSTEM
OTH UNIT: THIS EVENT WAS ASSIGNED TO UNITS 1 AND 2.
DESC : THE LOW TEMPERATURE OVERPRESSURE PROTECTION SYSTEM WAS INOPERABLE DO TO A NONCONSERVATIVE HIGH PRESSURE SETPOINT.

PERFORMANCE INDICATORS FOR OPERATING COMMERCIAL NUCLEAR POWER REACTORS
Data through September 1993

OFFICE FOR ANALYSIS AND EVALUATION OF OPERATIONAL DATA

PART II

U.S. NUCLEAR REGULATORY COMMISSION

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PART II

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9. PLANT DATA TABLES

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TABLE 9.1 ARKANSAS 1

Type	Phase	Year - Calendar Quarters											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	1	0	0	0	0	0	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	1	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	0	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	0	1	1	2	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	2	0	0	0	0	0	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		0	13	1	1	0	0	0	0	0	3	0	0
EFO/1000 HRS		0.00	1.60	0.00	0.45	0.00	0.00	0.77	0.00	0.00	0.47	0.00	0.00
CRIT. HRS		33	1875	1858	2208	2209	1417	1304	2208	2209	2119	2183	1645
RAD		336	108	45	10	12	342	189	5	9	7	4	NA
CAUSE CODES:													
Admin.	Operations	0	0	2	1	3	0	0	0	1	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	1	0	0	0	0	0	2	0	0	0	0	0
	Refueling	5	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	1	0	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	1	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	0	0	1	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	2	0	0	0	0	0	0	0	0	0	0
	Refueling	2	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	0	0	3	0	2	0	0	0	1	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	2	2	0	0	0	0	2	0	0	0	0	0
	Refueling	5	0	0	0	0	0	1	0	0	0	0	0
	Non-Refueling	0	0	2	0	0	0	0	0	0	0	0	0
Design	Operations	0	0	2	1	2	0	0	0	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	3	0	0	0	0	0	2	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	0	0	0	0	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Pre-Refueling	Operation	10/01/90	10/03/90	3
Refueling	Shutdown	10/04/90	12/16/90	74
Start-up	Operation	12/17/90	12/18/90	2
Non-Refueling	Shutdown	12/18/90	12/20/90	2
Start-up	Operation	12/21/90	12/23/90	3
Non-Refueling	Shutdown	12/24/90	01/03/91	11
Start-up	Operation	01/04/91	01/10/91	7
Non-Refueling	Shutdown	01/11/91	01/16/91	6
Start-up	Operation	01/17/91	01/29/91	13
Operation	Operation	01/30/91	04/08/91	69
Non-Refueling	Shutdown	04/09/91	04/21/91	13
Operation	Operation	04/22/91	02/07/92	292
Pre-Refueling	Operation	02/08/92	03/03/92	25
Refueling	Shutdown	03/04/92	05/04/92	62
Start-up	Operation	05/05/92	05/29/92	25
Operation	Operation	05/30/92	08/16/93	444
Pre-Refueling	Operation	08/17/93	09/10/93	25
Refueling	Shutdown	09/11/93	09/30/93	20

Time used in calculations

Trend Calculations			Deviation Calculations		
Op	12/15/92-09/10/93	270 days (incl. 0 days s/u)	Op	01/18/92-09/10/93	540 days (incl. 25 days s/u)
S/D	04/01/92-09/30/93	54 days (incl. 54 days ref)	S/D	10/12/90-09/30/93	180 days (incl. 148 days ref)
FOR	12/11/92-09/07/93	270 days	FOR	01/05/92-09/07/93	540 days

TABLE 9.2 ARKANSAS 2

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	1	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	1	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SEF	Operations	0	1	2	2	2	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	1	0	0	0	0
	Non-Refueling	0	0	1	0	1	0	0	0	0	0	0	0
FOR (%)		0	2	1	0	7	24	35	0	0	0	0	2
EFO/1000 HRS		0.00	0.80	0.55	0.00	0.97	0.61	0.00	0.00	0.00	0.00	0.00	0.45
CRIT. HRS		2209	1249	1817	2208	2087	1652	1426	1586	1791	2160	1813	2208
RAD		336	108	45	10	12	25	68	147	91	7	21	NA
CAUSE CODES:													
Admin.	Operations	3	2	3	2	3	1	0	0	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	1	0	0	0
	Refueling	0	0	2	0	0	0	0	1	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	1	0	0	0	1	0
Lic. Oper.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	1	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	1	0	0	0	0	0
Oth. Per.	Operations	2	2	0	0	0	0	0	1	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	0	0	0	0
	Refueling	0	1	0	0	0	[illegible]	0	0	1	0	0	0
	Non-Refueling	0	0	1	0	0		1	0	0	0	0	0
Maint.	Operations	4	3	2	0	4		0	1	1	0	0	0
	Pre-Refueling	0	2	0	0	0		0	0	0	0	0	0
	Startup	0	0	2	0	0		0	0	1	0	0	0
	Refueling	0	2	2	0	0	0	0	1	1	0	0	0
	Non-Refueling	0	0	1	0	0	1	1	0	0	0	1	0
Design	Operations	2	1	1	3	1	0	0	0	0	0	0	0
	Pre-Refueling	0	1	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	0	0	0	0
	Refueling	0	1	1	0	0	0	0	1	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	1	0
Misc.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	1	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	01/30/91	122
Pre-Refueling	Operation	01/31/91	02/24/91	25
Refueling	Shutdown	02/25/91	04/13/91	48
Start-up	Operation	04/14/91	04/15/91	2
Non-Refueling	Shutdown	04/16/91	04/18/91	3
Start-up	Operation	04/19/91	05/11/91	23
Operation	Operation	05/12/91	10/23/91	165
Non-Refueling	Shutdown	10/24/91	10/26/91	3
Operation	Operation	10/27/91	03/09/92	135
Non-Refueling	Shutdown	03/10/92	05/01/92	53
Operation	Operation	05/02/92	08/14/92	105
Pre-Refueling	Operation	08/15/92	09/08/92	25
Refueling	Shutdown	09/09/92	10/13/92	35
Start-up	Operation	10/14/92	10/15/92	2
Non-Refueling	Shutdown	10/16/92	10/17/92	2
Start-up	Operation	10/18/92	11/09/92	23
Operation	Operation	11/10/92	05/01/93	173
Non-Refueling	Shutdown	05/02/93	05/15/93	14
Operation	Operation	05/16/93	09/30/93	138

Time used in calculations

Trend Calculations

Op	12/21/92-09/30/93	270 days (incl.	0 days s/u)
S/D	04/01/92-05/15/93	82 days (incl.	35 days ref)
FOR	12/19/92-09/30/93	270 days	

Deviation Calculations

Op	12/27/91-09/30/93	540 days (incl.	25 days s/u)
S/D	02/25/91-05/15/93	158 days (incl.	83 days ref)
FOR	02/08/92-09/30/93	540 days	

TABLE 9.3 BEAVER VALLEY 1

Type	Phase	Year - Calendar Quarter 90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	0	0	0	0	0	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	2	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	1	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	0	0	0	2	1	0	0	1	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	3		0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0		1	0	0	0	0	0	0	0
FOR (%)		8	17	0	1	41	0	0	0	26	0	15	0
EFO/1000 HRS		0.97	1.10	0.00	1.2	0.00	0.00	0.00	0.00	0.61	0.00	0.00	0.00
CRIT. HRS		2063	1820	285	1612	1313	2184	2183	2208	1652	2042	355	2208
RAD		54	20	201	13	15	6	4	5	17	17	368	NA
CAUSE CODES:													
Admin.	Operations	1	1	0	2	0	2	1	1	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	1	0	0	0	0	0	0	1	1
	Refueling	0	0	4	0	0	0	0	0	0	0	1	0
	Non-Refueling	3	1	0	0	2	0	0	0	1	0	1	0
Lic. Oper.	Operations	0	0	0	1	0	0	0	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	1	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	1	0	0	0	0	0	0	0
Oth. Per.	Operations	1	4	0	0	0	0	1	0	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	1	0	0	0	0	0	0	0	1
	Refueling	0	0	1	0	0	0	0	0	0	0	2	0
	Non-Refueling	0	0	0	0	1	0	0	0	0	0	0	0
Maint.	Operations	6	6	0	2	1	3	2	2	1	2	0	0
	Pre-Refueling	0	0	1	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	2	0	0	0	0	0	0	0	1
	Refueling	0	0	6	0	0	0	0	0	0	0	3	0
	Non-Refueling	0	1	0	0	2	0	0	0	1	0	1	0
Design	Operations	0	0	0	1	1	1	0	0	1	2	0	0
	Pre-Refueling	0	0	1	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	3	0	0	0	0	0	0	0	1	0
	Non-Refue.	0	1	0	0	0	0	0	0	1	0	0	0
Misc.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	2	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	10/08/90	6
Non-Refueling	Shutdown	10/07/90	10/08/90	2
Operation	Operation	10/09/90	01/17/91	101
Non-Refueling	Shutdown	01/18/91	01/30/91	13
Operation	Operation	01/31/91	03/20/91	49
Pre-Refueling	Operation	03/21/91	04/14/91	25
Refueling	Shutdown	04/15/91	06/26/91	73
Start-up	Operation	06/27/91	06/28,91	2
Non-Refueling	Shutdown	06/29/91	07/16/91	18
Start-up	Operation	07/17/91	08/08/91	23
Operation	Operation	08/09/91	09/.8/91	41
Non-Refueling	Shutdown	09/19/91	09/23/91	5
Operation	Operation	09/24/91	10/22/91	29
Non-Refueling	Shutdown	10/23/91	11/27/91	36
Operation	Operation	11/28/91	10/09/92	317
Non-Refueling	Shutdown	10/10/92	10/31/92	22
Operation	Operation	11/01/92	03/04/93	124
Pre-Refueling	Operation	03/05/93	03/29/93	25
Refueling	Shutdown	03/30/93	06/07/93	70
Start-up	Operation	06/08/93	06/09/93	2
Non-Refueling	Shutdown	06/10/93	06/14/93	5
Start-up	Operation	06/15/93	07/07/93	23
Operation	Operation	07/08/93	09/30/93	85

Time used in calculations

Trend Calculations			Deviation Calculations		
Op	10/01/92-09/30/93	268 days (incl. 25 days s/u)	Op	01/03/92-09/30/93	540 days (incl. 25 days s/u)
S/D	10/17/92-06/14/93	90 days (incl. 70 days ref)	S/D	06/03/91-06/14/93	180 days (incl. 94 days ref)
FOR	10/20/92-09/30/93	270 days	FOR	01/24/92-09/30/93	540 days

TABLE 9.4 BEAVER VALLEY 2

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	0	1	0	0	0	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SBA	Operations	0	0	0	0	0	0	0	0	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	0	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	1	0	1	0	0	0	0	0	0	2	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	2	0	0	0	0	0	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (#)		0	0	0	0	2	0	1	0	0	2	0	0
EFO/1000 HRS		0.00	0.00	0.00	0.00	0.46	0.00	0.80	0.00	0.00	0.47	0.00	0.00
CRIT. HRS		997	2160	2183	2208	2162	1751	1253	2208	2209	2128	2183	1895
RAD		54	20	201	13	15	113	120	2	2	1	4	NA
CAUSE CODES:													
Admin.	Operations	0	0	1	0	0	1	0	1	0	1	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	1
	Startup	1	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	0	2	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	0	[illegible]	0	0	0	0	0	0	0	1	0	0
	Pre-Refueling	0	[illegible]	0	0	0	1	0	0	0	0	0	0
	Startup	2	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	1	0	0	0	0	0
Oth. Per.	Operations	0	0	1	2	0	0	0	0	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	1	0	1	2	1	1	1	2	2	4	1	0
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	1
	Startup	5	0	0	0	0	0	1	0	0	0	0	0
	Refueling	2	0	0	0	0	0	2	0	0	0	0	0
	Non-Refueling	1	0	0	0	0	0	0	0	0	0	0	0
Design	Operations	0	0	0	0	1	0	0	0	1	4	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	2	0	0	0	0	1	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	0	0	0	0	0	0	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Refueling	Shutdown	10/01/90	11/11/90	42
Start-up	Operation	11/12/90	11/13/90	2
Non-Refueling	Shutdown	11/14/90	11/19/90	6
Start-up	Operation	11/20/90	12/12/90	23
Operation	Operation	12/13/90	02/19/92	434
Pre-Refueling	Operation	02/20/92	03/15/92	25
Refueling	Shutdown	03/16/92	05/02/92	48
Start-up	Operation	05/03/92	05/04/92	2
Non-Refueling	Shutdown	05/05/92	05/08/92	4
Start-up	Operation	05/09/92	05/31/92	23
Operation	Operation	06/01/92	08/25/93	451
Pre-Refueling	Operation	08/26/93	09/19/93	25
Refueling	Shutdown	09/20/93	09/30/93	11

Time used in calculations

Trend Calculations

Op	12/24/92-09/19/93	270 days (incl.	0 days s/u)
S/D	04/01/92-09/30/93	47 days (incl.	43 days ref)
FOR	12/21/92-09/17/93	270 days	

Deviation Calculations

Op	02/06/92-09/19/93	540 days (incl.	25 days s/u)
S/D	10/01/80-09/30/93	111 days (incl.	101 days ref)
FOR	01/27/92-09/17/93	540 days	

TABLE 9.5 BIG ROCK POINT

Type	Phase	Year - Calender Quarter 90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	2	0	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	0	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	1
	Non-Refueling	0	0	1	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	1	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	2	0	0	0	0	1	1
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		1	0	23	2	0	0	11	12	14	0	0	0
EFO/1000 HRS		1.23	0.00	0.00	0.00	0.00	0.00	1.00	1.61	1.04	0.00	0.00	0.00
CRIT. HRS		810	2160	1695	2154	1441	0	1002	1859	1930	2048	2067	637
RAD		142	12	20	12	139	181	53	12	20	25	10	NA
CAUSE CODES:													
Admin.	Operations	0	0	0	0	0	0	0	1	2	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	2	0	0	0	0	0	2	0	0	0	0	0
	Refueling	1	0	0	0	0	2	2	0	0	0	1	3
	Non-Refueling	0	0	0	0	0	0	0	1	0	0	0	0
Lic. Oper.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	1	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	1	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	0	0	1	1	0	0	0	0	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	2	2	1	0	0	0	0	1
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	0	0	2	1	0	0	0	1	2	1	0	0
	Pre-Refueling	0	0	0	0	1	0	0	0	0	0	0	0
	Startup	1	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	3	3	2	0	0	0	1	4
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Design	Operations	0	1	0	0	0	0	0	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	2	0	0	0	0	0
	Refueling	0	0	0	0	0	1	0	0	0	0	0	3
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Refueling	Shutdown	10/01/90	11/26/90	57
Start-up	Operation	11/27/90	12/21/90	25
Operation	Operation	12/22/90	05/29/91	159
Non-Refueling	Shutdown	05/30/91	06/17/91	19
Operation	Operation	06/18/91	11/06/91	142
Pre-Refueling	Operation	11/07/91	12/01/91	25
Refueling	Shutdown	12/02/91	05/11/92	162
Start-up	Operation	05/12/92	06/03/92	23
Non-Refueling	Shutdown	06/04/92	06/05/92	2
Start-up	Operation	06/06/92	06/07/92	2
Operation	Operation	06/08/92	08/12/92	66
Non-Refueling	Shutdown	08/13/92	08/16/92	4
Operation	Operation	08/17/92	08/19/92	3
Non-Refueling	Shutdown	08/20/92	08/22/92	3
Operation	Operation	08/23/92	08/30/92	8
Non-Refueling	Shutdown	08/31/92	09/01/92	2
Operation	Operation	09/02/92	10/04/92	33
Non-Refueling	Shutdown	10/05/92	10/07/92	3
Operation	Operation	10/08/92	10/29/92	22
Non-Refueling	Shutdown	10/30/92	11/02/92	4

Phase	Phase type	Start	End	Length
Operation	Operation	11/03/92	12/06/92	34
Non-Refueling	Shutdown	12/07/92	12/09/92	3
Operation	Operation	12/10/92	02/28/93	81
Non-Refueling	Shutdown	03/01/93	03/04/93	4
Operation	Operation	03/05/93	06/02/93	90
Pre-Refueling	Operation	06/03/93	06/27/93	25
Refueling	Shutdown	06/28/93	09/03/93	68
Start-up	Operation	09/04/93	09/28/93	25
Operation	Operation	09/29/93	09/30/93	2

Time used in calculations:

Trend Calculations			Deviation Calculations		
Op	10/17/92-09/30/93	270 days (incl. 25 days s/u)	Op	07/29/91-09/30/93	540 days (incl. 50 days s/u)
S/D	08/14/92-09/03/93	90 days (incl. 68 days ref)	S/D	02/15/92-09/03/93	180 days (incl. 155 days ref)
FOR	10/19/92-09/30/93	270 days	FOR	08/03/91-09/30/93	540 days

TABLE 9.6 BRAIDWOOD 1

		Year - Calendar Quarter											
Type	Phase	90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	1	0	0	0	1	0	0	0	0	1	0	0
	Pre-Refueling	1	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	1	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	1	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	0	0	1	0	2	0	1	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	1	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		28	100	0	1	11	4	0	0	0	8	3	0
EFO/1000 HRS		1.86	0.00	0.00	0.45	0.97	0.47	0.00	0.00	0.00	0.50	0.48	0.00
CRIT. HRS		1615	0	1073	2208	2072	2119	2183	1587	1348	2000	2088	2208
RAD		4	69	38	42	126	6	5	54	49	80	45	NA
CAUSE CODES:													
Admin.	Operations	1	0	0	2	1	2	0	1	1	0	0	1
	Pre-Refueling	1	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	1	0	0	0	0	0	0	1	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	0	0	0	0	0	0	1	0	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	0	0	0	0	1	3	0	0	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	1	1	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	1	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	2	0	0	3	3	4	0	2	1	2	0	1
	Pre-Refueling	2	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	1	1	0	0	0	0	0	3	0	0	0
	Non-Refueling	1	1	0	0	0	0	0	0	0	0	0	0
Design	Operations	0	0	0	1	0	1	0	2	0	2	0	0
	Pre-Refueling	1	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	1	0	0	0	0	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	2	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Non-Refueling	Shutdown	10/01/90	10/21/90	21
Operation	Operation	10/22/90	12/06/90	46
Pre-Refueling	Operation	12/07/90	12/30/	24
Non-Refueling	Shutdown	12/31/90	02/04/91	36
Pre-Refueling	Operation	02/05/91	02/05/91	1
Refueling	Shutdown	02/06/91	04/28/91	82
Start-up	Operation	04/29/91	04/30/91	2
Non-Refueling	Shutdown	05/01/91	05/06/91	6
Start-up	Operation	05/07/91	05/08/91	2
Non-Refueling	Shutdown	05/09/91	05/14/91	6
Start-up	Operation	05/15/91	06/04/91	21
Operation	Operation	06/05/91	11/06/91	155
Non-Refueling	Shutdown	11/07/91	11/10/91	4
Operation	Operation	11/11/91	08/13/92	277
Pre-Refueling	Operation	08/14/92	09/07/92	25
Refueling	Shutdown	09/08/92	10/24/92	47
Start-up	Operation	10/25/92	10/26/92	2
Non-Refueling	Shutdown	10/27/92	10/29/92	3
Start-up	Operation	10/30/92	11/20/92	22
Non-Refueling	Shutdown	11/21/92	11/23/92	3

Phase	Phase type	Start	End	Length
Start-up	Operation	11/24/92	11/24/92	1
Operation	Operation	11/25/92	01/07/93	44
Non-Refueling	Shutdown	01/08/93	01/13/93	6
Operation	Operation	01/14/93	06/02/93	140
Non-Refueling	Shutdown	06/03/93	06/04/93	2
Operation	Operation	06/05/93	09/30/93	118

Time used in calculations

Trend Calculations			Deviation Calculations		
Op	12/27/92-09/30/93	270 days (incl. 0 days s/u)	Op	02/08/92-09/30/93	540 days (incl. 25 days s/u)
S/D	09/08/92-06/04/93	61 days (incl. 47 days ref)	S/D	01/15/91-06/04/93	180 days (incl. 129 days ref)
FOR	01/02/93-09/30/93	270 days	FOR	02/02/92-09/30/93	540 days

TABLE 9.7 BRAIDWOOD 2

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	1	0	2	0	1	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	1	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	1	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	0	0	1	0	1	0	1	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		0	0	10	5	4	6	3	1	1	0	0	0
EFO/1000 HRS		0.00	0.00	1.51	0.58	1.17	0.48	0.51	0.00	0.46	0.00	0.00	0.00
CRIT. HRS		2209	2160	1987	1724	857	2070	1960	2184	2182	1515	1478	2208
RAD		4	69	38	42	126	6	5	54	49	80	45	NA
CAUSE CODES:													
Admin.	Operations	0	0	0	1	0	1	0	1	2	0	0	2
	Pre-Refueling	0	0	0	1	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	1	0	0	0	0	1	2	0
	Non-Refueling	0	0	0	0	0	0	1	0	0	0	0	0
Lic. Oper.	Operations	0	0	0	0	0	1	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	1	0
	Non-Refueling	0	0	0	[illegible]	0	0	0	0	0	0	0	0
Oth. Per.	Operations	0	0	0	[illegible]	0	1	0	1	0	0	0	1
	Pre-Refueling	0	0	0	[illegible]	0	0	0	0	0	1	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	1	1	1	1	0	2	1	3	3	0	0	3
	Pre-Refueling	0	0	0	3	0	0	0	0	0	1	0	0
	Startup	0	0	0	0	1	0	0	0	0	0	0	0
	Refueling	0	0	0	0	2	0	0	0	0	0	1	0
	Non-Refueling	0	0	0	0	0	0	1	0	0	0	0	0
Design	Operations	0	0	0	1	0	0	0	2	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	1	0	1	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	[illegible]	0	0
	Refueling	0	0	0	0	0	0	0	0	0	[illegible]	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	[illegible]	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	05/12/91	224
Non-Refueling	Shutdown	05/13/91	05/19/91	7
Operation	Operation	05/20/91	08/01/91	74
Non-Refueling	Shutdown	08/02/91	08/04/91	3
Operation	Operation	08/05/91	08/21/91	17
Pre-Refueling	Operation	08/22/91	09/15/91	25
Refueling	Shutdown	09/16/91	11/16/91	62
Start-up	Operation	11/17/91	11/18/91	2
Non-Refueling	Shutdown	11/19/91	11/22/91	4
Start-up	Operation	11/23/91	12/15/91	23
Operation	Operation	12/16/91	02/25/92	72
Non-Refueling	Shutdown	02/26/92	02/28/92	3
Operation	Operation	02/29/92	05/23/92	85
Non-Refueling	Shutdown	05/24/92	05/29/92	6
Operation	Operation	05/30/92	02/10/93	257
Pre-Refueling	Operation	02/11/93	03/07/93	25
Refueling	Shutdown	03/08/93	04/23/93	47
Start-up	Operation	04/24/93	04/25/93	2
Non-Refueling	Shutdown	04/26/93	04/28/93	3
Start-up	Operation	04/29/93	05/21/93	23

Phase	Phase type	Start	End	Length
Operation	Operation	05/22/93	09/30/93	132

Time used in calculations

Trend Calculations			Deviation Calculations		
Op	11/15/92-09/30/93	270 days (incl. 25 days s/u)	Op	02/10/92-09/30/93	540 days (incl. 25 days s/u)
S/D	05/24/92-04/28/93	56 days (incl. 47 days ref)	S/D	05/13/91-04/28/93	135 days (incl. 109 days ref)
FOR	11/06/92-09/30/93	270 days	FOR	02/02/92-09/30/93	540 days

TABLE 9.8 BROWNS FERRY 1

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	1	0	0	0	0	0	0	1	1	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	1	0	2	0	0	0	0	0	1	0	0	0
FOR (%)		0	0	0	0	0	0	0	0	0	0	0	0
EFO/1000 HRS		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CRIT. HRS		0	0	0	0	0	0	0	0	0	0	0	0
RAD		72	43	26	24	24	40	44	51	37	140	83	NA
CAUSE CODES:													
Admin.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	4	3	3	1	0	0	0	0	2	2	1	0
Lic. Oper.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	2	2	2	0	0	0	2	0	0	2	1	0
Maint.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	3	5	8	0	0	1	4	2	2	3	2	0
Design	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	1	0	0	1	0	0	1	0	0	0
Misc.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	1	0	0	0	0	0

Phase	Phase type	Start	End	Length
Regulatory	Regulatory	10/01/90	09/30/93	1096

Time used in calculations

Trend Calculations

Op	/ / - / /	0 days (incl.	0 days s/u)
S/D	/ / - / /	0 days (incl.	0 days ref)
FOR	/ / - / /	0 days	

Deviation Calculations

Op	/ / - / /	0 days (incl.	0 days s/u)
S/D	/ / - / /	0 days (incl.	0 days ref)
FOR	/ / - / /	0 days	

TABLE 9.9 BROWNS FERRY 2

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	1	1	0	1	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	1	1	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	0	1	1	0	0	1	0	2	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	2	0	0	0	0	0	0	0	0	0
FOR (%)		0	0	0	3	2	0	2	6	0	0	0	0
EFO/1000 HRS		0.00	0.00	0.00	0.95	0.48	0.00	0.48	0.47	0.00	0.00	0.00	0.00
CRIT. HRS		0	0	456	2102	2089	2028	2151	2108	2209	681	756	2208
RAD		72	43	26	24	24	40	44	51	37	140	83	NA
CAUSE CODES:													
Admin.	Operations	0	0	1	1	0	0	0	1	3	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	1	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	2	0
	Refueling	0	0	0	0	0	0	0	0	0	0	1	0
	Non-Refueling	4	1	5	0	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	0	0	0	0	1	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	1	0
	Refueling	0	0	0	0	0	0	0	0	0	0	1	0
	Non-Refueling	0	0	0	0	0	0	1	0	0	0	0	0
Oth. Per.	Operations	0	0	1	0	0	0	3	1	0	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	2	0	0	0	1	0
	Non-Refueling	1	0	2	0	0	0	0	0	0	0	0	0
Maint.	Operations	0	0	1	1	0	1	5	3	3	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	2	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	1	0
	Refueling	0	0	0	0	0	0	0	0	0	2	3	0
	Non-Refueling	2	8	10	0	0	0	0	0	0	0	0	0
Design	Operations	0	0	0	2	0	1	1	0	2	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	1	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	0	1	1	1	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	1	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Regulatory	Regulatory	10/01/90	05/23/91	235
Operation	Operation	05/24/91	05/25/91	2
Non-Refueling	Shutdown	05/26/91	05/31/91	6
Operation	Operation	06/01/91	06/05/91	5
Non-Refueling	Shutdown	06/06/91	06/11/91	6
Operation	Operation	06/12/91	10/18/91	129
Non-Refueling	Shutdown	10/19/91	10/20/91	2
Operation	Operation	10/21/91	02/23/92	126
Non-Refueling	Shutdown	02/24/92	02/28/92	5
Operation	Operation	02/29/92	09/25/92	210
Non-Refueling	Shutdown	09/26/92	09/27/92	2
Operation	Operation	09/28/92	01/04/93	99
Pre-Refueling	Operation	01/05/93	01/29/93	25
Refueling	Shutdown	01/30/93	05/23/93	114
Start-up	Operation	05/24/93	05/27/93	4
Non-Refueling	Shutdown	05/28/93	05/30/93	3
Start-up	Operation	05/31/93	06/20/93	21
Operation	Operation	06/21/93	09/30/93	102

Time used in calculations

Trend Calculations			Deviation Calculations		
Op	10/01/92-09/30/93	248 days (incl. 25 days s/u)	Op	12/07/91-09/30/93	540 days (incl. 25 days s/u)
S/D	02/26/93-05/30/93	90 days (incl. 87 days ref)	S/D	05/26/91-05/30/93	138 days (incl. 114 days ref)
FOR	10/01/92-09/30/93	240 days	FOR	11/27/91-09/30/93	540 days

TABLE 9.10 BROWNS FERRY 3

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	-	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	1	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	1	0	2	0	0	0	0	0	1	0	0	0
FOR (%)		0	0	0	0	0	0	0	0	0	0	0	0
EFO/1000 HRS		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CRIT. HRS		0	0	0	0	0	0	0	0	0	0	0	0
RAD		72	43	26	24	24	40	44	51	37	140	83	NA
CAUSE CODES:													
Admin.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	5	1	2	1	1	0	0	0	3	1	1	0
Lic. Oper.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	2	0	2	0	1	0	2	0	1	1	1	0
Maint.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	4	4	7	0	1	2	4	2	4	2	2	0
Design	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	2	0	1	0	0	1	0	0	3	0	0	0
Misc.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	1	0	0	0	0	0

Phase	Phase type	Start	End	Length
Regulatory	Regulatory	10/01/90	09/30/93	1096

Time used in calculations

Trend Calculations			Deviation Calculations		
Op / / - / /	0 days (incl.	0 days s/u)	Op / / - / /	0 days (incl.	0 days s/u)
S/D / / - / /	0 days (incl.	0 days ref)	S/D / / - / /	0 days (incl.	0 days ref)
FOR / / - / /	0 days		FOR / / - / /	0 days	

TABLE 9.11 BRUNSWICK 1

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	1	0	2	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	1	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	1	0	2	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	1	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	0	0	2	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	1	0	0	0	0	0
	Startup	0	1	0	0	0	0	0	0	0	0	0	0
	Refueling	1	1	0	0	0	0	0	0	0	0	1	0
	Non-Refueling	0	0	0	0	0	0	1	2	0	0	0	0
FOR (%)		0	20	40	17	7	9	65	0	0	0	0	0
EFO/1000 HRS		0.00	1.34	0.00	1.05	0.00	0.99	2.01	0.00	0.00	0.00	0.00	0.00
CRIT. HRS		0	747	1338	1898	2078	2021	497	0	0	0	0	0
RAD		500	117	33	61	177	27	49	230	121	125	113	NA
CAUSE CODES:													
Admin.	Operations	0	0	0	1	0	2	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	2	0	0	0	0	0	0	0	0	0	0
	Refueling	3	3	0	0	0	0	0	0	0	0	2	0
	Non-Refueling	0	1	1	1	0	0	4	4	2	1	0	0
Lic. Oper.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	1	1	1	0	0	0
Oth. Per.	Operations	0	1	1	2	1	2	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	1	0	0	0	0	0	0	0	0	0	0
	Refueling	4	1	0	0	0	0	0	0	0	0	1	0
	Non-Refueling	0	0	0	0	0	0	1	1	1	0	0	0
Maint.	Operations	0	1	5	5	3	5	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	1	2	0	0	0	0	0
	Startup	0	2	0	0	0	0	0	0	0	0	0	0
	Refueling	12	3	0	0	0	0	0	0	0	0	3	0
	Non-Refueling	0	1	2	1	0	1	5	5	2	1	0	0
Design	Operations	0	0	1	2	0	1	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	2	0	0	0	0	0
	Startup	0	1	0	0	0	0	0	0	0	0	0	0
	Refueling	1	1	0	0	0	0	0	0	0	1	0	0
	Non-Refueling	0	0	0	0	0	0	2	4	1	4	0	0
Misc.	Operations	0	0	0	0	1	1	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	1	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Refueling	Shutdown	10/01/90	02/21/91	144
Start-up	Operation	02/22/91	03/05/91	12
Non-Refueling	Shutdown	03/06/91	03/07/91	2
Start-up	Operation	03/08/91	03/20/91	13
Operation	Operation	03/21/91	03/29/91	9
Non-Refueling	Shutdown	03/30/91	05/05/91	37
Operation	Operation	05/06/91	07/18/91	74
Non-Refueling	Shutdown	07/19/91	07/23/91	5
Operation	Operation	07/24/91	09/02/91	41
Non-Refueling	Shutdown	09/03/91	09/06/91	4
Operation	Operation	09/07/91	10/15/91	39
Non-Refueling	Shutdown	10/16/91	10/20/91	5
Operation	Operation	10/21/91	02/29/92	132
Non-Refueling	Shutdown	03/01/92	03/03/92	3
Operation	Operation	03/04/92	03/29/92	26
Pre-Refueling	Operation	03/30/92	04/21/92	23
Non-Refueling	Shutdown	04/22/92	03/06/93	319
Pre-Refueling	Operation	03/07/93	03/08/93	2
Refueling	Shutdown	03/09/93	09/30/93	206

Time used in calculations

Trend Calculations			Deviation Calculations		
Op	03/07/93-03/08/93	2 days (incl. 0 days s/u)	Op	02/22/91-03/08/93	371 days (incl. 25 days s/u)
S/D	07/03/93-09/30/93	90 days (incl. 90 days ref)	S/D	04/04/93-09/30/93	180 days (incl. 180 days ref)
FOR	04/30/92-05/30/92	30 days	FOR	02/26/91-05/30/92	458 days

TABLE 9.12 BRUNSWICK 2

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	1	1	0	0	0	1	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	1	0	0	0	0	0	0	0
SSA	Operations	1	1	1	0	0	1	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	1	0	0	0	0	0	0	0
	Refueling	0	0	0	0	2	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
SE	Operations	0	0	0	0	0	0	1	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	3	1	2	1	0	0	1	0	0	0	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	1	0	0	0	0	0	0	0
	Refueling	0	0	0	0	1	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	1	3	0	0	1	0
FOR (%)		9	10	42	0	0	14	30	0	0	0	0	0
EFO/1000 HRS		0.48	0.51	0.00	0.00	0.00	0.53	2.03	0.00	0.00	0.00	0.00	0.00
CRIT. HRS		2076	1963	1323	1752	198	1885	494	0	0	0	1498	2208
RAD		500	117	33	61	177	27	49	230	121	125	113	NA
CAUSE CODES:													
Admin.	Operations	1	3	0	2	0	0	0	0	0	0	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	1	1	0	0	0	0	0	0
	Refueling	0	0	0	1	1	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	2	4	2	3	2	0
Lic. Oper.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	1	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
Oth. Per.	Operations	1	2	0	0	0	2	0	0	0	0	0	0
	Pre-Refueling	0	0	0	1	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	1	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	1	4	2	1	0	0
Maint.	Operations	6	3	2	3	0	2	1	0	0	0	2	1
	Pre-Refueling	0	0	0	2	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	1	1	0	0	0	0	0	0
	Refueling	0	0	0	2	3	0	0	0	0	0	0	0
	Non-Refueling	0	0	1	0	0	0	3	7	3	4	1	0
Design	Operations	2	1	2	1	0	3	2	0	0	0	0	0
	Pre-Refueling	0	0	0	1	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	2	0	0	0	0	0	0	0
	Refueling	0	0	0	0	1	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	2	4	1	4	1	0
Misc.	Operations	1	0	0	0	0	1	0	0	0	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	1	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	10/12/90	12
Non-Refueling	Shutdown	10/13/90	10/16/90	4
Operation	Operation	10/17/90	01/25/91	101
Non-Refueling	Shutdown	01/26/91	01/30/91	5
Operation	Operation	01/31/91	03/29/91	58
Non-Refueling	Shutdown	03/30/91	05/05/91	37
Operation	Operation	05/06/91	08/19/91	106
Pre-Refueling	Operation	08/20/91	09/13/91	25
Refueling	Shutdown	09/14/91	12/12/91	90
Start-up	Operation	12/13/91	12/22/91	10
Non-Refueling	Shutdown	12/23/91	01/01/92	10
Start-up	Operation	01/02/92	01/16/92	15
Operation	Operation	01/17/92	02/02/92	17
Non-Refueling	Shutdown	02/03/92	02/04/92	2
Operation	Operation	02/05/92	02/07/92	3
Non-Refueling	Shutdown	02/08/92	02/12/92	5
Operation	Operation	02/13/92	04/21/92	69
Non-Refueling	Shutdown	04/22/92	04/27/93	371
Operation	Operation	04/28/93	08/30/93	156

Time used in calculations

Trend Calculations

Op	04/28/93-09/30/93	156 days (incl.	0 days s/u)
S/D	01/28/93-04/27/93	90 days (incl.	0 days ref)
FOR	05/15/93-09/30/93	138 days	

Deviation Calculations

Op	11/06/90-09/30/93	540 days (incl.	25 days s/u)
S/D	10/30/92-04/27/93	180 days (incl.	0 days ref)
FOR	11/26/90-09/30/93	540 days	

TABLE 9.13 BYRON 1

Type	Phase	Year - Calendar Quarter 90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	1	0	0	0	0	1	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	1	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
BE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	0	0	1	0	0	0	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Startup	0	0	0	0	1	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		2	0	0	0	6	3	0	0	0	0	5	0
EFO/1000 HRS		0.00	0.00	0.00	0.00	0.78	0.47	0.00	0.00	0.00	0.00	0.53	0.00
CRIT HRS		2177	2160	2183	1610	1290	2131	2183	2208	2209	842	1893	2208
RAD		38	3	2	53	76	70	24	2	4	109	11	NA
CAUSE CODES:													
Admin.	Operations	2	1	0	1	0	1	0	3	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	1	0	0	0	0	0	0	0
	Refueling	0	0	0	0	1	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	2	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	1	0	0	0	0	0	0	0
	Refueling	0	0	0	0	1	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	1	0	0	0	0	0	2	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	2	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	3	1	0	1	0	0	2	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	1	0	0	0	0	0	0	0
	Refueling	0	0	0	0	1	0	0	0	0	2	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Design	Operations	1	0	0	1	0	0	0	2	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	1	1	0	0	0	1	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	08/14/91	318
Pre-Refueling	Operation	08/15/91	09/08/91	25
Refueling	Shutdown	09/09/91	10/26/91	48
Start-up	Operation	10/27/91	10/28/91	2
Non-Refueling	Shutdown	10/29/91	11/03/91	6
Start-up	Operation	11/04/91	11/19/91	16
Non-Refueling	Shutdown	11/20/91	11/21/91	2
Start-up	Operation	11/22/91	11/28/91	7
Operation	Operation	11/29/91	01/13/93	412
Pre-Refueling	Operation	01/14/93	02/07/93	25
Refueling	Shutdown	02/08/93	04/03/93	55
Start-up	Operation	04/04/93	04/05/93	2
Non-Refueling	Shutdown	04/06/93	04/07/93	2
Start-up	Operation	04/08/93	04/15/93	8
Non-Refueling	Shutdown	04/16/93	04/18/93	3
Start-up	Operation	04/18/93	05/03/93	15
Operation	Operation	05/04/93	09/30/93	150

Time used in calculations

Trend Calculations				Deviation Calculations			
Op	11/05/92-09/30/93	270 days (incl.	25 days s/u)	Op	02/09/92-09/30/93	540 days (incl.	25 days s/u)
S/D	02/08/93-04/18/93	60 days (incl.	55 days ref)	S/D	09/09/91-04/18/93	116 days (incl.	103 days ref)
FOR	10/30/92-09/30/93	270 days		FOR	02/03/92-09/30/93	540 days	

TABLE 9.14 BYRON 2

Type	Phase	Year - Calendar Quarter 90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	0	1	0	0	0	0	0	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	1
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	0	0	1	0	0	0	1	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		4	0	0	0	12	0	6	0	0	0	3	0
EFO/1000 HRS		1.02	0.00	0.00	0.00	0.51	0.00	1.38	0.00	0.00	0.00	0.47	0.00
CRIT. HRS		982	2160	2183	2208	1951	1395	1453	2045	2209	2160	2145	1539
RAD		36	3	2	53	76	70	24	2	4	109	11	NA
CAUSE CODES:													
Admin.	Operations	0	1	0	1	1	1	0	4	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	1
	Startup	1	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	0	0	0	0	1	0	0	0	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	1
	Startup	1	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	1	0	0	0	0	0	1	0	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	1	1	0	1	3	0	2	2	0	2	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	1
	Startup	1	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	0	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Design	Operations	1	0	0	1	0	0	0	2	0	2	0	0
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	1	1	0	0	0	1	0	0	0	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	1	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Refueling	Shutdown	10/01/90	11/13/90	44
Start-up	Operation	11/14/90	11/15/90	2
Non-Refueling	Shutdown	11/16/90	11/19/90	4
Start-up	Operation	11/20/90	12/12/90	23
Operation	Operation	12/13/90	10/27/91	319
Non-Refueling	Shutdown	10/28/91	11/05/91	9
Operation	Operation	11/06/91	02/05/92	92
Pre-Refueling	Operation	02/06/92	03/01/92	25
Refueling	Shutdown	03/02/92	04/17/92	47
Start-up	Operation	04/18/92	04/19/92	2
Non-Refueling	Shutdown	04/20/92	04/26/92	7
Start-up	Operation	04/27/92	05/19/92	23
Operation	Operation	05/20/92	07/18/92	60
Non-Refueling	Shutdown	07/19/92	07/23/92	5
Operation	Operation	07/24/92	08/11/93	384
Pre-Refueling	Operation	08/12/93	09/05/93	25
Refueling	Shutdown	09/06/93	09/30/93	25

Time used in calculations

Trend Calculations			Deviation Calculations		
Op	12/10/92-09/05/93	270 days (incl. 0 days s/u)	Op	01/16/92-09/05/93	540 days (incl. 25 days s/u)
S/D	04/01/92-09/30/93	54 days (incl. 42 days ref)	S/D	10/01/90-09/30/93	141 days (incl. 116 days ref)
FOR	12/07/92-09/03/93	270 days	FOR	01/02/92-09/03/93	540 days

TABLE 9.15 CALLAWAY

Type	Phase	Year - Calendar Quarter 90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	1	0	0	0	1	1	0	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	1	0	0	0	0	0	1	0	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	1	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	0	1	0	0	0	0	0	0	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		14	0	0	0	2	2	6	1	0	0	0	0
EFO/1000 HRS		2.64	0.00	0.00	0.00	0.46	0.00	0.99	0.46	0.00	0.00	0.00	0.00
CRIT. HRS		1135	2160	2183	2208	2183	1879	1013	2189	2209	2160	2183	2208
RAD		317	9	5	5	4	73	255	4	5	5	4	NA
CAUSE CODES:													
Admin.	Operations	0	0	1	1	3	2	0	1	0	0	0	1
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Startup	2	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	0	0	0	0	0	1	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	1	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	0	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	0	0	1	0	0	1	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	1	0	0	0	0	0	0	0	0	0	0	0
	Refueling	2	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	0	0	1	1	3	1	0	2	0	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	4	0	0	0	0	0	0	0	0	0	0	0
	Refueling	2	0	0	0	0	0	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	1	0	0	0	0	0
Design	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	1	0	0	0	0	0	1	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	1	0	0	0	1	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	1	0	0	0	0	0	1	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Refueling	Shutdown	10/01/90	11/05/90	35
Start-up	Operation	11/06/90	11/07/90	2
Non-Refueling	Shutdown	11/08/90	11/12/90	5
Start-up	Operation	11/13/90	12/05/90	23
Operation	Operation	12/06/90	02/28/92	448
Pre-Refueling	Operation	02/27/92	03/22/92	25
Refueling	Shutdown	03/23/92	05/11/92	50
Start-up	Operation	05/12/92	05/13/92	2
Non-Refueling	Shutdown	05/14/92	05/16/92	3
Start-up	Operation	05/17/92	05/23/92	7
Non-Refueling	Shutdown	05/24/92	05/25/92	2
Start-up	Operation	05/26/92	06/10/92	15
Operation	Operation	06/11/92	09/30/93	477

Time used in calculations

Trend Calculations			Deviation Calculations		
Op	01/04/93-09/30/93	270 days (incl. 0 days s/u)	Op	02/14/92-09/30/93	540 days (incl. 25 days s/u)
S/D	04/01/82-05/25/92	46 days (incl. 41 days ref)	S/D	10/01/90-05/25/92	96 days (incl. 86 days ref)
FOR	01/04/93-09/30/93	270 days	FOR	02/09/92-09/30/93	540 days

TABLE 9.16 CALVERT CLIFFS 1

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	0	1	0	0	0	1	0	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	0	0	0	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	1	1	0	0	1	0	0	0	0	1	1	0
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	1	0	0	0	1	0	0	0	0	0	0	0
FOR (%)		0	19	0	12	11	1	0	11	3	0	7	0
EFO/1000 HRS		0.00	0.00	0.00	0.56	1.01	0.00	0.00	1.00	0.46	0.00	0.49	0.00
CRIT. HRS		1683	1772	1132	1797	1986	1882	0	996	2172	2160	2042	2208
RAD		40	25	19	7	15	10	127	31	7	79	104	NA
CAUSE CODES:													
Admin.	Operations	0	0	0	1	0	0	0	0	1	2	1	0
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	1	1	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	1	0	0	1	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	0	0	1	0	1	0	0	0	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	1	0	0	0	0	0	0	0
Maint.	Operations	1	0	1	2	2	0	0	0	1	2	1	0
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	1	1	0	0	0	0
	Non-Refueling	0	0	0	0	1	0	0	0	0	0	0	0
Design	Operations	0	1	0	0	1	0	0	0	1	0	1	0
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	1	0	0	0	0	0
	Non-Refueling	2	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Non-Refueling	Shutdown	10/01/90	10/03/90	3
Operation	Operation	10/04/90	12/01/90	59
Non-Refueling	Shutdown	12/02/90	12/19/90	18
Operation	Operation	12/20/90	02/02/91	45
Non-Refueling	Shutdown	02/03/91	02/17/91	15
Operation	Operation	02/18/91	05/18/91	90
Non-Refueling	Shutdown	05/19/91	07/16/91	59
Operation	Operation	07/17/91	12/21/91	156
Non-Refueling	Shutdown	12/22/91	12/28/91	7
Operation	Operation	12/29/91	02/25/92	59
Pre-Refueling	Operation	02/26/92	03/21/92	25
Refueling	Shutdown	03/22/92	08/05/92	137
Start-up	Operation	08/06/92	08/07/92	2
Non-Refueling	Shutdown	08/08/92	08/13/92	6
Start-up	Operation	08/14/92	08/23/92	10
Non-Refueling	Shutdown	08/24/92	08/26/92	3
Start-up	Operation	08/27/92	09/08/92	13
Operation	Operation	09/09/92	06/23/93	288
Non-Refueling	Shutdown	06/24/93	06/27/93	4
Operation	Operation	06/28/93	09/30/93	85

Time used in calculations

Trend Calculations				Deviation Calculations			
Op	12/31/92-09/30/93	270 days (incl.	0 days s/u)	Op	11/04/91-09/30/93	540 days (incl.	25 days s/u)
S/D	05/21/92-06/27/93	90 days (incl.	77 days ref)	S/D	06/24/91-06/27/93	180 days (incl.	137 days ref)
FOR	01/04/93-09/30/93	270 days		FOR	11/08/91-09/30/93	540 days	

TABLE 9.17 CALVERT CLIFFS 2

		Year - Calendar Quarter											
Type	Phase	90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	0	0	0	0	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	0	0	1	0
SSA	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	1	0
	Refueling	0	1	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	0	1	0	0	2	0	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	2	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	1	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		0	0	33	0	0	16	11	12	3	0	11	0
EFO/1000 HRS		0.00	0.00	2.75	0.00	0.00	0.54	1.53	2.04	0.00	0.00	0.00	0.00
CRIT. HRS		0	0	1091	2208	1353	1854	1965	1960	2145	1204	452	2208
RAD		40	25	19	7	15	10	127	31	7	79	104	NA
CAUSE CODES:													
Admin.	Operations	0	0	1	0	0	2	0	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	3	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	1	0
	Refueling	1	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	1	0	0	1	0	0	1	0
Lic. Oper.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	1	0
	Refueling	1	1	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	1	0	0	0	0	0	0	0
Oth. Per.	Operations	0	0	0	0	0	1	0	2	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	0	0	0	0
	Refueling	1	0	2	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	0	0	1	0	0	3	1	4	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	3	0	0
	Startup	0	0	1	0	0	0	0	0	0	0	1	0
	Refueling	2	0	2	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	1	0	0	1	0	0	1	0
Design	Operations	0	0	0	0	0	2	1	0	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	0	0	0	0
	Refueling	3	1	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	1	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Refueling	Shutdown	10/01/90	04/23/91	205
Start-up	Operation	04/24/91	04/25/91	2
Non-Refueling	Shutdown	04/26/91	04/27/91	2
Start-up	Operation	04/28/91	05/20/91	23
Non-Refueling	Shutdown	05/21/91	05/25/91	5
Operation	Operation	05/26/91	06/15/91	21
Non-Refueling	Shutdown	06/16/91	06/26/91	11
Operation	Operation	06/27/91	10/19/91	115
Non-Refueling	Shutdown	10/20/91	11/22/91	34
Operation	Operation	11/23/91	03/19/92	118
Non-Refueling	Shutdown	03/20/92	04/01/92	13
Operation	Operation	04/02/92	06/24/92	84
Non-Refueling	Shutdown	06/25/92	07/05/92	11
Operation	Operation	07/06/92	09/29/92	86
Non-Refueling	Shutdown	09/30/92	10/02/92	3
Operation	Operation	10/03/92	01/28/93	118
Pre-Refueling	Operation	01/29/93	02/22/93	25
Refueling	Shutdown	02/23/93	06/03/93	101
Start-up	Operation	06/04/93	06/05/93	2
Non-Refueling	Shutdown	06/06/93	06/08/93	3
Phase	Phase type	Start	End	Length
Start-up	Operation	06/09/93	07/01/93	23
Operation	Operation	07/02/93	09/30/93	91

Time used in calculations

Trend Calculations			Deviation Calculations		
Op	10/03/92-09/30/93	259 days (incl. 25 days s/u)	Op	11/30/91-09/30/93	540 days (incl. 25 days s/u)
S/D	03/09/93-06/08/93	90 days (incl. 87 days ref)	S/D	05/22/91-06/08/93	180 days (incl. 101 days ref)
FOR	10/01/92-09/30/93	250 days	FOR	12/15/91-09/30/93	540 days

TABLE 9.18 CATAWBA 1

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	2	1	0	0	0	0	0	1	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	0	0	0	0
ESA	Operations	0	0	0	4	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	2	2	0	3	2	2	0	0	1	2	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	1	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	1	0	0	0	0	0	0	0	0	0	0
FOR (%)		4	5	13	5	1	0	0	27	21	0	14	2
EFO/1000 HRS		0.47	0.60	5.17	1.41	0.46	0.00	0.00	4.20	0.56	0.00	0.53	0.91
CRIT. HRS		2140	1665	387	2129	2182	2184	2183	238	1791	2160	1897	2192
RAD		9	12	130	7	82	7	5	166	20	75	0	NA
CAUSE CODES:													
Admin.	Operations	5	2	0	3	2	1	1	0	0	4	0	0
	Pre-Refueling	0	0	0	0	0	0	0	1	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	2	0	0	0	0	1	0	0	0	0
	Non-Refueling	0	1	0	0	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	0	2	0	0	0	2	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	1	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	0	1	0	3	6	1	1	0	0	0	0	0
	Pre-Refueling	0	1	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	0	0	0	0
	Refueling	0	0	1	0	0	0	0	1	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	5	2	0	5	8	2	2	0	1	4	1	0
	Pre-Refueling	0	1	0	0	0	0	0	2	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	0	0	0	0
	Refueling	0	0	3	0	0	0	0	3	0	0	0	0
	Non-Refueling	0	2	0	0	0	0	0	0	0	0	0	0
Design	Operations	1	2	0	4	1	2	0	0	1	2	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	1	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	0	0	0	0	0	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	10/05/90	5
Non-Refueling	Shutdown	10/06/90	10/07/90	2
Operation	Operation	10/08/90	01/04/91	89
Non-Refueling	Shutdown	01/05/91	01/10/91	6
Operation	Operation	01/11/91	02/24/91	45
Pre-Refueling	Operation	02/25/91	02/27/91	3
Non-Refueling	Shutdown	02/28/91	03/01/91	2
Pre-Refueling	Operation	03/02/91	03/23/91	22
Refueling	Shutdown	03/24/91	06/04/91	73
Start-up	Operation	06/05/91	06/06/91	2
Non-Refueling	Shutdown	06/07/91	06/11/91	5
Start-up	Operation	06/12/91	07/04/91	23
Operation	Operation	07/05/91	06/18/92	350
Pre-Refueling	Operation	06/19/92	07/13/92	25
Refueling	Shutdown	07/14/92	09/22/92	71
Start-up	Operation	09/23/92	09/24/92	2
Non-Refueling	Shutdown	09/25/92	10/16/92	22
Start-up	Operation	10/17/92	11/08/92	23
Operation	Operation	11/09/92	06/12/93	216
Non-Refueling	Shutdown	06/13/93	06/23/93	11
Operation	Operation	06/24/93	09/30/93	99

Time used in calculations

Trend Calculations

Op	12/24/92-09/30/93	270 days (incl.	0 days s/u)
S/D	07/28/92-06/23/93	80 days (incl.	57 days ref)
FOR	01/04/93-09/30/93	270 days	

Deviation Calculations

Op	12/27/91-09/30/93	540 days (incl.	25 days s/u)
S/D	05/26/91-06/23/93	180 days (incl.	142 days ref)
FOR	12/29/91-09/30/93	540 days	

TABLE 9.19 CATAWBA 2

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	1	0	0	1	0	0	1	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	1	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	2	3	1	1	0	2	0	0	1	0	0	0
	Pre-Refueling	0	0	0	0	1	0	0	0	0	1	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	1	0	0	0	0	1	0	0
	Non-Refueling	0	0	0	1	0	0	0	0	0	0	0	0
FOR (%)		2	0	9	11	5	2	0	0	5	0	0	2
EFO/1000 HRS		0.46	0.00	2.48	0.51	1.55	0.93	0.00	0.00	0.00	0.00	0.00	0.46
CRIT. HRS		2175	2069	2014	1970	647	2151	2183	2208	1796	725	2183	2177
RAD		9	12	130	7	82	7	5	166	20	75	0	NA
CAUSE CODES:													
Admin.	Operations	4	0	1	3	0	1	1	0	0	0	0	0
	Pre-Refueling	0	0	0	0	2	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	3	0	0	0	0	4	0	0
	Non-Refueling	0	2	0	0	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	0	0	1	0	0	2	0	0	2	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	1	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	0	2	2	0	0	0	0	1	0	0	0	0
	Pre-Refueling	0	0	0	0	1	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	1	0	0	0	0	1	0	0
	Non-Refueling	0	0	0	1	0	0	0	0	0	0	0	0
Maint.	Operations	4	2	3	4	0	4	1	1	2	0	0	0
	Pre-Refueling	0	0	0	0	2	0	0	0	0	0	0	0
	Startup	1	0	0	0	0	0	0	0	0	1	0	0
	Refueling	0	0	0	0	4	0	0	0	0	5	0	0
	Non-Refueling	0	1	0	1	0	0	0	0	0	0	0	0
Design	Operations	1	3	0	3	0	1	0	1	2	0	0	0
	Pre-Refueling	0	0	0	0	1	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Non-Refueling	0	0	0	1	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	1	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Start-up	Operation	10/01/90	10/21/90	21
Operation	Operation	10/22/90	01/05/91	76
Non-Refueling	Shutdown	01/06/91	01/08/91	3
Operation	Operation	01/09/91	04/16/91	98
Non-Refueling	Shutdown	04/17/91	04/22/91	6
Operation	Operation	04/23/91	09/12/91	143
Non-Refueling	Shutdown	09/13/91	09/21/91	9
Operation	Operation	09/22/91	09/25/91	4
Pre-Refueling	Operation	09/26/91	10/20/91	25
Refueling	Shutdown	10/21/91	12/14/91	55
Start-up	Operation	12/15/91	12/16/91	2
Non-Refueling	Shutdown	12/17/91	12/21/91	5
Start-up	Operation	12/22/91	01/13/92	23
Operation	Operation	01/14/92	11/16/92	308
Non-Refueling	Shutdown	11/17/92	11/28/92	12
Operation	Operation	11/29/92	12/14/92	16
Non-Refueling	Shutdown	12/15/92	12/17/92	3
Operation	Operation	12/18/92	01/07/93	21
Pre-Refueling	Operation	01/08/93	02/01/83	25
Refueling	Shutdown	02/02/93	03/25/93	52
Start-up	Operation	03/26/93	03/27/93	2
Non-Refueling	Shutdown	03/28/93	03/29/93	2
Start-up	Operation	03/30/93	04/21/93	23
Operation	Operation	04/22/93	09/30/93	162

Time used in calculations

Trend Calculations			Deviation Calculations		
Op	10/27/92-09/30/93	270 days (incl. 25 days s/u)	Op	01/31/92-09/30/93	540 days (incl. 25 days s/u)
S/D	11/17/92-03/29/93	69 days (incl. 52 days ref)	S/D	01/06/91-03/29/93	147 days (incl. 107 days ref)
FOR	10/19/92-09/30/93	270 days	FOR	01/23/92-09/30/93	540 days

TABLE 9.20 CLINTON 1

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	0	0	1	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	0	0	1	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	2	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		0	28	0	0	9	24	0	0	3	0	0	0
EFO/1000 HRS		0.00	1.52	0.00	0.00	0.49	1.80	0.00	0.00	0.46	0.00	0.00	0.00
CRIT. HRS		325	659	2183	2208	2030	1112	663	2086	2164	2160	2183	2089
RAD		389	170	13	12	22	190	183	19	12	13	25	NA
CAUSE CODES:													
Admin	Operations	0	0	0	0	3	0	0	1	1	0	0	0
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	2	0	0	0	2	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	0	0	0	0	0	0	1	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	1	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	0	0	0	0	1	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	1	0	0	0	1	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	0	0	0	1	4	1	1	1	2	0	0	0
	Pre-Refueling	0	0	0	0	0	2	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	2	3	0	0	0	2	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Design	Operations	0	0	0	0	2	0	0	0	0	1	0	0
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	1	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Pre-Refueling	Operation	10/01/90	10/16/90	16
Refueling	Shutdown	10/17/90	03/03/91	138
Start-up	Operation	03/04/91	03/28/91	25
Operation	Operation	03/29/91	11/16/91	233
Non-Refueling	Shutdown	11/17/91	11/18/91	2
Operation	Operation	11/19/91	12/22/91	34
Non-Refueling	Shutdown	12/23/91	12/25/91	3
Operation	Operation	12/26/91	01/04/92	10
Non-Refueling	Shutdown	01/05/92	01/13/92	9
Operation	Operation	01/14/92	02/04/92	22
Pre-Refueling	Operation	02/05/92	02/29/92	25
Refueling	Shutdown	03/01/92	05/25/92	86
Start-up	Operation	05/26/92	06/19/92	25
Operation	Operation	06/20/92	06/23/92	4
Non-Refueling	Shutdown	06/24/92	07/04/92	11
Operation	Operation	07/05/92	09/02/93	425
Pre-Refueling	Operation	09/03/93	09/27/93	25
Refueling	Shutdown	09/28/93	09/30/93	3

Time used in calculations

Trend Calculations				Deviation Calculations			
Op	01/01/93-09/27/93	270 days (incl.	0 days s/u)	Op	12/19/91-09/27/93	540 days (incl.	25 days s/u)
S/D	04/01/82-09/30/83	69 days (incl.	58 days ref)	S/D	12/28/81-09/30/83	180 days (incl.	155 days ref)
FOR	12/29/92-09/25/93	270 days		FOR	12/19/91-09/25/93	540 days	

TABLE 9.21 COMANCHE PEAK 1

		Year - Calendar Quarter											
Type	Phase	90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	3	0	1	0	1	1	0	0	2	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SBA	Operations	0	0	1	2	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	2	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	1	0	0	0	0	0	2	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	1	0	0	0	0	0	0	0
	Non-Refueling	0	1	0	0	1	0	0	0	0	0	0	0
FOR (%)		2	7	41	1	5	2	4	4	7	3	2	0
EFO/1000 HRS		0.52	1.11	1.18	0.46	3.09	0.00	0.47	0.47	2.94	0.47	0.46	0.00
CRIT. HRS		1820	1808	844	2189	647	2163	2110	2149	681	2120	2157	2208
RAD		NA	2	11	1	119	9	6	6	153	7	2	NA
CAUSE CODES:													
Admin.	Operations	4	3	0	0	0	3	5	1	0	1	2	0
	Pre-Refueling	0	0	0	0	1	0	0	0	2	0	0	0
	Startup	0	0	0	0	0	0	0	0	1	0	0	0
	Refueling	0	0	0	0	3	0	0	0	1	0	0	0
	Non-Refueling	2	2	2	0	2	0	0	0	0	0	0	0
Lic. Oper.	Operations	2	0	0	1	0	2	0	0	0	2	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	1	0	0	0	0	0	0	0
	Non-Refueling	0	1	0	0	2	0	0	0	0	0	0	0
Oth. Per.	Operations	1	3	0	1	0	1	2	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	1	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	1	0	1	0	0	0	0	1	0	0	0	0
Maint.	Operations	3	4	0	2	0	4	6	1	0	4	3	0
	Pre-Refueling	0	0	0	0	2	0	0	0	3	0	0	0
	Startup	0	0	0	0	0	0	0	0	1	0	0	0
	Refueling	0	0	0	0	3	0	0	0	1	0	0	0
	Non-Refueling	3	4	3	0	2	0	0	1	0	0	0	0
Design	Operations	2	1	1	1	0	1	2	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	1	0	0	0
	Non-Refueling	0	0	1	0	0	0	0	1	0	0	0	0
Misc.	Operations	0	0	1	1	0	0	1	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	11/03/90	34
Non-Refueling	Shutdown	11/04/90	11/13/90	10
Operation	Operation	11/14/90	03/20/91	127
Non-Refueling	Shutdown	03/21/91	05/25/91	66
Operation	Operation	05/26/91	09/11/91	109
Pre-Refueling	Operation	09/12/91	10/06/91	25
Refueling	Shutdown	10/07/91	12/01/91	56
Start-up	Operation	12/02/91	12/03/91	2
Non-Refueling	Shutdown	12/04/91	12/08/91	5
Start-up	Operation	12/09/91	12/31/91	23
Operation	Operation	01/01/92	07/20/92	202
Non-Refueling	Shutdown	07/21/92	07/22/92	2
Operation	Operation	07/23/92	09/30/92	70
Pre-Refueling	Operation	10/01/92	10/23/92	23
Non-Refueling	Shutdown	10/24/92	10/25/92	2
Pre-Refueling	Operation	10/26/92	10/27/92	2
Refueling	Shutdown	10/28/92	12/19/92	53
Start-up	Operation	12/20/92	01/13/93	25
Operation	Operation	01/14/93	09/30/93	260

Time used in calculations

Trend Calculations				Deviation Calculations			
Op	01/04/93-09/30/93	270 days (incl.	10 days s/u)	Op	02/12/92-09/30/93	540 days (incl.	25 days s/u)
S/D	07/21/92-12/19/92	57 days (incl.	53 days ref)	S/D	03/25/91-12/19/92	180 days (incl.	109 days ref)
FOR	01/04/93-09/30/93	270 days		FOR	02/04/92-09/30/93	540 days	

TABLE 9.22 COMANCHE PEAK 2

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	1	0
	Pre-Refueling	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0
	Startup	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0
SSA	Operations	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0
	Pre-Refueling	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0
	Startup	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0
	Refueling	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0
	Non-Refueling	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0
SE	Operations	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0
	Pre-Refueling	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0
	Startup	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0
	Refueling	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0
	Non-Refueling	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0
SSF	Operations	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0
	Pre-Refueling	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0
	Startup	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0
	Refueling	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0
	Non-Refueling	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0
FOR (%)		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	22
EFO/1000 HRS		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.00
CRIT. HRS		NA	NA	NA	NA	NA	NA	NA	NA	NA	171	1045	1802
RAD		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CAUSE CODES:													
Admin.	Operations	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	2	0
	Pre-Refueling	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0
	Startup	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0
	Refueling	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0
	Non-Refueling	NA	NA	NA	NA	NA	NA	NA	NA	NA	2	0	0
Lic. Oper.	Operations	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	1
	Pre-Refueling	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0
	Startup	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0
	Refueling	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0
	Non-Refueling	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0
Oth. Per.	Operations	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0
	Pre-Refueling	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0
	Startup	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0
	Refueling	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0
	Non-Refueling	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0
Maint.	Operations	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	3	0
	Pre-Refueling	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0
	Startup	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0
	Refueling	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0
	Non-Refueling	NA	NA	NA	NA	NA	NA	NA	NA	NA	2	0	0
Design	Operations	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	2	0
	Pre-Refueling	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0
	Startup	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0
	Refueling	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0
	Non-Refueling	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0
Misc.	Operations	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	1
	Pre-Refueling	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0
	Startup	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0
	Refueling	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0
	Non-Refueling	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0

Phase	Phase type	Start	End	Length
Non-Refueling	Shutdown	02/02/93	03/23/93	50
Operation	Operation	03/24/93	05/08/93	46
Non-Refueling	Shutdown	05/09/93	05/10/93	2
Operation	Operation	05/11/93	05/20/93	10
Non-Refueling	Shutdown	05/21/93	07/02/93	43
Operation	Operation	07/03/93	09/17/93	77
Non-Refueling	Shutdown	09/18/93	09/28/93	11
Operation	Operation	09/29/93	09/30/93	2

Time used in calculations

Trend Calculations

Op	03/24/93-09/30/93	135 days (incl.	0 days s/u)
S/D	02/18/93-09/28/93	90 days (incl.	0 days ref)
FOR	08/03/93-09/30/93	59 days	

Deviation Calculations

Op	03/24/93-09/30/93	135 days (incl.	0 days s/u)
S/D	02/02/93-09/28/93	106 days (incl.	0 days ref)
FOR	08/03/93-09/30/93	59 days	

TABLE 9.23 COOK 1

Type	Phase	Year - Calendar Quarter 90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	1	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	1	0	0	0
SSA	Operations	0	0	1	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	0	0	2	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	2	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		0	0	7	4	0	0	0	0	1	0	0	0
EFO/1000 HRS		0.00	0.00	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CRIT. HRS		457	1634	1790	2121	2209	2184	1972	0	1596	2160	2185	2208
RAD		158	12	5	8	10	47	55	132	12	7	4	NA
CAUSE CODES:													
Admin.	Operations	0	0	2	1	1	0	1	0	0	1	0	0
	Pre-Refueling	1	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	1	0	0	0	0	0	1	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	0	0	0	0	0	0	0	0	0	0	0	1
	Pre-Refueling	1	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	1	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	0	1	1	1	0	1	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	2	0	0	0
	Refueling	2	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	1	0	0	0
Maint.	Operations	0	1	2	3	2	2	1	0	0	0	0	0
	Pre-Refueling	2	0	0	0	0	0	2	0	0	0	0	0
	Startup	0	1	0	0	0	0	0	0	2	0	0	0
	Refueling	3	0	0	0	0	0	0	4	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	1	0	0	0
Design	Operations	0	0	0	1	0	1	0	0	0	0	1	0
	Pre-Refueling	1	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	0	0	1	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Pre-Refueling	Operation	10/01/90	10/22/90	22
Refueling	Shutdown	10/23/90	01/22/91	92
Start-up	Operation	01/23/91	02/16/91	25
Operation	Operation	02/17/91	04/20/91	63
Non-Refueling	Shutdown	04/21/91	05/02/91	12
Operation	Operation	05/03/91	05/12/91	10
Non-Refueling	Shutdown	05/13/91	05/14/91	2
Operation	Operation	05/15/91	09/15/91	124
Non-Refueling	Shutdown	09/16/91	09/17/91	2
Operation	Operation	09/18/91	05/30/92	256
Pre-Refueling	Operation	05/31/92	06/22/92	23
Non-Refueling	Shutdown	06/23/92	06/24/92	2
Pre-Refueling	Operation	06/25/92	06/26/92	2
Refueling	Shutdown	06/27/92	10/10/92	106
Start-up	Operation	10/11/92	10/12/92	2
Non-Refueling	Shutdown	10/13/92	10/24/92	12
Start-up	Operation	10/25/92	11/16/92	23
Operation	Operation	11/17/92	09/30/93	318

Time used in calculations

Trend Calculations				Deviation Calculations			
Op	01/04/93-09/30/93	270 days (incl.	0 days s/u)	Op	12/11/91-09/30/93	540 days (incl.	25 days s/u)
S/D	07/25/92-10/24/92	90 days (incl.	78 days ref)	S/D	12/10/90-10/24/92	180 days (incl.	150 days ref)
FOR	01/04/93-09/30/93	270 days		FOR	12/03/91-09/30/93	540 days	

TABLE 9.24 COOK 2

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	2	1	0	1	1	0	0	0	0	0	0	2
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	1	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	0	0	1	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	1	1	0	0	0
FOR (%)			3	0	25	6	0	0	93	86	0	0	14
EFO/1000 HRS		1	0.00	0.00	0.60	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CRIT. HRS		1170	2108	2183	1666	2096	1253	358	801	757	2160	2183	1940
RAD		158	12	5	8	10	47	55	132	12	7	4	NA
CAUSE CODES:													
Admin.	Operations	0	2	0	1	2	1	0	0	0	0	1	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	1	0	0	0	0
	Refueling	0	0	0	0	0	0	1	0	0	0	0	0
	Non-Refueling	1	0	0	1	0	0	0	1	1	0	0	0
Lic. Oper.	Operations	0	1	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	1	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	0	2	0	0	1	0	0	0	0	2	0	0
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	2	0	0	0	0	0	0	0	2	0	0	0
Maint.	Operations	1	4	0	2	3	0	0	0	0	2	1	3
	Pre-Refueling	0	0	0	0	0	2	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	1	2	0	0	0	0	0
	Non-Refueling	1	0	0	0	0	0	0	3	3	0	0	0
Design	Operations	1	0	0	1	0	2	0	0	1	0	2	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	0	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	1	1	0	0	0
Misc.	Operations	0	1	0	0	0	0	0	0	0	0	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Refueling	Shutdown	10/01/90	10/05/90	5
Start-up	Operation	10/06/90	10/07/90	2
Non-Refueling	Shutdown	10/08/90	11/06/90	30
Start-up	Operation	11/07/90	11/29/90	23
Operation	Operation	11/30/90	12/15/90	16
Non-Refueling	Shutdown	12/16/90	12/18/90	3
Operation	Operation	12/19/90	03/13/91	85
Non-Refueling	Shutdown	03/14/91	03/15/91	2
Operation	Operation	03/16/91	08/01/91	139
Non-Refueling	Shutdown	08/02/91	08/23/91	22
Operation	Operation	08/24/91	11/15/91	84
Non-Refueling	Shutdown	11/16/91	11/18/91	3
Operation	Operation	11/19/91	01/30/92	73
Pre-Refueling	Operation	01/31/92	02/22/92	23
Non-Refueling	Shutdown	02/23/92	02/25/92	3
Pre-Refueling	Operation	02/26/92	02/27/92	2
Refueling	Shutdown	02/28/92	06/04/02	98
Start-up	Operation	06/05/92	06/06/92	2
Non-Refueling	Shutdown	06/07/92	06/14/92	8
Start-up	Operation	06/15/92	07/02/92	18
Non-Refueling	Shutdown	07/03/92	07/06/92	4
Start-up	Operation	07/07/92	07/09/92	3
Non-Refueling	Shutdown	07/10/92	07/22/92	13
Start-up	Operation	07/23/92	07/24/92	2
Operation	Operation	07/25/92	08/01/92	8
Non-Refueling	Shutdown	08/02/92	08/20/92	19
Operation	Operation	08/21/92	09/09/92	20
Non-Refueling	Shutdown	09/10/92	11/20/92	72
Operation	Operation	11/21/92	11/22/92	2
Non-Refueling	Shutdown	11/23/92	11/29/92	7
Operation	Operation	11/30/92	08/02/93	246
Non-Refueling	Shutdown	08/03/93	08/11/93	9
Operation	Operation	08/12/93	09/30/93	50

Time used in calculations

Trend Calculations				Deviation Calculations			
Op	12/26/92-09/30/93	270 days (incl.	0 days s/u)	Op	07/26/91-09/30/93	540 days (incl.	25 days s/u)
S/D	08/19/92-08/11/93	90 days (incl.	0 days ref)	S/D	04/18/92-08/11/93	180 days (incl.	48 days ref)
FOR	01/04/93-09/30/93	270 days		FOR	12/01/91-09/30/93	540 days	

TABLE 9.25 COOPER STATION

Type	Phase	Year - Calender Quarter 90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	1	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	2	0	1	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	2	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	0	0	1	0	3	3	3	1	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	1	0	0	0	0	2	3	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		14	0	0	0	0	5	0	0	0	0	0	0
EFO/1000 HRS		0.00	0.00	0.00	0.00	0.00	0.48	0.00	0.00	0.00	0.00	0.00	0.00
CRIT. HRS		1911	2080	2152	2208	478	2065	2088	2125	2209	1526	0	1552
RAD		21	17	12	14	362	18	21	20	14	155	190	NA
CAUSE CODES:													
Admin.	Operations	1	1	0	2	0	3	3	1	2	1	0	1
	Pre-Refueling	0	0	0	0	1	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	3	0	0	0	2	8	2	2
	Non-Refueling	0	2	0	0	0	0	1	0	0	0	0	0
Lic. Oper.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	2	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	0	1	0	0	0	1	0	0	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	1	0	0	0	0	0	0	0
	Refueling	0	0	0	0	4	0	0	0	0	2	2	0
	Non-Refueling	0	2	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	1	2	1	2	0	4	2	1	2	0	0	1
	Pre-Refueling	0	0	0	0	1	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	6	0	0	0	0	5	8	2
	Non-Refueling	0	1	0	0	0	0	0	0	0	0	0	0
Design	Operations	0	0	0	1	0	1	3	2	2	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	3	0	0	0	0	3	6	2
	Non-Refueling	0	1	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	1	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	10/17/90	17
Non-Refueling	Shutdown	10/18/90	10/29/90	12
Operation	Operation	10/30/90	03/23/91	145
Non-Refueling	Shutdown	03/24/91	03/27/91	4
Operation	Operation	03/28/91	09/12/91	169
Pre-Refueling	Operation	09/13/91	10/07/91	25
Refueling	Shutdown	10/08/91	12/14/91	68
Start-up	Operation	12/15/91	01/08/92	25
Operation	Operation	01/09/92	02/10/92	33
Non-Refueling	Shutdown	02/11/92	02/14/92	4
Operation	Operation	02/15/92	04/19/92	65
Non-Refueling	Shutdown	04/20/92	04/23/92	4
Operation	Operation	04/24/92	09/11/92	141
Non-Refueling	Shutdown	09/12/92	09/14/92	3
Operation	Operation	09/15/92	02/08/93	147
Pre-Refueling	Operation	02/09/93	03/05/93	25
Refueling	Shutdown	03/06/93	07/20/93	137
Start-up	Operation	07/21/93	07/23/93	3
Non-Refueling	Shutdown	07/24/93	07/28/93	5
Start-up	Operation	07/29/93	08/19/93	22
Operation	Operation	08/20/93	09/30/93	42

Time used in calculations

Trend Calculations

Op	10/01/92-09/30/93	223 days (incl.	25 days s/u)
S/D	04/27/93-07/28/93	90 days (incl.	85 days ref)
FOR	10/01/92-09/30/93	216 days	

Deviation Calculations

Op	09/01/91-09/30/93	540 days (incl.	50 days s/u)
S/D	11/18/91-07/28/93	180 days (incl.	164 days ref)
FOR	08/21/91-09/30/93	540 days	

TABLE 9.26 CRYSTAL RIVER 3

Type	Phase	Year - Calendar Quarter 90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	0	3	1	0	0	1	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	.	0	0
SSA	Operations	0	0	1	0	1	1	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	1	0	0	0	0	1	1	0
SE	Operations	0	0	0	0	1	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
SSF	Operations	0	0	1	0	1	0	0	1	0	0	1	0
	Pre-Refueling	0	0	0	0	0	0	1	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	1	0	0	0	0	0	0	0
FOR (%)		8	0	3	2	38	5	13	1	3	0	0	3
EFO/1000 HRS		0.00	0.00	0.00	0.00	1.43	0.48	0.00	0.54	0.46	0.00	0.00	0.46
CRIT. HRS		1649	2160	2121	2208	698	2077	608	1843	2157	1494	1578	2164
RAD		18	11	6	3	84	9	393	15	5	38	13	NA
CAUSE CODES:													
Admin.	Operations	0	0	2	1	2	1	0	1	2	0	0	0
	Pre-Refueling	0	0	0	0	0	0	1	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	2	2	0	0	0	0
	Non-Refueling	1	0	0	0	3	0	0	0	0	1	1	0
Lic. Oper.	Operations	0	0	0	0	2	0	0	0	2	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	1	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	2	1	0	0	3	1	0	1	0	0	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	2	1	0	0	0	0
	Non-Refueling	1	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	2	0	5	1	5	2	0	3	4	0	1	0
	Pre-Refueling	0	0	0	0	0	0	1	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	1	0	0	0	0
	Refueling	0	0	0	0	0	0	2	2	0	0	0	0
	Non-Refueling	2	0	0	0	1	0	0	0	0	1	1	0
Design	Operations	2	1	0	0	1	1	0	2	2	0	2	1
	Pre-Refueling	0	0	0	0	0	0	4	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	2	0	0	0	0	0
	Non-Refueling	0	0	0	0	3	0	0	0	0	0	1	0
Misc.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	1	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	1	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	10/10/90	10
Non-Refueling	Shutdown	10/11/90	10/24/90	14
Operation	Operation	10/25/90	12/12/90	49
Non-Refueling	Shutdown	12/13/90	12/17/90	5
Operation	Operation	12/18/90	10/11/91	298
Non-Refueling	Shutdown	10/12/91	11/23/91	43
Operation	Operation	11/24/91	12/03/91	10
Non-Refueling	Shutdown	12/04/91	12/06/91	3
Operation	Operation	12/07/91	12/08/91	2
Non-Refueling	Shutdown	12/09/91	12/16/91	8
Operation	Operation	12/17/91	03/27/92	102
Non-Refueling	Shutdown	03/28/92	04/03/92	7
Operation	Operation	04/04/92	04/07/92	4
Pre-Refueling	Operation	04/08/92	05/02/92	25
Refueling	Shutdown	05/03/92	07/05/92	64
Start-up	Operation	07/06/92	07/07/92	2
Non-Refueling	Shutdown	07/08/92	07/13/92	6
Start-up	Operation	07/14/92	08/05/92	23
Operation	Operation	08/06/92	03/04/93	211
Non-Refueling	Shutdown	03/05/93	04/25/93	52

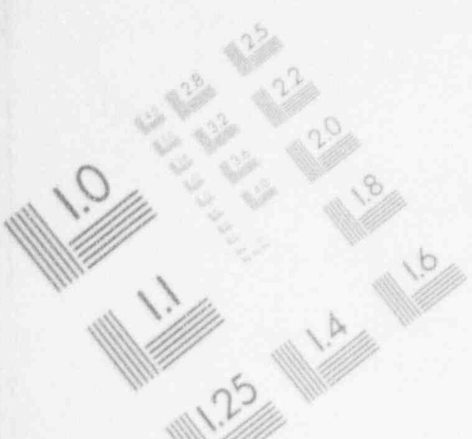
Phase	Phase type	Start	End	Length
Operation	Operation	04/26/93	09/30/93	158

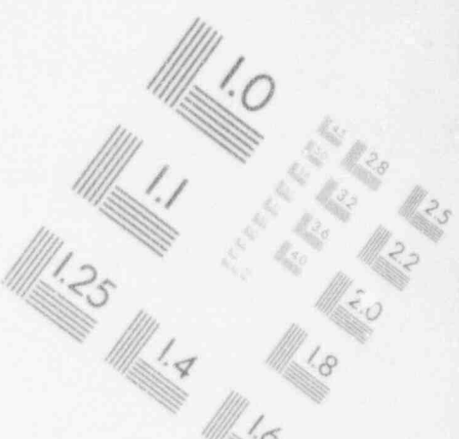
Time used in calculations

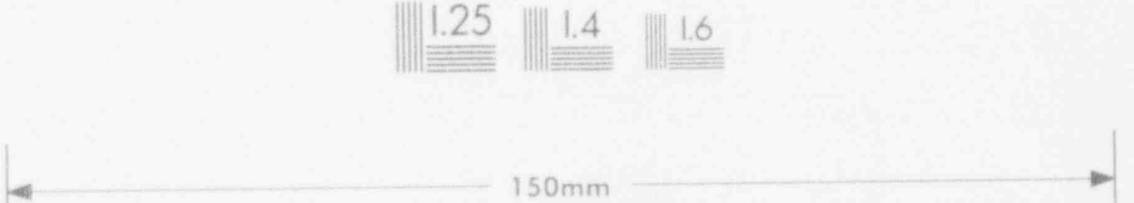
Trend Calculations				Deviation Calculations			
Op	11/13/92-09/30/93	270 days (incl.	0 days s/u)	Op	10/09/91-09/30/93	540 days (incl.	25 days s/u)
S/D	06/04/92-04/25/93	90 days (incl.	32 days ref)	S/D	10/15/91-04/25/93	180 days (incl.	64 days ref)
FOR	11/11/92-09/30/93	270 days		FOR	11/29/91-09/30/93	540 days	

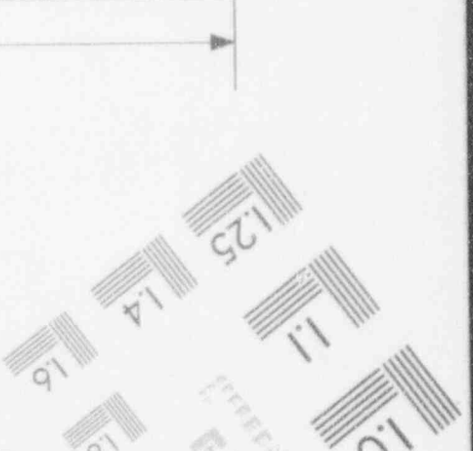
1

IMAGE EVALUATION TEST TARGET (MT-3)



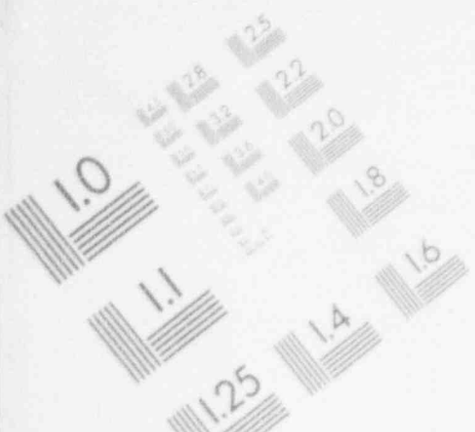


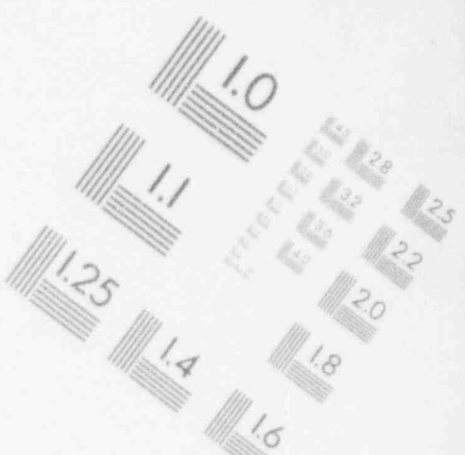


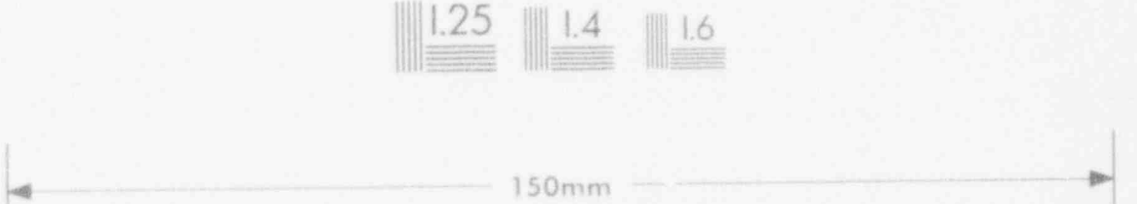


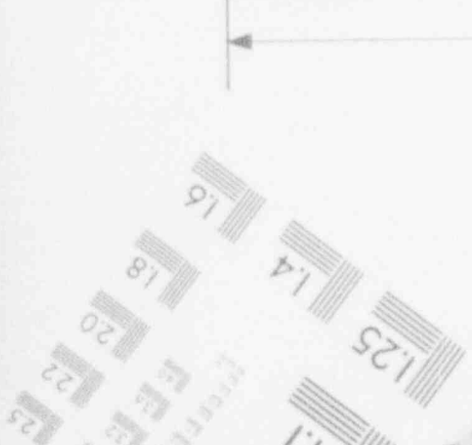
1

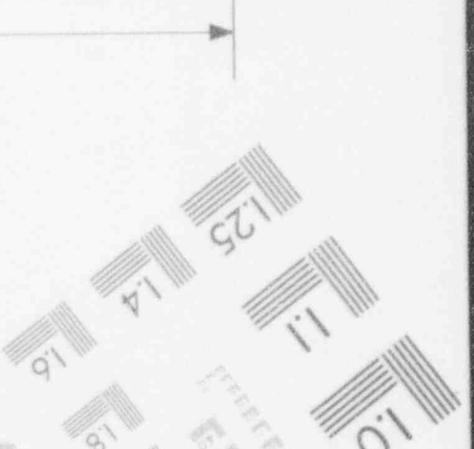
IMAGE EVALUATION
TEST TARGET (MT-3)





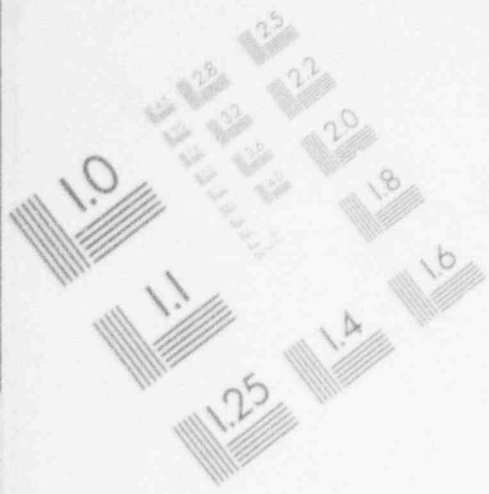


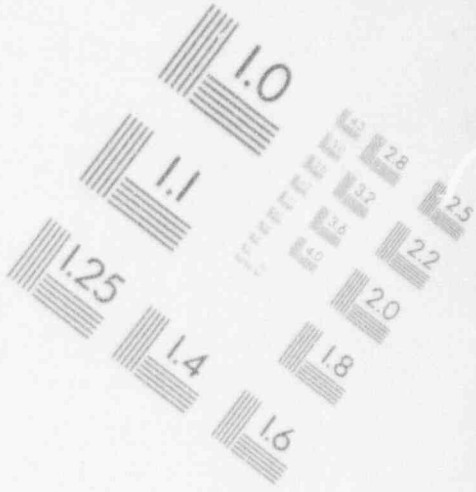


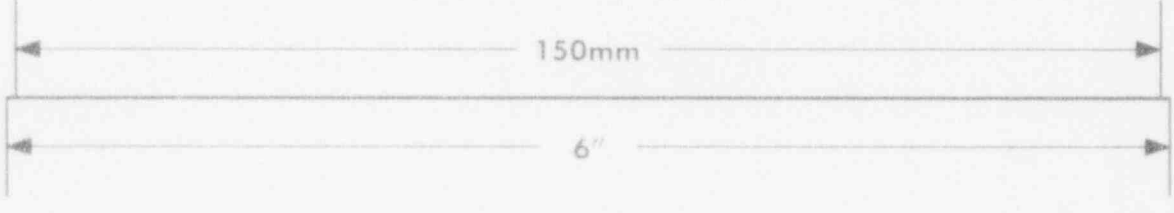


1

IMAGE EVALUATION TEST TARGET (MT-3)







1

IMAGE EVALUATION TEST TARGET (MT-3)

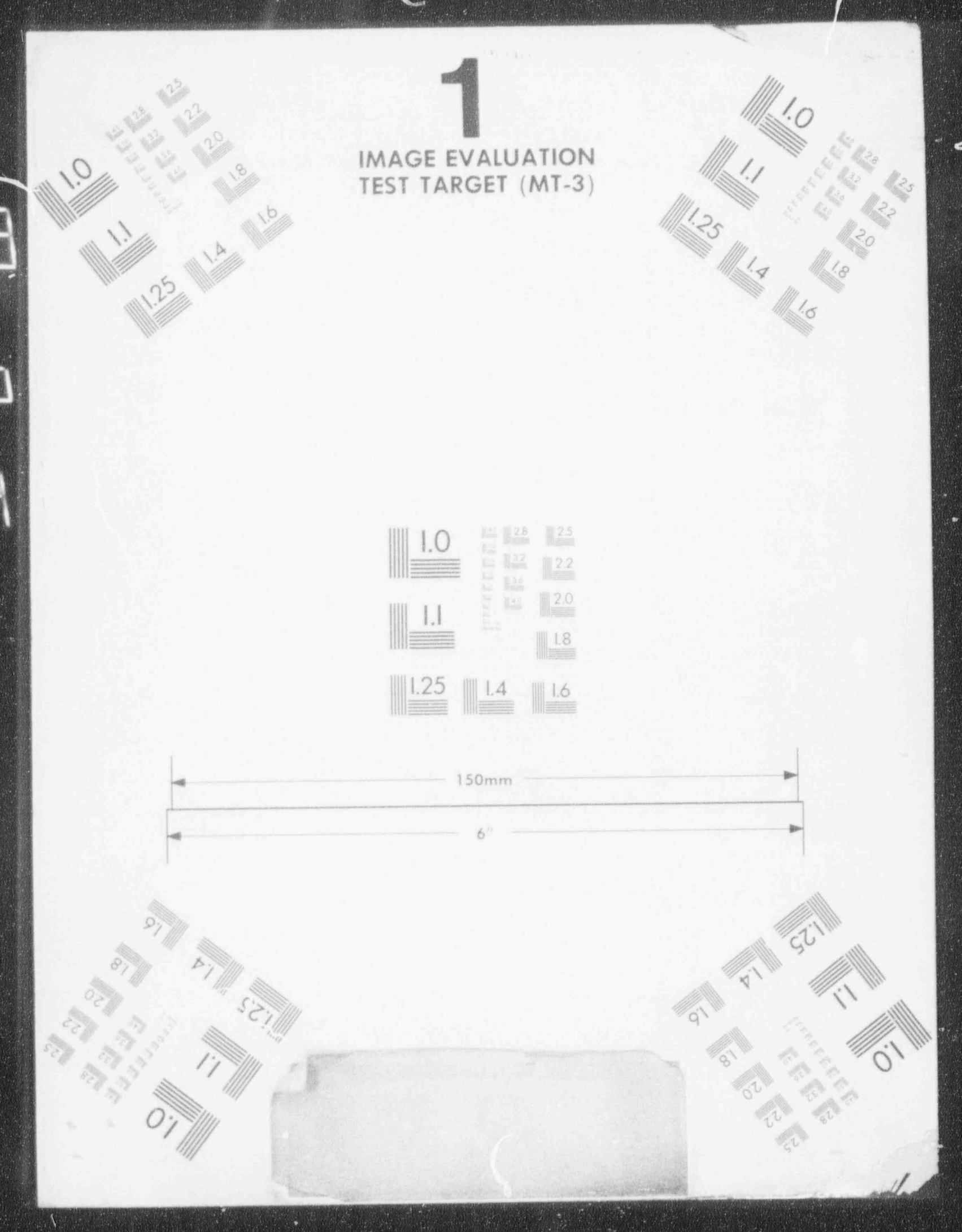


TABLE 9.27 DAVIS-BESSE

Type	Phase	Year - Calendar Quarter 90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	1	0	0	0	0	1	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	1	0
SSA	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	0	0	0	0	1	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		3	0	0	0	11	2	0	0	0	0	2	0
EFO/1000 HRS		0.46	0.00	0.00	0.00	1.61	0.00	0.00	0.00	0.00	0.00	0.67	0.00
CRIT. HRS		2160	2160	2183	1466	1246	2159	2183	2208	2209	1420	1493	2208
RAD		10	3	4	110	99	2	5	7	9	231	124	NA
CAUSE CODES:													
Admin.	Operations	1	1	0		0	1	0	2	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	1	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	1	1	0	0	0	0	0	0	0
Lic. Oper.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	2	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	0	0	0	0	1	2	1	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	1	0
	Refueling	0	0	0	1	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	2	1	0	0	2	3	0	3	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	1	0
	Refueling	0	0	0	1	2	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	1	1	0	0	0	0	0	0	0
Design	Operations	0	0	0	0	0	0	1	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	1	0	0	0	0	0	1	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	08/08/91	312
Pre-Refueling	Operation	08/09/91	08/31/91	23
Non-Refueling	Shutdown	09/01/91	09/02/91	2
Pre-Refueling	Operation	09/03/91	09/04/91	2
Refueling	Shutdown	09/05/91	10/30/91	56
Start-up	Operation	10/31/91	11/01/91	2
Non-Refueling	Shutdown	11/02/91	11/03/91	2
Start-up	Operation	11/04/91	11/26/91	23
Operation	Operation	11/27/91	12/06/91	10
Non-Refueling	Shutdown	12/07/91	12/09/91	3
Operation	Operation	12/10/91	02/07/93	426
Pre-Refueling	Operation	02/08/93	03/04/93	25
Refueling	Shutdown	03/05/93	04/21/93	48
Start-up	Operation	04/22/93	04/23/93	2
Non-Refueling	Shutdown	04/24/93	04/27/93	4
Start-up	Operation	04/28/93	05/20/93	23
Operation	Operation	05/21/93	09/30/93	133

Time used in calculations

Trend Calculations				Deviation Calculations			
Op	11/13/92-09/30/93	270 days (incl.	25 days s/u)	Op	02/17/92-09/30/93	540 days (incl.	25 days s/u)
S/D	03/05/93-04/27/93	52 days (incl	48 days ref)	S/D	09/01/91-04/27/93	115 days (incl.	104 days ref)
FOR	11/04/92-09/30/93	270 days		FOR	02/08/92-09/30/93	540 days	

TABLE 9.28 DIABLO CANYON 1

Type	Phase	Year - Calender Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	2	0	1	0	0	1	1	0	0	0	0	0
	Pre-Refueling	0	1	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	0	0	0	0
SSA	Operations	1	0	1	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	2	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	1	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	1	0	0	2	0	1	1	0	2	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	2	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	1	0	0	0
FOR (%)		7	5	6	0	0	4	2	0	1	0	0	0
EFO/1000 HRS		0.87	1.33	1.48	0.00	0.00	0.47	0.00	0.00	0.79	0.00	0.00	0.00
CRIT. HRS		2065	753	2027	2208	2209	2107	2150	1775	1266	2160	2183	2208
RAD		5	146	5	97	25	4	4	102	105	91	33	NA
CAUSE CODES:													
Admin.	Operations	0	0	0	5	2	1	3	1	2	2	0	0
	Pre-Refueling	0	0	0	0	0	0	0	2	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	1	0	0	0
	Refueling	0	2	0	0	0	0	0	0	2	0	0	0
	Non-Refueling	0	0	0	0	0	3	0	0	2	0	0	0
Lic. Oper.	Operations	0	0	0	2	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	1	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	1	0	0	0
Oth. Per.	Operations	4	1	1	2	0	0	1	1	1	0	0	0
	Pre-Refueling	0	1	0	0	0	0	0	1	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	0	0	0	0
	Refueling	0	2	0	0	0	0	0	0	1	0	0	0
	Non-Refueling	1	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	5	1	1	5	2	1	4	1	2	1	0	0
	Pre-Refueling	0	1	0	0	0	0	0	4	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	0	0	0	0
	Refueling	0	3	0	0	0	0	0	0	2	0	0	0
	Non-Refueling	1	0	0	0	0	0	0	0	1	0	0	0
Design	Operations	1	0	0	0	2	2	1	1	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	1	0	0	0	0	0	1	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	1	0	0	0
Misc.	Operations	1	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	12/24/90	85
Non-Refueling	Shutdown	12/25/90	12/27/90	3
Operation	Operation	12/28/90	01/09/91	13
Pre-Refueling	Operation	01/10/91	02/03/91	25
Refueling	Shutdown	02/04/91	03/26/91	51
Start-up	Operation	03/27/91	03/28/91	2
Non-Refueling	Shutdown	03/29/91	04/01/91	4
Start-up	Operation	04/02/91	04/24/91	23
Operation	Operation	04/25/91	05/17/91	23
Non-Refueling	Shutdown	05/18/91	05/19/91	2
Operation	Operation	05/20/91	03/06/92	292
Non-Refueling	Shutdown	03/07/92	03/08/92	2
Operation	Operation	03/09/92	08/20/92	165
Pre-Refueling	Operation	08/21/92	09/14/92	25
Refueling	Shutdown	09/15/92	11/03/92	50
Start-up	Operation	11/04/92	11/05/92	2
Non-Refueling	Shutdown	11/06/92	11/08/92	3
Start-up	Operation	11/09/92	12/01/92	23
Operation	Operation	12/02/92	09/30/93	303

Time used in calculations

Trend Calculations				Deviation Calculations			
Op	01/04/93-09/30/93	270 days (incl.	0 days s/u)	Op	02/14/82-09/30/93	540 days (incl.	25 days s/u)
S/D	09/15/92-11/08/82	53 days (incl.	50 days ref)	S/D	12/25/90-11/08/82	115 days (incl.	101 days ref)
FOR	01/04/93-09/30/93	270 days		FOR	02/09/82-09/30/93	540 days	

TABLE 9.29 DIABLO CANYON 2

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	0	0	0	0	0	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	1	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	0	0	0	2	1	0	3	0	2	0	0
	Pre-Refueling	0	0	0	1	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	1	0	0	0	0	0	2	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		0	0	0	0	0	6	0	0	0	5	0	0
EFO/1000 HRS		0.00	0.00	0.00	0.00	0.00	0.48	0.00	0.00	0.00	0.00	0.00	0.00
CRIT. HRS		2209	2160	2183	1478	1685	2073	2183	2208	2209	1474	1494	2208
RAD		5	146	5	97	25	4	4	102	105	91	33	NA
CAUSE CODES:													
Admin.	Operations	0	0	0	1	0	2	1	2	3	1	0	0
	Pre-Refueling	0	0	0	1	0	0	0	0	0	1	0	0
	Startup	0	0	0	0	1	0	0	0	0	0	0	0
	Refueling	0	0	0	2	1	0	0	0	0	1	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	1	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	1	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	0	0	0	1	0	0	2	1	2	1	0	0
	Pre-Refueling	0	0	0	1	0	0	0	0	0	1	0	0
	Startup	0	0	0	0	1	0	0	0	0	0	0	0
	Refueling	0	0	0	0	1	0	0	0	0	1	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	0	0	0	2	0	3	1	2	3	2	0	0
	Pre-Refueling	0	0	0	1	0	0	0	0	0	1	0	0
	Startup	0	0	0	0	1	0	0	0	0	0	0	0
	Refueling	0	0	0	1	2	0	0	0	0	1	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Design	Operations	0	0	0	0	1	1	2	2	2	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	08/08/91	312
Pre-Refueling	Operation	08/09/91	09/02/91	25
Refueling	Shutdown	09/03/91	10/12/91	40
Start-up	Operation	10/13/91	10/14/91	2
Non-Refueling	Shutdown	10/15/91	10/19/91	5
Start-up	Operation	10/20/91	11/11/91	23
Operation	Operation	11/12/91	03/22/92	132
Non-Refueling	Shutdown	03/23/92	03/26/92	4
Operation	Operation	03/27/92	02/10/93	321
Pre-Refueling	Operation	02/11/93	03/07/93	25
Refueling	Shutdown	03/08/93	04/24/93	48
Start-up	Operation	04/25/93	04/26/93	2
Non-Refueling	Shutdown	04/27/93	04/28/93	2
Start-up	Operation	04/29/93	05/21/93	23
Operation	Operation	05/22/93	09/30/93	132

Time used in calculations

Trend Calculations				Deviation Calculations			
Op	12/15/92-09/30/93	270 days (incl.	25 days s/u)	Op	02/15/92-09/30/93	540 days (incl.	25 days s/u)
S/D	03/08/93-04/28/93	50 days (incl.	48 days ref)	S/D	09/03/91-04/28/93	99 days (incl.	88 days ref)
FOR	11/08/92-09/30/93	270 days		FOR	02/12/92-09/30/93	540 days	

TABLE 9.30 DRESDEN 2

		Year - Calendar Quarter										
Type	Phase	90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	1	1	1	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	1	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	2	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	1	0	0	1	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	0	2	4	1	1	1	1	1	0	0	4
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Non-Refueling	0	0	0	0	2	0	0	0	0	0	0	0
FOR (%)		0	47	9	12	77	43	0	8	11	0	7	0
EFO/1000 HRS		0.00	3.91	0.50	2.01	1.97	0.00	0.00	0.48	0.50	0.00	0.00	0.00
CRIT. HRS		0	768	2015	1990	507	1304	2183	2072	1994	390	883	2208
RAD		410	100	66	117	220	136	46	43	76	462	273	NA
CAUSE CODES:													
Admin.	Operations	0	0	4	11	1	2	7	2	6	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	6	0	0	0	0	0	0	0	0	2	1	0
	Non-Refueling	0	1	0	0	1	4	0	0	1	0	0	0
Lic. Oper.	Operations	0	0	0	2	0	0	0	0	1	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	1	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	0	0	1	4	0	1	1	0	1	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	1	0	0	0	0	0	0	0	1	0	0
	Refueling	1	0	0	0	0	0	0	0	0	1	0	0
	Non-Refueling	0	0	0	0	2	1	0	0	0	0	0	0
Maint.	Operations	0	1	7	16	2	5	9	8	5	0	0	3
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	3	0	0	0	0	0	0	0	0	1	0
	Refueling	11	0	0	0	0	0	0	0	0	4	2	0
	Non-Refueling	0	2	0	1	4	3	0	0	2	0	0	0
Design	Operations	0	0	3	5	3	0	2	2	4	0	0	2
	Pre-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	2	0	0	0	0	0	0	0	0	1	2	0
	Non-Refueling	0	0	0	0	2	2	0	0	0	0	0	0
Misc.	Operations	0	0	0	1	0	0	0	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length	Phase	Phase type	Start	End	Length
Refueling	Shutdown	10/01/90	01/03/91	95	Non-Refueling	Shutdown	12/09/92	12/17/92	9
Start-up	Operation	01/04/91	01/06/91	3	Operation	Operation	12/18/92	12/23/92	6
Non-Refueling	Shutdown	01/07/91	02/08/91	33	Pre-Refueling	Operation	12/24/92	01/17/93	25
Start-up	Operation	02/09/91	02/13/91	5	Refueling	Shutdown	01/18/93	05/21/93	124
Non-Refueling	Shutdown	02/14/91	02/16/91	3	Start-up	Operation	05/22/93	06/15/93	25
Start-up	Operation	02/17/91	03/05/91	17	Operation	Operation	06/16/93	09/30/93	107
Non-Refueling	Shutdown	03/06/91	03/12/91	7					
Operation	Operation	03/13/91	03/24/91	12					
Non-Refueling	Shutdown	03/25/91	04/04/91	11					
Operation	Operation	04/05/91	07/10/91	97					
Non-Refueling	Shutdown	07/11/91	07/13/91	3					
Operation	Operation	07/14/91	08/26/91	44					
Non-Refueling	Shutdown	08/27/91	08/29/91	3					
Operation	Operation	08/30/91	10/21/91	53					
Non-Refueling	Shutdown	10/22/91	11/11/91	21					
Operation	Operation	11/12/91	11/13/91	2					
Non-Refueling	Shutdown	11/14/91	02/05/92	84					
Operation	Operation	02/06/92	08/02/92	179					
Non-Refueling	Shutdown	08/03/92	08/04/92	2					
Operation	Operation	08/05/92	12/08/92	126					

Time used in calculations

Trend Calculations				Deviation Calculations			
Op	10/01/92-09/30/93	232 days (incl.	25 days s/u)	Op	08/10/91-09/30/93	540 days (incl.	25 days s/u)
S/D	02/21/93-05/21/93	90 days (incl.	90 days ref)	S/D	12/23/91-05/21/93	180 days (incl.	124 days ref)
FOR	10/01/92-09/30/93	237 days		FOR	12/02/91-09/30/93	540 days	

TABLE 9.31 DRESDEN 3

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	0	0	0	0	0	2	1	0	1
	Pre-Refueling	0	0	0	1	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	1	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	0	2	1	0	0	1	1	5	1	0	3
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	1	0	0	0	0	0
	Refueling	0	0	0	0	3	1	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
FOR (%)		3	0	0	7	0	0	17	0	15	42	30	7
EFO/1000 HRS		0.46	0.00	0.00	0.63	0.00	0.00	1.30	0.00	1.55	1.58	0.00	0.48
CRIT. HRS		2172	1582	2183	1581	0	0	1542	2208	1940	1265	1564	2079
RAD		410	100	66	117	220	136	46	43	76	462	273	NA
CAUSE CODES:													
Admin.	Operations	1	1	4	1	0	0	1	1	4	2	0	1
	Pre-Refueling	0	0	0	1	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	1	0	0	0	0	0
	Refueling	0	0	0	1	2	7	1	0	0	0	0	0
	Non-Refueling	0	1	0	0	0	0	2	0	1	1	0	0
Lic. Oper.	Operations	0	0	0	0	0	0	0	0	0	0	1	1
	Pre-Refueling	0	0	0	1	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	0	0	1	1	0	0	0	1	1	0	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	1	0	0	0	0	0
	Refueling	0	0	0	2	0	2	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	1	0	0	0	0	0
Maint.	Operations	1	1	5	4	0	0	2	3	6	4	1	4
	Pre-Refueling	0	0	0	2	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	1	0	0	0	0	0
	Refueling	0	0	0	3	3	10	1	0	0	0	0	0
	Non-Refueling	0	2	0	0	0	0	3	0	1	3	2	0
Design	Operations	0	0	2	2	0	0	2	1	2	1	1	2
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	1	0	0	0	0	0
	Refueling	0	0	0	1	2	3	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	1	0	0	1	0	0
Misc.	Operations	0	0	0	1	0	0	0	0	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length	Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	01/13/91	105	Operation	Operation	12/28/92	01/16/93	20
Non-Refueling	Shutdown	01/14/91	01/31/91	18	Non-Refueling	Shutdown	01/17/93	01/19/93	3
Operation	Operation	02/01/91	02/03/91	3	Operation	Operation	01/20/93	02/26/93	38
Non-Refueling	Shutdown	02/04/91	02/07/91	4	Non-Refueling	Shutdown	02/27/93	04/26/93	59
Operation	Operation	02/08/91	08/14/91	188	Operation	Operation	04/27/93	07/10/93	75
Pre-Refueling	Operation	08/15/91	09/08/91	25	Non-Refueling	Shutdown	07/11/93	07/14/93	4
Refueling	Shutdown	09/09/91	04/06/92	211	Operation	Operation	07/15/93	09/30/93	78
Start-up	Operation	04/07/92	04/08/92	2					
Non-Refueling	Shutdown	04/09/92	04/10/92	2					
Start-up	Operation	04/11/92	04/17/92	7					
Non-Refueling	Shutdown	04/18/92	04/23/92	6					
Start-up	Operation	04/24/92	05/01/92	8					
Non-Refueling	Shutdown	05/02/92	05/06/92	5					
Start-up	Operation	05/07/92	05/12/92	6					
Non-Refueling	Shutdown	05/13/92	05/15/92	3					
Start-up	Operation	05/16/92	05/17/92	2					
Operation	Operation	05/18/92	10/13/92	149					
Non-Refueling	Shutdown	10/14/92	10/19/92	6					
Operation	Operation	10/20/92	12/25/92	67					
Non-Refueling	Shutdown	12/26/92	12/27/92	2					

Time used in calculations

Trend Calculations				Deviation Calculations			
Op	10/28/92-09/30/93	270 days (incl.	0 days s/u)	Op	06/13/91-09/30/93	540 days (incl.	25 days s/u)
S/D	04/09/92-07/14/93	90 days (incl.	0 days ref)	S/D	01/08/92-07/14/93	180 days (incl.	90 days ref)
FOR	01/04/93-09/30/93	270 days		FOR	08/22/91-09/30/93	540 days	

TABLE 9.32 DUANE ARNOLD

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	1	1	1	0	0	0	0	1	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	1	0	0	0	1	0	3	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	1	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	0	0	3	0	1	1	1	2	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	1	0	0	0	0	0	1
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		3	8	4	0	0	0	0	5	3	0	0	0
EFO/1000 HRS		0.00	0.53	0.51	0.00	0.00	0.00	0.00	0.48	0.47	0.00	0.00	0.00
CRIT. HRS		2041	1886	1975	2208	2208	1379	1610	2076	2128	2035	2183	685
RAD		47	55	76	45	21	269	170	30	21	30	25	NA
CAUSE CODES:													
Admin.	Operations	1	0	1	2	1	1	0	1	2	0	1	0
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Startup	1	0	0	0	0	0	1	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	2
	Non-Refueling	1	0	0	0	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	0	1	0	0	1	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	1	0	0	1	0	0	0	1	1	0	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	1	2	0	2	2	1	0	2	4	0	3	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	1	0	0	0	0	0	1	0	0	0	0	0
	Refueling	0	0	0	0	0	0	2	0	0	0	0	1
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Design	Operations	2	0	1	2	0	1	1	3	1	0	1	0
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Startup	0	0	0	0		0	1	0	0	0	0	0
	Refueling	0	0	0	0	0	1	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	2	0	0	0	1	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Start-up	Operation	10/01/90	10/04/90	4
Operation	Operation	10/05/90	12/09/90	66
Non-Refueling	Shutdown	12/10/90	12/13/90	4
Operation	Operation	12/14/90	01/15/91	33
Non-Refueling	Shutdown	01/16/91	01/21/91	6
Operation	Operation	01/22/91	02/09/91	19
Non-Refueling	Shutdown	02/10/91	02/13/91	4
Operation	Operation	02/14/91	06/22/91	129
Non-Refueling	Shutdown	06/23/91	06/29/91	7
Operation	Operation	06/30/91	02/04/92	220
Pre-Refueling	Operation	02/05/92	02/29/92	25
Refueling	Shutdown	03/01/92	04/23/92	54
Start-up	Operation	04/24/92	05/18/92	25
Operation	Operation	05/19/92	08/17/92	91
Non-Refueling	Shutdown	08/18/92	08/21/92	4
Operation	Operation	08/22/92	11/13/92	84
Non-Refueling	Shutdown	11/14/92	11/15/92	2
Operation	Operation	11/16/92	01/24/93	70
Non-Refueling	Shutdown	01/25/93	01/28/93	4
Operation	Operation	01/29/93	07/07/93	160
Pre-Refueling	Operation	07/08/93	08/01/93	25
Refueling	Shutdown	08/02/93	09/28/93	58
Start-up	Operation	09/29/93	09/30/93	2

Time used in calculations

Trend Calculations

Op	11/01/92-09/30/93	270 days (incl.	2 days s/u)
S/D	04/02/92-09/28/93	90 days (incl.	80 days ref)
FOR	10/25/92-07/29/93	270 days	

Deviation Calculations

Op	12/09/91-09/30/93	540 days (incl.	27 days s/u)
S/D	12/10/90-09/28/93	143 days (incl.	112 days ref)
FOR	11/28/91-07/29/93	540 days	

TABLE 9.33 FARLEY 1

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	1	2	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	1	0	0	0
SSA	Operations	0	0	0	1	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	1	0	0	0
	Refueling	0	0	0	0	0	0	0	0	1	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		0	0	5	4	1	0	0	0	5	11	0	0
EFO/1000 HRS		0.00	0.00	1.00	0.00	0.46	0.00	0.00	0.00	1.32	0.51	0.00	0.00
CRIT. HRS		2209	1608	1001	2185	2193	2184	2183	2087	756	1943	2183	2208
RAD		205	149	167	6	2	92	126	15	169	9	3	NA
CAUSE CODES:													
Admin.	Operations	0	1	0	0	2	2	0	2	0	1	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	0	0	0	0
	Refueling	0	0	1	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	0	0	0	1	0	1	0	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	0	0	0	0	0	0	0	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	0	0	0	0
	Refueling	0	0	1	0	0	0	0	0	1	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	0	0	1	0	3	1	0	1	0	1	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	2	0	0	0	0	0	0	0	0	0
	Refueling	0	0	2	0	0	0	0	0	2	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Design	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	1	0	0	0
Misc.	Operations	0	0	0	1	0	0	0	0	0	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	1	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	02/13/91	136
Pre-Refueling	Operation	02/14/91	03/10/91	25
Refueling	Shutdown	03/11/91	05/13/91	64
Start-up	Operation	05/14/91	05/15/91	2
Non-Refueling	Shutdown	05/16/91	05/17/91	2
Start-up	Operation	05/18/91	06/09/91	23
Operation	Operation	06/10/91	09/03/92	452
Pre-Refueling	Operation	09/04/92	09/28/92	25
Refueling	Shutdown	09/29/92	11/24/92	57
Start-up	Operation	11/25/92	11/26/92	2
Non-Refueling	Shutdown	11/27/92	11/28/92	2
Start-up	Operation	11/29/92	12/21/92	23
Operation	Operation	12/22/92	03/06/93	75
Non-Refueling	Shutdown	03/07/93	03/14/93	8
Operation	Operation	03/15/93	09/30/93	200

Time used in calculations

Trend Calculations				Deviation Calculations			
Op	12/27/92-09/30/93	270 days (incl.	0 days s/u)	Op	02/02/92-09/30/93	540 days (incl.	25 days s/u)
S/D	09/29/92-03/14/93	67 days (incl.	57 days ref)	S/D	03/11/91-03/14/93	133 days (incl.	121 days ref)
FOR	01/04/93-09/30/93	270 days		FOR	02/01/92-09/30/93	540 days	

TABLE 9.34 FARLEY 2

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	2	1	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	3	0	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	0	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	0	1	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		0	0	10	1	0	2	10	0	2	12	0	0
EFO/1000 HRS		0.00	0.00	1.01	0.00	0.00	0.64	0.84	0.00	0.00	0.48	0.00	0.00
CRIT. HRS		294	2094	1989	2188	2209	1565	1196	2208	2188	2101	2183	2063
RAD		205	149	167	6	2	92	128	15	169	9	3	NA
CAUSE CODES:													
Admin.	Operations	0	0	1	0	2	1	0	0	0	1	0	1
	Pre-Refueling	0	0	0	0	0	2	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	4	0	0	0	0	0
	Refueling	0	0	0	0	0	1	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	0	0	0	0	0	0	0	0	1	0	0	0
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	2	0	0	0	0	0
	Refueling	0	0	0	0	0	[illegible]	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0		0	0	0	1	0	0
Oth. Per.	Operations	0	0	2	0	0	0	0	1	0	0	0	0
	Pre-Refueling	1	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	1	0	0	0	0	0
	Refueling	1	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	0	0	3	0	2	1	0	1	0	1	0	1
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	4	0	0	0	0	0
	Refueling	2	0	0	0	0	0	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
Design	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	1	1	0	0	0	0	0	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Pre-Refueling	Operation	10/01/90	10/13/90	13
Refueling	Shutdown	10/14/90	12/29/90	77
Start-up	Operation	12/30/90	12/31/90	2
Non-Refueling	Shutdown	01/01/91	01/02/91	2
Start-up	Operation	01/03/91	01/25/91	23
Operation	Operation	01/26/91	04/01/91	66
Non-Refueling	Shutdown	04/02/91	04/07/91	6
Operation	Operation	04/08/91	02/13/92	312
Pre-Refueling	Operation	02/14/92	03/09/92	25
Refueling	Shutdown	03/10/92	05/02/92	54
Start-up	Operation	05/03/92	05/04/92	2
Non-Refueling	Shutdown	05/05/92	05/08/92	4
Start-up	Operation	05/09/92	05/31/92	23
Operation	Operation	06/01/92	01/30/93	244
Non-Refueling	Shutdown	01/31/93	02/09/93	10
Operation	Operation	02/10/93	09/02/93	205
Pre-Refueling	Operation	09/03/93	09/27/93	25
Refueling	Shutdown	09/28/93	09/30/93	3

Time used in calculations

Trend Calculations				Deviation Calculations			
Op	12/22/92-09/27/93	270 days (incl.	0 days s/u)	Op	01/29/92-09/27/93	540 days (incl.	25 days s/u)
S/D	04/01/82-09/30/93	49 days (incl.	35 days ref)	S/D	10/14/90-09/30/93	156 days (incl.	134 days ref)
FOR	12/28/92-09/24/93	270 days		FOR	01/27/92-09/24/93	540 days	

TABLE 9.35 FERMI 2

Type	Phase	Year - Calendar Quarter 90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	1	0	0	0	0	0	0	0	0	1	1	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	0	1	0	0	0	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	1	0	0	0
	Refueling	0	0	1	0	0	0	0	0	1	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	1	2	0	1	1	1	2	0	0	2	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	1	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		0	2	11	0	0	2	4	0	5	5	2	3
EFO/1000 HRS		0.00	0.48	2.18	0.00	0.00	0.00	0.47	0.00	0.00	0.00	0.00	0.00
CRIT. HRS		1144	2087	458	2208	1992	2148	2113	1754	1124	2065	1929	2094
RAD		10	14	161	18	17	11	13	81	124	10	9	NA
CAUSE CODES:													
Admin.	Operations	1	1	0	1	2	1	2	0	0	3	1	3
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	0	0	0	0
	Refueling	0	0	1	0	0	0	0	1	0	0	0	0
	Non-Refueling	1	0	0	0	1	0	0	0	0	0	0	0
Lic. Oper.	Operations	0	0	0	0	1	0	1	0	0	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	1	0	0	0	0	0	0	0
Oth. Per.	Operations	0	0	0	2	1	0	0	0	0	1	2	3
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	1	0	0	0
	Refueling	0	0	3	0	0	0	0	1	1	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	1	2	0	2	4	2	2	0	0	4	2	1
	Pre-Refueling	0	0	0	0	0	0	0	1	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	0	0	0	0
	Refueling	0	1	8	0	0	0	0	1	2	0	0	0
	Non-Refueling	1	0	0	0	0	0	0	0	0	0	0	0
Design	Operations	0	1	0	0	0	1	2	0	0	2	0	2
	Pre-Refueling	0	1	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	1	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	1	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	1	0	0	0	0	0	0	0	0	0
	Non-Refueling	1	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Non-Refueling	Shutdown	10/01/90	10/04/90	4
Operation	Operation	10/05/90	10/06/90	2
Non-Refueling	Shutdown	10/07/90	10/08/90	2
Operation	Operation	10/09/90	11/25/90	48
Non-Refueling	Shutdown	11/26/90	12/29/90	34
Operation	Operation	12/30/90	03/05/91	66
Pre-Refueling	Operation	03/06/91	03/30/91	25
Refueling	Shutdown	03/31/91	06/02/91	64
Start-up	Operation	06/03/91	06/27/91	25
Operation	Operation	06/28/91	12/10/91	166
Non-Refueling	Shutdown	12/11/91	12/18/91	8
Operation	Operation	12/19/91	08/19/92	245
Pre-Refueling	Operation	08/20/92	09/13/92	25
Refueling	Shutdown	09/14/92	11/04/92	52
Start-up	Operation	11/05/92	11/29/92	25
Operation	Operation	11/30/92	12/05/92	6
Non-Refueling	Shutdown	12/06/92	12/11/92	6
Operation	Operation	12/12/92	02/10/93	61
Non-Refueling	Shutdown	02/11/93	02/12/93	2
Operation	Operation	02/13/93	04/10/93	57
Non-Refueling	Shutdown	04/11/93	04/18/93	8
Operation	Operation	04/19/93	09/30/93	165

Time used in calculations

Trend Calculations			Deviation Calculations		
Op	12/25/92-09/30/93	270 days (incl. 0 days s/u)	Op	02/01/92-09/30/93	540 days (incl. 25 days s/u)
S/D	09/14/92-04/18/93	68 days (incl. 52 days ref)	S/D	10/01/90-04/18/93	180 days (incl. 116 days ref)
FOR	12/22/82-09/30/93	270 days	FOR	01/21/92-09/30/93	540 days

TABLE 9.36 FITZPATRICK

Type	Phase	Year - Calendar Quarter 90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	2	0	0	0	0	0	0	0	0	0	2	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	0	0	0	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	1	1	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	1	0	0	0	0	0	0	0	0	0
SSF	Operations	1	0	1	3	2	0	0	0	0	0	2	2
	Pre-Refueling	0	0	0	0	2	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	2	0	0
	Refueling	0	0	0	0	3	7	4	0	2	0	0	0
	Non-Refueling	0	0	3	1	0	0	0	0	0	0	0	0
FOR (%)		7	18	74	54	37	100	0	0	0	31	21	3
EFO/1000 HRS		0.00	0.61	1.69	0.00	0.00	0.00	0.00	0.00	0.00	0.63	1.62	0.46
CRIT. HRS		2081	1630	591	1054	1401	0	0	0	0	1578	1848	2163
RAD		56	87	85	73	48	244	187	144	99	56	39	NA
CAUSE CODES:													
Admin.	Operations	4	2	1	3	0	0	0	0	0	2	2	3
	Pre-Refueling	0	0	0	0	4	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	8	8	2	8	0	0	0
	Non-Refueling	0	0	1	0	0	0	0	0	0	0	1	0
Lic. Oper.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	1	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	2	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	2	2	0	2	0	0	0	0	0	0	2	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	1	2	4	4	3	0	0	0
	Non-Refueling	0	0	1	1	0	0	0	0	0	1	0	0
Maint.	Operations	7	3	1	5	1	0	0	0	0	1	5	3
	Pre-Refueling	0	0	0	0	1	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	1	4	12	5	6	0	0	0
	Non-Refueling	0	0	1	2	0	0	0	0	0	1	1	0
Design	Operations	1	1	2	2	1	0	0	0	0	2	2	0
	Pre-Refueling	0	0	0	0	3	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	1	0	0
	Refueling	0	0	0	0	4	11	7	1	2	0	0	0
	Non-Refueling	0	0	1	4	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	0	0	0	0	0	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length	Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	03/09/91	160	Operation	Operation	05/28/93	09/30/93	126
Non-Refueling	Shutdown	03/10/91	03/16/91	7					
Operation	Operation	03/17/91	03/18/91	2					
Non-Refueling	Shutdown	03/19/91	04/11/91	24					
Operation	Operation	04/12/91	05/07/91	26					
Non-Refueling	Shutdown	05/08/91	08/16/91	101					
Operation	Operation	08/17/91	11/04/91	80					
Pre-Refueling	Operation	11/05/91	11/29/91	25					
Refueling	Shutdown	11/30/91	01/01/93	399					
Start-up	Operation	01/02/93	01/26/93	25					
Operation	Operation	01/27/93	02/25/93	30					
Non-Refueling	Shutdown	02/26/93	03/05/93	8					
Operation	Operation	03/06/93	03/07/93	2					
Non-Refueling	Shutdown	03/08/93	03/19/93	12					
Operation	Operation	03/20/93	04/20/93	32					
Non-Refueling	Shutdown	04/21/93	04/24/93	4					
Operation	Operation	04/25/93	05/19/93	25					
Non-Refueling	Shutdown	05/20/93	05/23/93	4					
Operation	Operation	05/24/93	05/25/93	2					
Non-Refueling	Shutdown	05/26/93	05/27/93	2					

Time used in calculations

Trend Calculations

Op	01/02/93-09/30/93	242 days (incl.	25 days a/u)
S/D	11/03/92-05/27/93	90 days (incl.	60 days ref)
FOR	01/23/93-09/30/93	242 days	

Deviation Calculations

Op	10/01/90-09/30/93	535 days (incl.	25 days a/u)
S/D	08/05/92-05/27/93	180 days (incl.	150 days ref)
FOR	03/19/91-09/30/93	540 days	

TABLE 9.37 FORT CALHOUN

Type	Phase	Year - Calendar Quarter 90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	0	0	0	0	2	0	0	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	1	0	0	0	0	0
SSA	Operations	0	0	1	0	0	0	0	1	0	0	2	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	1	0	0	0	0	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	2	3	2	0	0	0	0	0	1	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	2	1	0	0	0	0	0
	Non-Refueling	0	0	0	1	0	0	0	0	0	0	0	0
FOR (%)		26	9	0	20	8	0	4	38	0	0	4	0
EFO/1000 HRS		0.60	0.00	0.00	1.13	0.96	0.00	0.71	1.41	0.00	0.00	0.00	0.00
CRIT. HRS		1663	1980	2183	1775	2093	751	1417	1414	2209	2160	1974	2071
RAD		25	16	13	14	9	175	53	17	10	6	5	NA
CAUSE CODES:													
Admin.	Operations	1	4	2	0	6	0	3	3	2	4	4	0
	Pre-Refueling	0	0	0	0	0	2	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	1	0	0	0	0	0
	Refueling	0	0	0	0	0	3	1	0	0	0	0	0
	Non-Refueling	0	0	0	2	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	0	0	1	0	1	0	1	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	1	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	1	1	3	0	1	0	1	1	2	0	3	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	1	0	0	0	0	0
	Refueling	0	0	0	0	0	0	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	1	0	0	0	0	0	1	0
Maint.	Operations	1	3	5	0	4	0	2	5	1	4	5	0
	Pre-Refueling	0	0	0	0	0	3	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	1	0	0	0	0	0
	Refueling	0	0	0	0	0	3	2	0	0	0	0	0
	Non-Refueling	0	0	0	0	1	0	0	0	0	0	0	0
Design	Operations	1	2	1	4	3	0	1	5	0	2	0	0
	Pre-Refueling	0	0	0	0	0	2	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	4	3	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Non-Refueling	Shutdown	10/01/90	10/04/90	4
Operation	Operation	10/05/90	11/19/90	46
Non-Refueling	Shutdown	11/20/90	11/21/90	2
Operation	Operation	11/22/90	12/15/90	24
Non-Refueling	Shutdown	12/16/90	01/07/91	23
Operation	Operation	01/08/91	09/12/91	248
Non-Refueling	Shutdown	09/13/91	10/04/91	22
Operation	Operation	10/05/91	01/09/92	97
Pre-Refueling	Operation	01/10/92	02/01/92	23
Non-Refueling	Shutdown	02/02/92	02/03/92	2
Pre-Refueling	Operation	02/04/92	02/05/92	2
Refueling	Shutdown	02/06/92	04/25/92	80
Start-up	Operation	04/26/92	04/26/92	1
Non-Refueling	Shutdown	04/27/92	04/30/92	4
Start-up	Operation	05/01/92	05/24/92	24
Operation	Operation	05/25/92	07/03/92	40
Non-Refueling	Shutdown	07/04/92	07/21/92	18
Operation	Operation	07/22/92	08/22/92	32
Non-Refueling	Shutdown	08/23/92	09/04/92	13
Operation	Operation	09/05/92	04/23/93	231

Phase	Phase type	Start	End	Length
Non-Refueling	Shutdown	04/24/93	04/29/93	6
Operation	Operation	04/30/93	09/25/93	149
Non-Refueling	Shutdown	09/26/93	09/27/93	2
Operation	Operation	09/28/93	09/30/93	3

Time used in calculations

Trend Calculations				Deviation Calculations			
Op	12/27/92-09/30/93	270 days (incl.	0 days s/u)	Op	12/06/91-09/30/93	540 days (incl.	25 days s/u)
S/D	04/01/92-09/27/93	68 days (incl.	25 days ref)	S/D	10/01/90-09/27/93	176 days (incl.	80 days ref)
FOR	12/22/92-09/25/93	270 days		FOR	12/25/91-09/25/93	540 days	

TABLE 9.38 GINNA

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	3	0	0	0	0	2	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	0	1	0	0	0
	Pre-Refueling	0	2	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	1	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	1	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		11	0	1	1	0	4	5	0	0	0	0	0
EFO/1000 HRS		1.00	0.00	0.81	0.00	0.00	0.50	0.83	0.00	0.00	0.00	0.00	0.00
CRIT. HRS		1992	1933	1241	2208	2209	2013	1204	2208	2209	1695	1596	2208
RAD		14	241	73	9	6	35	210	10	5	85	75	NA
CAUSE CODES:													
Admin.	Operations	3	0	0	0	0	0	0	0	0	0	0	1
	Pre-Refueling	0	1	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	1	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	0	0	0	0	0	1	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	1	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	3	1	1	1	1	3	0	0	0	0	0	1
	Pre-Refueling	0	1	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	1	0	0	0	0	0
	Refueling	0	0	1	0	0	0	1	0	0	0	1	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Design	Operations	2	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	1	0	0	0	0	1	0	0	1	0	0	0
	Pre-Refueling	0	1	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	12/12/90	73
Non-Refueling	Shutdown	12/13/90	12/19/90	7
Operation	Operation	12/20/90	02/27/91	70
Pre-Refueling	Operation	02/28/91	03/24/91	25
Refueling	Shutdown	03/25/91	05/04/91	41
Start-up	Operation	05/05/91	05/06/91	2
Non-Refueling	Shutdown	05/07/91	05/10/91	4
Start-up	Operation	05/11/91	06/02/91	23
Operation	Operation	06/03/91	03/02/92	274
Pre-Refueling	Operation	03/03/92	03/27/92	25
Refueling	Shutdown	03/28/92	05/02/92	36
Start-up	Operation	05/03/92	05/04/92	2
Non-Refueling	Shutdown	05/05/92	05/08/92	4
Start-up	Operation	05/09/92	05/31/92	23
Operation	Operation	06/01/92	02/17/93	262
Pre-Refueling	Operation	02/18/93	03/14/93	25
Refueling	Shutdown	03/15/93	04/20/93	37
Start-up	Operation	04/21/93	04/22/93	2
Non-Refueling	Shutdown	04/23/93	04/24/93	2
Start-up	Operation	04/25/93	05/17/93	23

Phase	Phase type	Start	End	Length
Operation	Operation	05/18/93	09/30/93	136

Time used in calculations

Trend Calculations				Deviation Calculations			
Op	11/26/92-09/30/93	270 days (incl.	25 days s/u)	Op	01/21/92-09/30/93	540 days (incl.	50 days s/u)
S/D	04/01/92-04/24/93	75 days (incl.	69 days ref)	S/D	12/13/90-04/24/93	131 days (incl.	114 days ref)
FOR	11/19/92-09/30/93	270 days		FOR	01/09/92-09/30/93	540 days	

TABLE 9.39 GRAND GULF

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	3	2	1	0	0	1	0	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	2	0	0	0	0	0	2	0	0	0	0	0
SSA	Operations	0	0	2	2	0	0	0	0	0	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	1	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	0	0	0	0	0	0	0	1	1	0	2
	Pre-Refueling	0	0	0	0	0	0	1	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	3	0	0	0	0	0	2	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		49	0	15	12	6	10	7	3	0	0	0	14
EFO/1000 HRS		3.41	0.00	1.02	0.50	0.47	0.00	0.00	0.46	0.00	0.00	0.00	1.51
CRIT. HRS		586	2160	1953	2009	2109	2011	963	2166	2209	2160	2183	1990
RAD		414	23	42	15	24	35	422	14	13	16	10	NA
CAUSE CODES:													
Admin.	Operations	0	0	2	2	1	0	0	1	1	2	2	1
	Pre-Refueling	0	0	0	0	0	0	1	0	0	0	0	0
	Startup	3	0	0	0	0	0	2	0	0	0	0	0
	Refueling	4	0	0	0	0	0	2	0	0	0	0	0
	Non-Refueling	0	0	0	1	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	0	1	0	1	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	1	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	0	0	0	0	0	0	0	0	1	0	0	1
	Pre-Refueling	0	0	0	0	0	1	1	0	0	0	0	0
	Startup	0	0	0	0	0	0	3	0	0	0	0	0
	Refueling	2	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	0	1	3	2	2	0	0	1	2	2	2	3
	Pre-Refueling	0	0	0	0	0	1	1	0	0	0	0	0
	Startup	2	0	0	0	0	0	3	0	0	0	0	0
	Refueling	5	0	0	0	0	0	3	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Design	Operations	0	0	1	1	0	0	0	2	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	1	0	0	0	0	0
	Startup	0	0	0	0	0	0	2	0	0	0	0	0
	Refueling	1	0	0	0	0	0	2	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	1	1	1	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	1	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Refueling	Shutdown	10/01/90	11/23/90	54
Start-up	Operation	11/24/90	12/18/90	25
Non-Refueling	Shutdown	12/19/90	12/29/90	11
Operation	Operation	12/30/90	05/18/91	140
Non-Refueling	Shutdown	05/19/91	05/22/91	4
Operation	Operation	05/23/91	06/11/91	20
Non-Refueling	Shutdown	06/12/91	06/14/91	3
Operation	Operation	06/15/91	07/28/91	44
Non-Refueling	Shutdown	07/29/91	08/03/91	6
Operation	Operation	08/04/91	11/19/91	108
Non-Refueling	Shutdown	11/20/91	11/21/91	2
Operation	Operation	11/22/91	12/30/91	39
Non-Refueling	Shutdown	12/31/91	01/07/92	8
Operation	Operation	01/08/92	03/25/92	78
Pre-Refueling	Operation	03/26/92	04/19/92	25
Refueling	Shutdown	04/20/92	06/03/92	45
Start-up	Operation	06/04/92	06/28/92	25
Operation	Operation	06/29/92	09/13/93	442
Non-Refueling	Shutdown	09/14/93	09/17/93	4
Operation	Operation	09/18/93	09/30/93	13

Time used in calculations

Trend Calculations				Deviation Calculations			
Op	12/31/92-09/30/93	270 days (incl.	0 days s/u)	Op	02/20/92-09/30/93	540 days (incl.	25 days s/u)
S/D	04/20/92-09/17/93	49 days (incl.	45 days ref)	S/D	10/01/90-09/17/93	137 days (incl.	99 days ref)
FOR	01/01/93-09/28/93	270 days		FOR	02/13/92-09/28/93	*40 days	

TABLE 9.40 HADDAM NECK

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	1	0	0	0	0	0	1
SSA	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	2	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	1	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	3	3	0	1	0	0	3	0	0	0	0	2
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	1	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	2	3	0	0	0	0	1	0
	Non-Refueling	1	2	0	0	0	0	0	0	0	0	0	1
FOR (%)		21	14	0	0	7	10	0	0	0	2	0	5
EFO/1000 HRS		0.00	0.00	0.00	0.00	2.36	2.27	0.00	0.00	0.00	0.47	0.00	0.56
CRIT. HRS		1769	1879	2183	2208	423	440	2183	2208	2209	2130	1069	1786
RAD		46	27	11	26	532	170	10	10	12	10	366	NA
CAUSE CODES:													
Admin.	Operations	4	6	1	0	0	0	1	1	1	1	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	1	0
	Startup	0	0	0	0	0	2	0	0	0	0	0	0
	Refueling	0	0	0	0	3	2	0	0	0	0	0	1
	Non-Refueling	0	1	0	0	0	2	0	0	0	0	0	1
Lic. Oper.	Operations	0	1	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	1	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	1
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	1	1	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	3	0	1	2	0	0	2	1	0	2	0	0
	Pre-Refueling	0	0	0	6	1	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	1	0	0	0	0	1	0
	Non-Refueling	0	1	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	6	4	1	4	0	0	3	0	1	3	0	1
	Pre-Refueling	0	0	0	0	2	0	0	0	0	0	1	0
	Startup	0	0	0	0	0	1	0	0	0	0	0	1
	Refueling	0	0	0	0	4	2	0	0	0	0	6	0
	Non-Refueling	1	2	0	0	0	1	0	0	0	0	0	1
Design	Operations	1	1	0	1	0	0	2	1	0	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	4	3	0	0	0	0	0	0
	Non-Refueling	1	1	0	0	0	1	0	0	0	0	0	0
Misc.	Operations	0	0	0	0	0	0	1	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	1	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	10/27/90	27
Non-Refueling	Shutdown	10/28/90	11/13/90	17
Operation	Operation	11/14/90	03/01/91	108
Non-Refueling	Shutdown	03/02/91	03/12/91	11
Operation	Operation	03/13/91	09/24/91	196
Pre-Refueling	Operation	09/25/91	10/19/91	25
Refueling	Shutdown	10/20/91	02/12/92	116
Start-up	Operation	02/13/92	02/14/92	2
Non-Refueling	Shutdown	02/15/92	03/10/92	25
Start-up	Operation	03/11/92	04/02/92	23
Operation	Operation	04/03/92	04/22/93	385
Pre-Refueling	Operation	04/23/93	05/17/93	25
Refueling	Shutdown	05/18/93	07/10/93	54
Start-up	Operation	07/11/93	07/12/93	2
Non-Refueling	Shutdown	07/13/93	07/16/93	4
Start-up	Operation	07/17/93	08/08/93	23
Operation	Operation	08/09/93	09/30/93	53

Time used in calculations

Trend Calculations			Deviation Calculations		
Op	11/07/92-09/30/93	270 days (incl. 25 days s/u)	Op	09/23/91-09/30/93	540 days (incl. 50 days s/u)
S7D	05/18/93-07/16/93	58 days (incl. 54 days ref)	S7D	11/06/91-07/16/93	180 days (incl. 151 days ref)
FOR	10/29/92-09/30/93	270 days	FOR	09/06/91-09/30/93	540 days

TABLE 9.41 HARRIS

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	0	0	0	0	2	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	0	0	0	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	0	0	0	0
	Refueling	0	0	1	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	0	0	1	0	0	0	0	0	2	1	0
	Pre-Refueling	0	2	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	1	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		11	0	6	0	0	6	0	12	0	0	0	0
EPO/1000 HRS		0.64	0.00	0.00	0.00	0.00	0.00	0.00	1.92	0.00	0.00	0.00	0.00
CRIT. HRS		1565	1779	946	2208	2209	2058	2183	1566	775	2160	2156	2208
RAD		34	69	139	8	10	14	12	49	139	7	8	NA
CAUSE CODES:													
Admin.	Operations	2	1	1	2	1	2	2	1	0	1	2	0
	Pre-Refueling	0	2	0	0	0	0	0	1	0	0	0	0
	Startup	0	0	3	0	0	0	0	0	0	0	0	0
	Refueling	0	1	1	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	1	0	0	0	0
Lic. Oper.	Operations	0	0	0	0	0	0	0	2	0	0	2	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	1	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	0	1	0	1	0	0	1	3	0	1	1	0
	Pre-Refueling	0	1	0	0	0	0	0	1	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	0	0	0	0
	Refueling	0	2	2	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	2	2	1	3	3	1	1	4	0	2	5	0
	Pre-Refueling	0	3	0	0	0	0	0	1	0	0	0	0
	Startup	0	0	4	0	0	0	0	0	0	0	0	0
	Refueling	0	2	3	0	0	0	0	0	0	0	0	0
	Non-Refueling	2	0	0	0	0	0	0	1	0	0	0	0
Design	Operations	0	0	0	1	1	2	0	1	0	1	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	1	0	0	0	0	0	0	0	0	0
	Non-Refueling	1	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	11/10/90	41
Non-Refueling	Shutdown	11/11/90	11/28/90	18
Operation	Operation	11/29/90	12/01/90	3
Non-Refueling	Shutdown	12/02/90	12/08/90	7
Operation	Operation	12/09/90	02/20/91	74
Pre-Refueling	Operation	02/21/91	03/17/91	25
Refueling	Shutdown	03/18/91	05/17/91	61
Start-up	Operation	05/18/91	06/11/91	25
Operation	Operation	06/12/91	03/07/92	270
Non-Refueling	Shutdown	03/08/92	03/11/92	4
Operation	Operation	03/12/92	07/17/92	128
Non-Refueling	Shutdown	07/18/92	07/21/92	4
Operation	Operation	07/22/92	08/20/92	30
Pre-Refueling	Operation	08/21/92	09/14/92	25
Refueling	Shutdown	09/15/92	11/23/92	70
Start-up	Operation	11/24/92	11/25/92	2
Non-Refueling	Shutdown	11/26/92	11/28/92	3
Start-up	Operation	11/29/92	12/21/92	23
Operation	Operation	12/22/92	09/30/93	283

Time used in calculations

Trend Calculations				Deviation Calculations			
Op	01/04/93-09/30/93	270 days (incl.	0 days s/u)	Op	01/19/92-09/30/93	540 days (incl.	25 days s/u)
S/D	07/18/92-11/28/92	77 days (incl.	70 days ref)	S/D	11/11/90-11/28/92	167 days (incl.	131 days ref)
FOR	01/02/93-09/30/93	270 days		FOR	01/17/92-09/30/93	540 days	

TABLE 9.42 HATCH 1

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	1	3	0	1	0	1	1	1	0	0	1	0
	Pre-Refueling	0	0	0	1	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	1	0
SSA	Operations	0	2	0	0	0	0	0	2	0	0	0	0
	Pre-Refueling	0	0	0	1	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	1	0	0	0	0	1	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	1	0	1	2	1	2	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	1	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		5	15	0	8	0	4	3	4	1	0	4	0
EFO/1000 HRS		0.48	1.06	0.00	0.55	0.00	0.00	0.48	0.47	0.00	0.00	0.00	0.00
CRIT. HRS		2078	1881	2183	1812	914	2122	2098	2150	2196	1784	1120	2208
RAD		39	66	209	58	227	31	43	57	143	84	170	NA
CAUSE CODES:													
Admin.	Operations	5	1	2	0	0	4	3	4	0	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	1	0	0	0	0	0	2	0
	Refueling	0	0	0	0	3	0	0	0	0	0	3	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	0	0	0	0	1	2	1	0	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	1	0
	Refueling	0	0	0	0	0	0	0	0	0	0	1	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	2	4	1	0	0	1	0	0	0	0	0	0
	Pre-Refueling	0	0	0	2	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	1	0	0	0	0	0	0	0
	Refueling	0	0	0	0	2	0	0	0	0	0	2	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	6	7	5	2	2	7	6	8	2	1	1	1
	Pre-Refueling	0	0	0	3	0	0	0	0	0	1	0	0
	Startup	0	0	0	0	3	0	0	0	0	0	3	0
	Refueling	0	0	0	0	7	0	0	0	0	0	5	0
	Non-Refueling	0	1	0	0	0	0	0	0	0	0	0	0
Design	Operations	1	1	2	3	0	1	3	0	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	1	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	1	2	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	1	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	1	0	0	0	0	0	1	0
	Non-Refueling	0	1	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	10/06/90	6
Non-Refueling	Shutdown	10/07/90	10/08/90	2
Operation	Operation	10/09/90	02/12/91	127
Non-Refueling	Shutdown	02/13/91	02/19/91	7
Operation	Operation	02/20/91	08/26/91	188
Pre-Refueling	Operation	08/27/91	09/20/91	25
Refueling	Shutdown	09/21/91	11/20/91	61
Start-up	Operation	11/21/91	12/15/91	25
Operation	Operation	12/16/91	02/22/93	435
Pre-Refueling	Operation	02/23/93	03/19/93	25
Refueling	Shutdown	03/20/93	05/12/93	54
Start-up	Operation	05/13/93	06/06/93	25
Operation	Operation	06/07/93	09/30/93	116

Time used in calculations

Trend Calculations				Deviation Calculations			
Op	11/11/92-09/30/93	270 days (incl.	25 days s/u)	Op	02/15/92-09/30/93	540 days (incl.	25 days s/u)
S/D	03/20/93-05/12/93	54 days (incl.	54 days ref)	S/D	10/07/90-05/12/93	124 days (incl.	115 days ref)
FOR	11/03/92-09/30/93	270 days		FOR	02/04/92-09/30/93	540 days	

TABLE 9.43 HATCH 2

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	1	0	0	0	0	1	0	0	0	0	0
	Pre-Refueling	0	1	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	1	0	0	0
SSA	Operations	0	0	0	0	0	0	1	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	1	0	0	0	0	0	1	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	1	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	1	0	0	1	0	1	1	0	0	0	1	2
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		0	17	0	0	0	1	3	0	12	31	8	0
EFO/1000 HRS		0.00	0.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64	0.00	0.00
CRIT. HRS		2209	1621	741	2208	2209	2081	2135	1851	939	1560	2050	2208
RAD		39	86	209	58	227	31	43	57	143	94	170	NA
CAUSE CODES:													
Admin.	Operations	5	1	0	0	2	3	3	2	0	0	2	1
	Pre-Refueling	0	0	0	0	0	0	0	1	0	0	0	0
	Startup	0	0	3	0	0	0	0	0	2	0	0	0
	Refueling	0	1	2	0	0	0	0	1	3	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	0	0	0	0	1	1	1	0	0	0	2	0
	Pre-Refueling	0	1	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	1	0	0	0
	Refueling	0	0	0	0	0	0	0	2	1	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	4	1	0	2	2	2	1	2	0	0	0	0
	Pre-Refueling	0	1	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	1	0	0	0	0	0	2	0	0	0
	Non-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
Maint.	Operations	7	5	0	3	7	7	7	3	2	2	5	1
	Pre-Refueling	0	1	0	0	0	0	0	2	0	0	0	0
	Startup	0	0	3	0	0	0	0	0	2	0	0	0
	Refueling	0	3	6	0	0	0	0	4	3	0	0	0
	Non-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
Design	Operations	0	1	0	4	0	0	3	1	0	2	0	0
	Pre-Refueling	0	0	0	0	0	0	0	1	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	1	0	0	0
	Refueling	0	0	1	0	0	0	0	1	1	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	4	0	0	1	0	1	1	0	0	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	1	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	02/14/91	137
Non-Refueling	Shutdown	02/15/91	02/23/91	9
Pre-Refueling	Operation	02/24/91	03/20/91	25
Refueling	Shutdown	03/21/91	05/30/91	71
Start-up	Operation	05/31/91	06/24/91	25
Operation	Operation	06/25/91	01/24/92	214
Non-Refueling	Shutdown	01/25/92	01/27/92	3
Operation	Operation	01/28/92	08/23/92	209
Pre-Refueling	Operation	08/24/92	09/17/92	25
Refueling	Shutdown	09/18/92	11/17/92	61
Start-up	Operation	11/18/92	12/06/92	18
Non-Refueling	Shutdown	12/07/92	12/09/92	3
Start-up	Operation	12/10/92	12/15/92	6
Operation	Operation	12/16/92	03/03/93	78
Non-Refueling	Shutdown	03/04/93	03/26/93	23
Operation	Operation	03/27/93	03/31/93	5
Non-Refueling	Shutdown	04/01/93	04/04/93	4
Operation	Operation	04/05/93	09/30/93	179

Time used in calculations

Trend Calculations			Deviation Calculations		
Op	12/05/92-09/30/93	270 days (incl. 8 days s/u)	Op	01/06/92-09/30/93	540 days (incl. 25 days s/u)
S/D	09/19/92-04/04/93	90 days (incl. 60 days ref)	S/D	02/15/91-04/04/93	174 days (incl. 132 days ref)
FOR	01/04/93-09/30/93	270 days	FOR	01/19/82-09/30/93	540 days

TABLE 9.44 HOPE CREEK

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	2	0	1	0	0	0	0	0	0	1	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	1	0	0	0	0	0	0	0	0	0	0
SSA	Operations	2	0	2	1	0	0	0	0	0	0	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	3	0	3	2	0	1	2	0	1	0	0	2
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		16	21	4	0	0	0	6	0	4	0	5	0
EFO/1000 HRS		1.12	2.33	0.00	0.00	0.00	0.00	0.96	0.00	0.00	0.00	0.48	0.00
CRIT. HRS		1784	860	2103	2208	2209	1963	2087	1755	1290	2160	2102	2208
RAD		106	298	22	19	30	27	20	140	248	24	21	NA
CAUSE CODES:													
Admin.	Operations	3	0	3	1	0	0	1	0	0	2	0	0
	Pre-Refueling	1	0	0	0	0	0	0	1	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	2	0	0	0	0	0	3	0	0	0	0
	Non-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
Lic. Oper.	Operations	1	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	1	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	2	0	1	0	0	1	1	1	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	.	0	0	0
	Refueling	0	2	0	0	0	0	0	0	.	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	7	0	6	1	1	3	3	0	0	2	2	2
	Pre-Refueling	1	0	0	0	0	0	0	1	0	0	0	0
	Startup	0	1	0	0	0	0	0	0	0	0	0	0
	Refueling	0	4	0	0	0	0	0	3	0	0	0	0
	Non-Refueling	0	0	1	0	0	1	0	0	0	0	0	0
Design	Operations	6	0	2	0	2	0	0	0	0	0	0	1
	Pre-Refueling	2	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	1	0	0	0	0	0	0	2	0	0	0
	Non-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
Misc.	Operations	1	0	0	2	0	0	0	0	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	11/04/90	35
Non-Refueling	Shutdown	11/05/90	11/13/90	9
Operation	Operation	11/14/90	12/02/90	19
Pre-Refueling	Operation	12/03/90	12/27/90	25
Refueling	Shutdown	12/28/90	02/15/91	50
Start-up	Operation	02/16/91	02/23/91	8
Non-Refueling	Shutdown	02/24/91	02/28/91	5
Start-up	Operation	03/01/91	03/17/91	17
Operation	Operation	03/18/91	05/07/91	51
Non-Refueling	Shutdown	05/08/91	05/10/91	3
Operation	Operation	05/11/91	03/06/92	301
Non-Refueling	Shutdown	03/07/92	03/13/92	7
Operation	Operation	03/14/92	05/26/92	74
Non-Refueling	Shutdown	05/27/92	05/29/92	3
Operation	Operation	05/30/92	08/19/92	82
Pre-Refueling	Operation	08/20/92	09/13/92	25
Refueling	Shutdown	09/14/92	11/05/92	53
Start-up	Operation	11/06/92	11/30/92	25
Operation	Operation	12/01/92	05/16/93	167
Non-Refueling	Shutdown	05/17/93	05/18/93	2

Phase	Phase type	Start	End	Length
Operation	Operation	05/19/93	09/30/93	135

Time used in calculations

Trend Calculations

Op	01/02/93-09/30/93	270 days (incl.	0 days s/u)
S/D	05/27/92-05/18/93	58 days (incl.	53 days ref)
FOR	01/04/93-09/30/93	270 days	

Deviation Calculations

Op	02/04/92-09/30/93	540 days (incl.	25 days s/u)
S/D	11/05/90-05/18/93	132 days (incl.	103 days ref)
FOR	01/30/92-09/30/93	540 days	

TABLE 9.45 INDIAN POINT 2

Type	Phase	Year - Calendar Quarter 90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	1	0	0	0	1	1	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	1	0	0	0	0	0	0	0	0
SSA	Operations	1	0	0	0	0	1	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	2	1	0	0	0	0	0	0	3	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	1	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	0	0	1	0	0	1	0	0	0	0	3
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	1	0	0	0	0	0	0	1	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		0	5	0	7	8	6	1	6	0	0	13	0
EFO/1000 HRS		0.00	0.00	0.00	1.05	0.94	1.88	0.00	0.94	0.00	0.00	0.00	0.00
CRIT. HRS		2209	730	0	1904	2128	2130	2158	2128	2209	697	1517	2208
RAD		25	618	775	32	43	25	21	17	18	559	89	NA
CAUSE CODES:													
Admin.	Operations	0	0	0	0	1	1	1	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	1	0	0	0	0	0	2	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	2	1	0	0	0	0	3	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	1	0	0	0	0	0	0	0	0
	Refueling	0	2	0	0	0	0	0	0	2	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	8	1	0	2	2	6	5	1	0	0	0	1
	Pre-Refueling	0	1	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	3	0	0	0	0	0	0	0	0
	Refueling	0	3	1	1	0	0	0	0	0	5	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Design	Operations	0	0	0	2	0	0	2	2	0	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	1	0	0	0	0	0	0	1	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	1	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	01/07/91	99
Pre-Refueling	Operation	01/08/91	02/01/91	25
Refueling	Shutdown	02/02/91	07/12/91	161
Start-up	Operation	07/13/91	08/06/91	25
Operation	Operation	08/07/91	08/19/91	13
Non-Refueling	Shutdown	08/20/91	08/22/91	3
Operation	Operation	08/23/91	11/02/91	72
Non-Refueling	Shutdown	11/03/91	11/06/91	4
Operation	Operation	11/07/91	09/20/92	319
Non-Refueling	Shutdown	09/21/92	09/22/92	2
Operation	Operation	09/23/92	01/05/93	105
Pre-Refueling	Operation	01/06/93	01/30/93	25
Refueling	Shutdown	01/31/93	04/13/93	73
Start-up	Operation	04/14/93	04/15/93	2
Non-Refueling	Shutdown	04/16/93	04/19/93	4
Start-up	Operation	04/20/93	05/02/93	13
Non-Refueling	Shutdown	05/03/93	05/08/93	6
Start-up	Operation	05/09/93	05/18/93	10
Operation	Operation	05/19/93	09/30/93	135

Time used in calculations

Trend Calculations				Deviation Calculations			
Op	10/13/92-09/30/93	270 days (incl.	25 days s/u)	Op	01/15/92-09/30/93	540 days (incl.	25 days s/u)
S/D	09/21/92-05/08/93	85 days (incl.	73 days ref)	S/D	04/16/91-05/08/93	180 days (incl.	161 days ref)
FOR	10/13/92-09/30/93	270 days		FOR	01/17/92-09/30/93	540 days	

TABLE 9.46 INDIAN POINT 3

Type	Phase	Year - Calendar Quarter 90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	2	0	0	0	0	0	2	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
SSF	Operations	0	0	0	1	1	0	0	0	2	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	2	0	0	0	0	0	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	3	2
FOR (%)		13	12	11	0	18	6	0	32	13	38	100	100
EFO/1000 HRS		3.72	1.55	0.00	0.45	0.00	0.48	0.00	0.98	0.00	0.00	0.00	0.00
CRIT. HRS		269	1933	1699	2208	1828	2064	409	1025	1898	1304	0	0
RAD		177	6	21	4	4	5	156	21	12	9	16	NA
CAUSE CODES:													
Admin.	Operations	0	0	0	1	1	2	0	0	4	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	0	1	2	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	1	9	4
Lic. Oper.	Operations	0	0	0	0	0	0	0	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	1	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	1	1	0
Oth. Per.	Operations	0	0	0	1	0	0	0	0	3	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	2	0	0	0	0	0	2	2	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	1	10	2
Maint.	Operations	0	3	1	2	1	3	0	1	5	2	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	1	0	0	0	0	0	0	0	0	0	0	0
	Refueling	3	0	0	0	0	0	5	2	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	2	13	2
Design	Operations	0	0	0	1	0	1	0	1	2	2	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	0	3	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	2	2
Misc.	Operations	0	0	0	0	1	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Refueling	Shutdown	10/01/90	12/18/90	78
Start-up	Operation	12/19/90	01/12/91	25
Operation	Operation	01/13/91	03/23/91	70
Non-Refueling	Shutdown	03/24/91	04/08/91	16
Operation	Operation	04/09/91	05/12/91	34
Non-Refueling	Shutdown	05/13/91	05/23/91	11
Operation	Operation	05/24/91	10/19/91	149
Non-Refueling	Shutdown	10/20/91	11/02/91	14
Operation	Operation	11/03/91	03/20/92	139
Non-Refueling	Shutdown	03/21/92	03/24/92	4
Operation	Operation	03/25/92	03/25/92	1
Pre-Refueling	Operation	03/26/92	04/19/92	25
Refueling	Shutdown	04/20/92	07/23/92	95
Start-up	Operation	07/24/92	07/24/92	1
Non-Refueling	Shutdown	07/25/92	08/01/92	8
Start-up	Operation	08/02/92	08/25/92	24
Operation	Operation	08/26/92	09/15/92	21
Non-Refueling	Shutdown	09/16/92	10/10/92	25
Operation	Operation	10/11/92	11/20/92	41
Non-Refueling	Shutdown	11/21/92	11/22/92	2
Operation	Operation	11/23/92	02/27/93	97
Non-Refueling	Shutdown	02/28/93	09/30/93	215

Time used in calculations

	Trend Calculations		Deviation Calculations	
Op	10/11/92-02/27/93	138 days (incl. 0 days s/u)	03/16/91-02/27/93	540 days (incl. 25 days s/u)
S/D	07/03/93-09/30/93	90 days (incl. 0 days ref)	04/04/93-09/30/93	180 days (incl. 0 days ref)
FOR	12/31/92-09/30/93	270 days	12/14/91-09/30/93	540 days

TABLE 9.47 KEWAUNEE

Type	Phase	Year - Calendar Quarter 90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	0	1	0	0	1	0	2	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	1	0	0	1	0	0	0	1	0	0	0
	Pre-Refueling	0	1	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	2	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		0	0	0	0	1	0	0	3	2	3	0	0
EFO/1000 HRS		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46	0.46	0.67	0.00	0.00
CRIT. HRS		2209	1612	1289	2208	2197	1584	1812	2151	2178	1499	1692	2208
RAD		3	69	138	3	3	80	32	2	1	74	28	NA
CAUSE CODES:													
Admin.	Operations	2	0	0	1	2	0	0	0	2	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	1	0	0	0	1	0	0	0	0	0
	Refueling	0	0	1	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	0	0	0	0	1	0	0	1	0	0	2	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	1	0	0	0	1	0	1	0	1	0	1	0
	Pre-Refueling	0	1	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	1	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	4	0	0	1	4	1	1	3	4	3	2	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Startup	0	0	1	0	0	0	2	0	0	0	1	0
	Refueling	0	0	1	0	0	4	0	0	0	3	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Design	Operations	1	1	0	1	2	0	2	0	0	0	0	0
	Pre-Refueling	0	1	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	1	1	0	0	2	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	0	0	0	0	0	0	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	02/13/91	136
Pre-Refueling	Operation	02/14/91	03/10/91	25
Refueling	Shutdown	03/11/91	05/06/91	57
Start-up	Operation	05/07/91	05/31/91	25
Operation	Operation	06/01/91	02/12/92	257
Pre-Refueling	Operation	02/13/92	03/06/92	25
Refueling	Shutdown	03/09/92	04/11/92	34
Start-up	Operation	04/12/92	04/13/92	2
Non-Refueling	Shutdown	04/14/92	04/16/92	3
Start-up	Operation	04/17/92	05/09/92	23
Operation	Operation	05/10/92	02/11/93	278
Pre-Refueling	Operation	02/12/93	03/08/93	25
Refueling	Shutdown	03/09/93	04/11/93	34
Start-up	Operation	04/12/93	05/06/93	25
Operation	Operation	05/07/93	06/05/93	30
Non-Refueling	Shutdown	06/06/93	06/10/93	5
Operation	Operation	06/11/93	09/30/93	112

Time used in calculations

Trend Calculations				Deviation Calculations			
Op	11/26/92-09/30/93	270 days (incl.	25 days s/u)	Op	01/24/92-09/30/93	540 days (incl.	50 days s/u)
S/D	04/01/92-06/10/93	53 days (incl.	45 days ref)	S/D	03/11/91-06/10/93	133 days (incl.	125 days ref)
FOR	11/16/82-09/30/93	270 days		FOR	01/09/92-09/30/93	540 days	

TABLE 9.48 LASALLE 1

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	0	0	1	0	0	0	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	0	0	0	0	2
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	1	1	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	1	0	0	1	3	1	2	0	0	1	1	3
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	2	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		0	0	5	0	4	4	0	0	0	25	2	18
EFO/1000 HRS		0.00	0.00	0.78	0.00	0.47	0.47	0.00	0.00	0.00	3.71	0.46	0.55
CRIT. HRS		2209	1109	1290	2208	2140	2123	2183	2208	55	1347	2155	1812
RAD		55	202	100	43	58	294	36	42	211	57	38	NA
CAUSE CODES:													
Admin.	Operations	2	0	0	0	3	2	1	0	0	0	1	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	4	2	0	0	0	0	0	6	1	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
Lic. Oper.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	3	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	0	1	1	0	2	0	1	0	0	0	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	2	0	0
	Refueling	0	1	0	0	0	0	0	0	2	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
Maint.	Operations	2	2	2	4	4	3	3	0	0	2	2	4
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	2	0	0	0	0	0	0	3	0	0
	Refueling	0	4	2	0	0	0	0	0	5	1	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	2	0	0
Design	Operations	1	1	0	0	1	1	1	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	1	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	1	1	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	0	0	0	0	0	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	01/23/91	115
Pre-Refueling	Operation	01/24/91	02/17/91	25
Refueling	Shutdown	02/18/91	05/04/91	76
Start-up	Operation	05/05/91	05/29/91	25
Operation	Operation	05/30/91	09/10/92	470
Pre-Refueling	Operation	09/11/92	10/03/92	23
Non-Refueling	Shutdown	10/04/92	10/05/92	2
Pre-Refueling	Operation	10/06/92	10/07/92	2
Refueling	Shutdown	10/08/92	01/22/93	107
Start-up	Operation	01/23/93	02/14/93	23
Non-Refueling	Shutdown	02/15/93	02/19/93	5
Start-up	Operation	02/20/93	02/21/93	2
Operation	Operation	02/22/93	02/28/93	7
Non-Refueling	Shutdown	03/01/93	03/05/93	5
Operation	Operation	03/06/93	08/14/93	193
Non-Refueling	Shutdown	08/15/93	09/30/93	16

Time used in calculations

Trend Calculations

Op	10/01/92-09/14/93	230 days (incl.	25 days s/u)
S/D	11/20/92-09/30/93	90 days (incl.	84 days ref)
FOR	10/01/92-09/30/93	245 days	

Deviation Calculations

Op	11/26/91-09/14/93	540 days (incl.	25 days s/u)
S/D	03/21/91-09/30/93	180 days (incl.	152 days ref)
FOR	12/11/91-09/30/93	540 days	

TABLE 9.49 LASALLE 2

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	1	1	0	0	1	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	0	0	0	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	3	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	1	1	0	1	0	1	2	0	2	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	1
	Startup	0	0	0	0	0	0	1	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	1
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		6	0	0	13	5	0	6	16	3	0	0	0
EFO/1000 HRS		0.47	0.00	0.00	1.03	0.92	0.00	1.55	0.53	0.00	0.00	0.00	0.00
CRIT. HRS		2113	2160	2183	1934	2169	84	1933	1879	2182	2160	1997	1563
RAD		55	202	100	43	59	294	38	42	211	57	38	NA
CAUSE CODES:													
Admin.	Operations	3	3	1	0	0	0	1	0	3	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	2
	Startup	0	0	0	0	0	0	1	0	0	0	0	0
	Refueling	0	0	0	0	0	3	0	0	0	0	0	0
	Non-Refueling	0	0	0	1	0	0	0	0	0	0	1	0
Oper.	Operations	0	0	0	0	0	0	0	0	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	1	1	2	2	1	0	1	0	1	0	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	1	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	5	4	5	5	1	0	3	3	2	2	1	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	2
	Startup	0	0	0	0	0	0	2	0	0	0	0	0
	Refueling	0	0	0	0	0	5	0	0	0	0	0	0
	Non-Refueling	1	0	0	1	0	0	0	0	0	0	1	0
Design	Operations	0	1	0	0	0	0	0	2	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	1	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	1	0
Misc.	Operations	0	0	0	0	1	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	12/15/90	76
Non-Refueling	Shutdown	12/16/90	12/18/90	3
Operation	Operation	12/19/90	09/06/91	262
Non-Refueling	Shutdown	09/07/91	09/09/91	3
Operation	Operation	09/10/91	09/24/91	15
Non-Refueling	Shutdown	09/25/91	09/30/91	6
Operation	Operation	10/01/91	12/12/91	73
Pre-Refueling	Operation	12/13/91	01/06/92	25
Refueling	Shutdown	01/07/92	04/09/92	94
Start-up	Operation	04/10/92	04/15/92	6
Non-Refueling	Shutdown	04/16/92	04/17/92	2
Start-up	Operation	04/18/92	05/06/92	19
Operation	Operation	05/07/92	08/27/92	113
Non-Refueling	Shutdown	08/28/92	09/08/92	12
Operation	Operation	09/09/92	05/29/93	263
Non-Refueling	Shutdown	05/30/93	06/04/93	6
Operation	Operation	06/05/93	08/11/95	68
Pre-Refueling	Operation	08/12/93	09/05/93	25
Refueling	Shutdown	09/06/93	09/30/93	25

Time used in calculations

Trend Calculations			Deviation Calculations		
Op	12/04/92-09/05/93	270 days (incl. 0 days s/u)	Op	11/22/91-09/05/93	540 days (incl. 25 days s/u)
S/D	04/01/92-09/30/93	54 days (incl. 34 days ref)	S/D	12/16/90-09/30/93	151 days (incl. 119 days ref)
FOR	11/28/92-09/04/93	270 days	FOR	11/25/91-09/04/93	540 days

TABLE 9.50 LIMERICK 1

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	1	0	0	0	0	0	0	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	1	0	0	0	0	0	0	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	1	3	0	1	0	0	0	0	1	0	0
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	1	0	0	0	0
	Refueling	0	0	0	0	0	0	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		34	0	18	0	14	0	100	4	0	0	0	6
EFO/1000 HRS		4.06	0.46	1.06	0.00	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.48
CRIT. HRS		493	2160	1885	2208	1925	1910	0	2121	2209	2160	2183	2098
RAD		93	11	26	7	7	49	215	14	15	9	9	NA
CAUSE CODES:													
Admin.	Operations	0	5	5	1	2	0	0	0	2	2	2	2
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	6	0	0	0	0	0	6	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	0	1	0	0	2	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	0	3	2	2	1	0	0	0	1	0	1	1
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	1	0	0	0	0
	Refueling	3	0	0	0	0	0	3	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	0	8	8	4	7	0	0	0	2	4	5	2
	Pre-Refueling	0	0	0	0	0	3	0	0	0	0	0	0
	Startup	1	0	0	0	6	0	0	2	0	0	0	0
	Refueling	12	0	0	0	0	0	7	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Design	Operations	0	0	1	0	0	0	0	1	0	2	1	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	3	0	0	0	0	0	5	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	1	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	1	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	1	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Refueling	Shutdown	10/01/90	12/05/90	66
Start-up	Operation	12/06/90	12/09/90	4
Non-Refueling	Shutdown	12/10/90	12/13/90	4
Start-up	Operation	12/14/90	01/03/91	21
Operation	Operation	01/04/91	04/12/91	99
Non-Refueling	Shutdown	04/13/91	04/16/91	4
Operation	Operation	04/17/91	06/02/91	47
Non-Refueling	Shutdown	06/03/91	06/08/91	6
Operation	Operation	06/09/91	12/18/91	193
Non-Refueling	Shutdown	12/19/91	12/29/91	11
Operation	Operation	12/30/91	02/26/92	59
Pre-Refueling	Operation	02/27/92	03/22/92	25
Refueling	Shutdown	03/23/92	07/03/92	103
Start-up	Operation	07/04/92	07/28/92	25
Operation	Operation	07/29/92	09/07/93	406
Non-Refueling	Shutdown	09/08/93	09/10/93	3
Operation	Operation	09/11/93	09/30/93	20

Time used in calculations

Trend Calculations			Deviation Calculations		
Op	01/01/93-09/30/93	270 days (incl. 0 days s/u)	Op	12/14/91-09/30/93	540 days (incl. 25 days s/u)
S/D	04/08/92-09/10/93	90 days (incl. 87 days ref)	S/D	10/18/90-09/10/93	180 days (incl. 152 days ref)
FOR	01/04/93-09/30/93	270 days	FOR	01/16/92-09/30/93	540 days

TABLE 9.51 LIMERICK 2

		Year - Calendar Quarter											
Type	Phase	90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Startup	0	0	0	0	0	0	0	0	0	1	0	0
SSA	Operations	0	0	0	0	0	0	0	0	0	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	1	0	0
	Refueling	0	1	0	0	0	0	0	0	0	2	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	0	0	1	1	5	3	0	0	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		4	2	0	0	0	0	0	0	10	20	0	0
EFO/1000 HRS		0.91	1.55	0.00	0.00	0.00	0.00	0.00	0.00	0.48	3.74	0.46	0.00
CRIT. HRS		2209	1932	680	2208	2209	2184	2183	2208	2078	802	2183	2208
RAD		NA	11	26	7	7	9	5	14	15	152	8	NA
CAUSE CODES:													
Admin.	Operations	3	2	0	2	0	1	7	0	0	0	1	4
	Pre-Refueling	0	1	0	0	0	0	0	0	0	1	0	0
	Startup	0	0	3	0	0	0	0	0	0	1	0	0
	Refueling	0	3	4	0	0	0	0	0	0	2	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	0	0	0	0	0	0	1	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	1	1	0	1	2	2	4	1	2	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Startup	0	0	2	0	0	0	0	0	0	0	0	0
	Refueling	0	1	2	0	0	0	0	0	0	1	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	8	3	0	5	4	4	9	1	2	0	3	4
	Pre-Refueling	0	1	0	0	0	0	0	0	0	3	0	0
	Startup	0	0	3	0	0	0	0	0	0	1	0	0
	Refueling	0	3	8	0	0	0	0	0	0	3	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Design	Operations	2	0	0	0	1	0	6	1	0	0	1	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Startup	0	0	1	0	0	0	0	0	0	1	0	0
	Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	0	1	0	0	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	02/25/91	148
Pre-Refueling	Operation	02/26/91	03/22/91	25
Refueling	Shutdown	03/23/91	06/01/91	71
Start-up	Operation	06/02/81	06/26/91	25
Operation	Operation	06/27/91	12/04/92	527
Non-Refueling	Shutdown	12/05/92	12/08/92	4
Operation	Operation	12/09/92	12/26/92	18
Pre-Refueling	Operation	12/27/92	01/03/93	8
Non-Refueling	Shutdown	01/04/93	01/06/93	3
Pre-Refueling	Operation	01/07/93	01/23/93	17
Refueling	Shutdown	01/24/93	03/12/93	48
Start-up	Operation	03/13/93	04/06/93	25
Operation	Operation	04/07/93	09/30/93	177

Time used in calculations

Trend Calculations			Deviation Calculations		
Op	11/10/92-09/30/93	270 days (incl. 25 days s/u)	Op	02/14/92-09/30/93	540 days (incl. 25 days s/u)
S/D	12/05/92-03/12/93	55 days (incl. 48 days ref)	S/D	03/23/91-03/12/93	126 days (incl. 119 days ref)
FOR	11/11/92-09/30/93	270 days	FOR	02/15/92-09/30/93	540 days

TABLE 9.52 MAINE YANKEE

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	2	0	2	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	2	0	0	1	0	0	0	1	0	1	0
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	1	0	0	0	0	0
	Refueling	0	0	0	0	0	1	0	0	0	0	0	1
	Non-Refueling	1	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		31	17	35	0	7	7	12	9	5	5	0	3
EFO/1000 HRS		2.42	1.10	0.69	0.00	0.95	0.00	0.60	0.50	0.45	0.48	0.00	1.43
CRIT. HRS		1654	1826	1450	2208	2102	1059	1667	2015	2209	2097	2183	698
RAD		62	41	17	18	20	400	40	11	14	6	5	NA
CAUSE CODES:													
Admin.	Operations	1	1	1	0	0	0	0	0	3	3	4	1
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	1
	Startup	0	0	0	0	0	0	1	0	0	0	0	0
	Refueling	0	0	0	0	0	0	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	0	0	1	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	0	1	0	0	0	0	0	0	0	0	1	0
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	3	2	2	0	2	0	0	0	3	2	5	1
	Pre-Refueling	0	0	0	0	0	2	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	1	0	0	0	0	0
	Refueling	0	0	0	0	0	1	1	0	0	0	0	2
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Design	Operations	3	0	0	1	1	0	0	1	0	0	1	0
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Non-Refueling	1	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	1	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	10/01/90	1
Non-Refueling	Shutdown	10/02/90	10/06/90	5
Operation	Operation	10/07/90	10/20/90	14
Non-Refueling	Shutdown	10/21/90	10/24/90	4
Operation	Operation	10/25/90	12/17/90	54
Non-Refueling	Shutdown	12/18/90	01/06/91	20
Operation	Operation	01/07/91	01/08/91	2
Non-Refueling	Shutdown	01/09/91	01/10/91	2
Operation	Operation	01/11/91	02/14/91	35
Non-Refueling	Shutdown	02/15/91	02/17/91	3
Operation	Operation	02/18/91	04/28/91	71
Non-Refueling	Shutdown	04/30/91	05/28/91	29
Operation	Operation	05/29/91	01/23/92	240
Pre-Refueling	Operation	01/24/92	02/17/92	25
Refueling	Shutdown	02/18/92	04/09/92	52
Start-up	Operation	04/10/92	04/11/92	2
Non-Refueling	Shutdown	04/12/92	04/15/92	4
Start-up	Operation	04/16/92	05/08/92	23
Operation	Operation	05/09/92	06/14/92	37
Non-Refueling	Shutdown	06/15/92	06/20/92	6
Operation	Operation	06/21/92	07/22/92	32
Non-Refueling	Shutdown	07/23/92	07/29/92	7
Operation	Operation	07/30/92	12/10/92	134
Non-Refueling	Shutdown	12/11/92	12/12/92	2
Operation	Operation	12/13/92	02/01/93	51
Non-Refueling	Shutdown	02/02/93	02/03/93	2
Operation	Operation	02/04/93	07/07/93	154
Pre-Refueling	Operation	07/08/93	08/01/93	25
Refueling	Shutdown	08/02/93	09/30/93	60

Time used in calculations

Trend Calculations				Deviation Calculations			
Op	11/01/92-08/01/93	270 days (incl.	0 days s/u)	Op	11/28/91-08/01/93	540 days (incl.	25 days s/u)
S/D	04/01/92-08/30/93	90 days (incl.	69 days ref)	S/D	12/25/90-09/30/93	180 days (incl.	112 days ref)
FOR	11/03/92-07/30/93	270 days		FOR	12/04/91-07/30/93	540 days	

TABLE 9.53 MCGUIRE 1

Type	Phase	Year - Calendar Quarter 90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	2	2	0	0	0	0	1	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	2	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	1	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	2	3	3	1	0	0	1	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	1	0	0	0	0	0	0	0
	Refueling	0	0	0	1	1	0	0	0	0	0	2	0
	Non-Refueling	2	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		35	4	21	0	14	37	50	2	0	0	28	43
EFO/1000 HRS		3.44	0.96	1.15	0.00	1.78	0.73	0.00	0.46	0.00	0.00	2.32	1.60
CRIT. HRS		1453	2084	1733	1951	561	1377	1111	2166	2209	1687	431	1253
RAD		88	6	13	30	132	140	45	4	4	25	0	NA
CAUSE CODES:													
Admin.	Operations	1	3	2	4	0	1	2	1	0	1	0	2
	Pre-Refueling	0	0	0	1	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	1	0	0	0	0	0	0	0
	Refueling	0	0	0	0	2	0	0	0	0	0	1	0
	Non-Refueling	1	0	0	0	0	3	1	0	0	0	0	0
Lic. Oper.	Operations	0	0	0	1	0	0	0	0	0	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	1	0	0	0	0	0
Oth. Per.	Operations	1	1	2	2	0	0	2	1	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	1	0	0	0	0	0	0	0
	Non-Refueling	1	0	0	0	0	1	0	0	0	0	0	0
Maint.	Operations	3	3	2	3	0	0	2	1	2	1	0	2
	Pre-Refueling	0	0	0	1	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	1	0	0	0	0	0	1	0
	Refueling	0	0	0	0	2	0	0	0	0	0	2	0
	Non-Refueling	2	0	0	0	0	3	0	0	0	0	0	0
Design	Operations	2	2	1	2	0	1	1	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	1	0	0	0	0	0	1	0
	Non-Refueling	3	0	0	0	0	1	0	0	0	0	0	0
Misc.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	10/15/90	15
Non-Refueling	Shutdown	10/16/90	11/13/90	29
Operation	Operation	11/14/90	04/25/91	163
Non-Refueling	Shutdown	04/26/91	05/13/91	18
Operation	Operation	05/14/91	08/26/91	105
Pre-Refueling	Operation	08/27/91	09/20/91	25
Refueling	Shutdown	09/21/91	12/03/91	74
Start-up	Operation	12/04/91	12/05/91	2
Non-Refueling	Shutdown	12/06/91	12/07/91	2
Start-up	Operation	12/08/91	12/30/91	23
Operation	Operation	12/31/91	01/17/92	18
Non-Refueling	Shutdown	01/18/92	02/18/92	32
Operation	Operation	02/19/92	05/05/92	77
Non-Refueling	Shutdown	05/06/92	06/16/92	42
Operation	Operation	06/17/92	02/17/93	246
Pre-Refueling	Operation	02/18/93	03/14/93	25
Refueling	Shutdown	03/15/93	06/06/93	84
Start-up	Operation	06/07/93	06/08/93	2
Non-Refueling	Shutdown	06/09/93	06/10/93	2
Start-up	Operation	06/11/93	07/03/93	23
Operation	Operation	07/04/93	08/22/93	50
Non-Refueling	Shutdown	08/23/93	09/30/93	39

Time used in calculations

Trend Calculations

Op	10/01/92-08/22/93	240 days (incl.	25 days s/u)
S/D	04/19/93-09/30/93	90 days (incl.	49 days ref)
FOR	10/08/92-09/30/93	270 days	

Deviation Calculations

Op	07/09/91-08/22/93	540 days (incl.	50 days s/u)
S/D	02/06/92-09/30/93	180 days (incl.	84 days ref)
FOR	01/12/92-09/30/93	540 days	

TABLE 9.54 MCGUIRE 2

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	0	1	0	2	2	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	1	0	0	0	0	0	0
SSA	Operations	0	0	1	0	0	0	0	0	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	2	2	2	1	0	1	0	0	0	1	0
	Pre-Refueling	0	0	0	0	1	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	1	0	0	0	0	0
	Refueling	4	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		47	0	0	3	6	8	5	5	0	2	0	13
EFO/1000 HRS		f 53	0.00	0.00	0.93	0.96	3.44	1.52	0.95	0.00	1.42	0.00	2.77
CRIT. HRS		117	2160	2183	2140	2078	581	1315	2110	2209	2119	2183	361
RAD		86	6	13	30	132	140	45	4	4	25	0	NA
CAUSE CODES:													
Admin.	Operations	0	2	2	6	2	0	0	0	0	1	0	0
	Pre-Refueling	0	0	0	0	1	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	2	0	0	0	0	0	1
	Non-Refueling	0	0	0	0	0	0	1	0	0	0	0	0
Lic. Oper.	Operations	0	0	1	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	1	0	0	0	0	0	1
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	1
Oth. Per.	Operations	0	1	4	3	0	0	0	0	1	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	1	1	0	0	0	0	0
	Refueling	2	0	0	0	0	1	0	0	0	0	0	1
	Non-Refueling	0	0	0	0	0	0	1	0	0	0	0	1
Maint.	Operations	0	2	4	2	1	0	2	1	2	4	1	0
	Pre-Refueling	0	0	0	0	1	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	2	0	0	0	0	0	0
	Refueling	4	0	0	0	0	2	0	0	0	0	0	1
	Non-Refueling	0	0	0	0	0	0	1	0	0	0	0	1
Design	Operations	0	2	2	3	1	0	1	0	0	2	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	4	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	1	1	0	0	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	1	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Refueling	Shutdown	10/01/90	12/20/90	81
Start-up	Operation	12/21/90	12/22/90	2
Non-Refueling	Shutdown	12/23/90	12/26/90	4
Start-up	Operation	12/27/90	01/18/91	23
Operation	Operation	01/19/91	10/04/91	259
Non-Refueling	Shutdown	10/05/91	10/07/91	3
Operation	Operation	10/08/91	12/17/91	71
Pre-Refueling	Operation	12/18/91	01/11/92	25
Refueling	Shutdown	01/12/92	03/10/92	59
Start-up	Operation	03/11/92	04/04/92	25
Operation	Operation	04/05/92	05/20/92	46
Non-Refueling	Shutdown	05/21/92	06/24/92	35
Operation	Operation	06/25/92	08/05/92	42
Non-Refueling	Shutdown	08/06/92	08/07/92	2
Operation	Operation	08/08/92	06/08/93	305
Pre-Refueling	Operation	06/09/93	07/03/93	25
Refueling	Shutdown	07/04/93	08/26/93	54
Start-up	Operation	08/27/93	08/28/93	2
Non-Refueling	Shutdown	08/29/93	09/11/93	14
Start-up	Operation	09/12/93	09/27/93	16
Non-Refueling	Shutdown	09/28/93	09/30/93	3

Time used in calculations

Trend Calculations			Deviation Calculations		
Op	10/25/92-09/27/93	270 days (incl. 18 days s/u)	Op	10/25/91-09/27/93	540 days (incl. 43 days s/u)
S/D	06/08/92-09/30/93	90 days (incl. 54 days ref)	S/D	12/15/90-09/30/93	180 days (incl. 119 days ref)
FOR	10/19/92-09/29/93	270 days	FOR	10/15/91-09/29/93	540 days

TABLE 9.55 MILLSTONE 1

Type	Phase	Year - Calendar Quarter 90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	0	0	0	0	0	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	1	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	3	0	0	0	0	1	1	0	1	1	1	2
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	1	0	0	0	0	0	0	0	0
	Refueling	0	0	2	3	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	1	4	0	1	0	0	0	0
FOR (%)		16	7	0	33	100	79	6	46	1	0	5	0
EFO/10\0 HRS		0.00	0.00	0.00	0.00	0.00	2.06	0.00	0.00	0.00	0.00	0.00	0.00
CRIT. HRS		1879	2016	150	932	2	486	2072	1232	2184	2160	2086	2208
RAD		30	28	290	42	18	39	17	26	15	18	22	NA
CAUSE CODES:													
Admin.	Operations	1	1	0	0	0	0	2	1	1	1	1	0
	Pre-Refueling	0	0	2	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	1	0	0	0	0	0	0	0	0
	Refueling	0	0	4	1	0	0	0	0	0	0	0	0
	Non-Refueling	0	1	0	0	2	3	0	0	0	0	1	0
Lic. Oper.	Operations	0	0	0	0	0	0	0	1	1	1	0	0
	Pre-Refueling	0	0	1	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth Per.	Operations	1	0	0	0	0	0	1	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	1	0	0	0	0	1	0
Maint.	Operations	2	1	0	0	0	0	2	2	3	1	3	1
	Pre-Refueling	0	0	2	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	6	2	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	1	2	4	0	0	0	0	1	0
Design	Operations	0	3	0	0	0	1	2	0	0	1	2	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	1	0	0	0	0	0	0	0	0
	Refueling	0	0	4	2	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	2	8	0	1	0	0	0	0
Misc.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	10/04/90	4
Non-Refueling	Shutdown	10/05/90	10/17/90	13
Operation	Operation	10/18/90	03/02/91	136
Non-Refueling	Shutdown	03/03/91	03/07/91	5
Operation	Operation	03/08/91	03/13/91	6
Pre-Refueling	Operation	03/14/91	04/07/91	25
Refueling	Shutdown	04/08/91	08/13/91	128
Start-up	Operation	08/14/91	08/19/91	6
Non-Refueling	Shutdown	08/20/91	08/24/91	5
Start-up	Operation	08/25/91	09/12/91	19
Operation	Operation	09/13/91	10/01/91	19
Non-Refueling	Shutdown	10/02/91	03/01/92	152
Operation	Operation	03/02/92	03/22/92	21
Non-Refueling	Shutdown	03/23/92	03/30/92	8
Operation	Operation	03/31/92	04/01/92	2
Non-Refueling	Shutdown	04/02/92	04/04/92	3
Operation	Operation	04/05/92	07/04/92	91
Non-Refueling	Shutdown	07/05/92	08/11/92	38
Operation	Operation	08/12/92	04/26/93	258
Non-Refueling	Shutdown	04/27/93	04/29/93	3

Phase	Phase type	Start	End	Length
Operation	Operation	04/30/93	09/30/93	154

Time used in calculations

Trend Calculations

Op 01/01/93-09/30/93 270 days (incl. 0 days s/u)
S/D 04/02/92-04/29/93 44 days (incl. 0 days ref)
FOR 01/04/93-09/30/93 270 days

Deviation Calculations

Op 09/18/91-09/30/93 540 days (incl. 0 days s/u)
S/D 10/26/91-04/29/93 180 days (incl. 0 days ref)
FOR 04/09/92-09/30/93 540 days

TABLE 9.56 MILLSTONE 2

Type	Phase	Year - Calendar Quarter 90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	1	0	0	0	0	0	0	0	2	2	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	1	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	1	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	1	0	1	1	0	1	0	0	2	1	2
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	1	0	0	0	0	0	0	0	0	0	0	0
	Refueling	3	0	0	0	0	0	0	2	0	0	0	0
	Non-Refueling	0	0	0	0	0	1	0	0	0	0	0	1
FOR (%)		5	12	82	43	61	19	0	0	0	4	3	28
EPO/1000 HRS		0.77	1.02	1.18	1.47	1.02	0.56	0.00	0.00	0.00	0.00	0.00	0.61
CRIT. HRS		1305	1954	846	1360	981	1788	1416	0	0	1895	2141	1652
RAD		275	29	118	16	13	35	141	507	585	17	13	NA
CAUSE CODES:													
Admin.	Operations	1	4	0	0	0	2	1	0	0	3	1	4
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	1	1	2	0	0	0
	Non-Refueling	0	0	0	0	0	2	0	0	0	0	0	0
Lic. Oper.	Operations	0	0	1	0	0	0	0	0	0	2	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	1	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
Oth. Per.	Operations	2	2	0	0	0	1	0	0	0	0	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	2	0	0	0	0	0	0	1	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	1	5	0	1	1	3	0	0	0	4	3	4
	Pre-Refueling	0	0	0	0	0	0	1	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	2	0	0	0	0	0	1	3	2	0	0	0
	Non-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
Design	Operations	0	1	0	0	1	2	2	0	0	0	1	3
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	1	0	0	0	0	0	0	0	0	0	0	0
	Refueling	2	0	0	0	0	0	0	2	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Refueling	Shutdown	10/01/9[illegible]	[illegible]/90	31
Start-up	Operation	11/01	11/25/90	25
Operation	Operation	11/26	12/29/90	34
Non-Refueling	Shutdown	12/3[illegible]/90	01/07/91	9
Operation	Operation	01/0[illegible]	04/22/91	105
Non-Refueling	Shutdown	04/23	05/10/91	18
Operation	Operation	05/11/	05/25/91	15
Non-Refueling	Shutdown	05/26/9[illegible]	07/05/91	41
Operation	Operation	07/06/91	08/06/91	32
Non-Refueling	Shutdown	08/07/91	08/16/91	10
Operation	Operation	08/17/91	08/23/91	7
Non-Refueling	Shutdown	08/24/91	09/09/91	17
Operation	Operation	09/10/91	11/06/91	58
Non-Refueling	Shutdown	11/07/91	12/26/91	50
Operation	Operation	12/27/91	01/28/92	33
Non-Refueling	Shutdown	01/29/92	02/12/92	15
Operation	Operation	02/13/92	05/07/92	85
Pre-Refueling	Operation	05/08/92	06/01/92	25
Refueling	Shutdown	06/02/92	01/04/93	217
Start-up	Operation	01/05/93	01/06/93	2
Non-Refueling	Shutdown	01/07/93	01/08/93	2
Start-up	Operation	01/09/93	01/31/93	23
Operation	Operation	02/01/93	08/05/93	186
Non-Refueling	Shutdown	08/06/93	08/10/93	5
Operation	Operation	08/11/93	09/14/93	35
Non-Refueling	Shutdown	09/15/93	09/30/93	16

Time used in calculations

Trend Calculations			Deviation Calculations		
Op	01/05/93-09/14/93	246 days (incl. 25 days s/u)	Op	03/15/91-09/14/93	540 days (incl. 25 days s/u)
S/D	10/30/92-09/30/93	90 days (incl. 67 days ref)	S/D	08/01/92-09/30/93	180 days (incl. 157 days ref)
FOR	01/13/93-09/30/93	260 days	FOR	08/24/91-09/30/93	540 days

TABLE 9.57 MILLSTONE 3

Type	Phase	Year - Calendar Quarter 90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	1	0	0	0	0	0	2	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	1	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	1	0	0	0	0	0	0	0	0
SSF	Operations	0	0	2	0	0	0	0	3	0	1	2	0
	Pre-Refueling	0	1	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	1
	Non-Refueling	0	0	1	0	2	3	0	0	0	0	0	0
FOR (%)		0	25	8	73	100	40	9	2	43	1	10	0
EFO/1000 HRS		0.45	0.00	0.57	1.68	0.00	0.00	0.00	0.46	1.52	0.47	0.00	0.00
CRIT. HRS		2202	609	1757	596	0	1356	1632	2190	1313	2137	2029	726
RAD		2	134	3	8	8	4	9	2	2	3	6	NA
CAUSE CODES:													
Admin.	Operations	4	0	3	0	0	4	4	5	3	2	2	1
	Pre-Refueling	0	2	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	0	0	0	0
	Refueling	0	2	0	0	0	0	0	0	0	0	0	2
	Non-Refueling	0	0	0	2	2	2	1	0	3	0	0	0
Lic. Oper.	Operations	0	0	0	0	0	0	0	2	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	1	0	0	0	0	1	0	0	0
Oth. Per.	Operations	1	0	1	0	0	2	0	1	1	0	0	0
	Pre-Refueling	0	1	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	1	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	1	2	0	0	0	0	1	0	0	0
Maint.	Operations	4	0	4	0	0	4	2	5	5	4	2	1
	Pre-Refueling	0	2	0	0	0	0	0	0	0	0	0	1
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	3	0	0	0	0	0	0	0	0	0	2
	Non-Refueling	0	0	1	5	2	2	2	0	3	0	0	0
Design	Operations	1	0	0	3	0	0	4	2	2	0	3	0
	Pre-Refueling	0	2	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	1	0	0	0	0	0	0	0	0	0	1
	Non-Refueling	0	0	1	0	2	1	0	0	0	0	0	0
Misc.	Operations	0	0	0	0	0	0	0	0	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	12/31/90	92
Non-Refueling	Shutdown	01/01/91	01/06/91	6
Operation	Operation	01/07/91	01/11/91	5
Pre-Refueling	Operation	01/12/91	02/05/91	25
Refueling	Shutdown	02/06/91	04/07/91	61
Start-up	Operation	04/08/91	04/09/91	2
Non-Refueling	Shutdown	04/10/91	04/12/91	3
Start-up	Operation	04/13/91	05/05/91	23
Operation	Operation	05/06/91	06/09/91	35
Non-Refueling	Shutdown	06/10/91	06/13/91	4
Operation	Operation	06/14/91	07/25/91	42
Non-Refueling	Shutdown	07/26/91	02/03/92	193
Operation	Operation	02/04/92	04/05/92	62
Non-Refueling	Shutdown	04/06/92	04/09/92	4
Operation	Operation	04/10/92	05/16/92	37
Non-Refueling	Shutdown	05/17/92	06/01/92	16
Operation	Operation	06/02/92	09/30/92	121
Non-Refueling	Shutdown	10/01/92	11/03/92	34
Operation	Operation	11/04/92	03/31/93	148
Non-Refueling	Shutdown	04/01/93	04/06/93	6
Operation	Operation	04/07/93	07/08/93	93
Pre-Refueling	Operation	07/09/93	08/02/93	25
Refueling	Shutdown	08/03/93	09/30/93	59

Time used in calculations

Trend Calculations

Op	11/04/92-08/02/93	266 days (incl.	0 days s/u)
S/D	10/10/92-09/30/93	90 days (incl.	59 days ref)
FOR	11/03/92-07/31/93	270 days	

Deviation Calculations

Op	05/29/91-08/02/93	540 days (incl.	0 days s/u)
S/D	12/05/91-09/30/93	180 days (incl.	59 days ref)
FOR	01/18/92-07/31/93	540 days	

TABLE 9.58 MONTICELLO

Type	Phase	Year - Calender Quarter 90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	1	1	0	1	0	0	0	0	0	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	2	0	0	0	0	0	0	1	0	0
SSA	Operations	0	0	0	2	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	1	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	1	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	1	0	0	1	0	0	0	0	2	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	3	0	0	0	0	0	0	3	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		4	5	10	2	0	4	0	0	0	7	0	1
EFO/1000 HRS		0.00	0.00	0.00	0.46	0.00	0.47	0.00	0.00	0.00	1.22	0.00	0.46
CRIT. HRS		2132	1982	710	2175	2209	2115	2034	2208	2209	823	2183	2185
RAD		24	39	385	20	22	43	26	17	28	448	22	NA
CAUSE CODES:													
Admin.	Operations	3	2	0	2	0	3	0	3	1	0	0	0
	Pre-Refueling	0	1	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	2	0	0	0	0	0	0	1	0	0
	Refueling	0	0	1	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	0	0	0	0	0	1	0	0	0	0	0	0
	Pre-Refueling	0	1	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	1	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	0	1	0	1	0	1	0	0	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	1	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	1	2	0	2	0	2	0	3	2	0	1	1
	Pre-Refueling	0	1	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	2	0	0	0	0	0	0	1	0	0
	Refueling	0	0	4	0	0	0	0	0	0	1	0	0
	Non-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
Design	Operations	1	0	0	1	0	1	1	0	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	0	1	0	0
	Refueling	0	0	2	0	0	0	0	0	0	3	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	1	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	10/29/90	29
Non-Refueling	Shutdown	10/30/90	10/31/90	2
Operation	Operation	11/01/90	02/07/91	99
Non-Refueling	Shutdown	02/08/91	02/09/91	2
Operation	Operation	02/10/91	02/11/91	2
Non-Refueling	Shutdown	02/12/91	02/14/91	3
Operation	Operation	02/15/91	03/06/91	20
Pre-Refueling	Operation	03/07/91	03/31/91	25
Refueling	Shutdown	04/01/91	05/28/91	58
Start-up	Operation	05/29/91	06/22/91	25
Operation	Operation	06/23/91	01/02/92	194
Non-Refueling	Shutdown	01/03/92	01/04/92	2
Operation	Operation	01/05/92	04/19/92	106
Non-Refueling	Shutdown	04/20/92	04/25/92	6
Operation	Operation	04/26/92	01/02/93	252
Pre-Refueling	Operation	01/03/93	01/27/93	25
Refueling	Shutdown	01/28/93	03/20/93	52
Start-up	Operation	03/21/93	04/14/93	25
Operation	Operation	04/15/93	09/30/93	169

Time used in calculations

Trend Calculations

Op	11/13/92-09/30/93	270 days (incl.	25 days s/u)
S/D	04/20/92-03/20/93	58 days (incl.	52 days ref)
FOR	11/09/92-09/30/93	270 days	

Deviation Calculations

Op	02/11/92-09/30/93	540 days (incl.	25 days s/u)
S/D	10/30/90-03/20/93	125 days (incl.	110 days ref)
FOR	02/06/92-09/30/93	540 days	

TABLE 9.59 NINE MILE PT. 1

Type	Phase	Year - Calender Quarter 90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	2	1	0	2	1	1	2	1	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	1	0
SSA	Operations	1	0	0	0	0	0	0	0	0	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	1	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
SSF	Operations	1	0	0	1	1	1	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	1	0	0	0	1	0	0	0	0	0	0
FOR (%)		8	17	0	5	16	49	79	42	0	4	0	0
EFO/1000 HRS		0.48	0.96	0.00	0.53	0.53	0.90	4.03	2.16	0.00	0.00	0.00	0.00
CRIT. HRS		2063	1045	2183	1874	1886	1113	496	1388	2209	1169	1856	2208
RAD		183	61	22	31	19	39	133	88	29	303	61	NA
CAUSE CODES:													
Admin.	Operations	4	0	1	2	0	1	0	1	0	2	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	3	0	0
	Non-Refueling	0	2	0	0	0	2	0	0	0	0	0	0
Lic. Oper.	Operations	0	0	0	0	0	0	0	2	1	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	1	0	1	1	0	0	0	0	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	6	2	2	3	0	3	2	3	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	1	0
	Refueling	0	0	0	0	0	0	0	0	0	2	0	0
	Non-Refueling	1	2	0	0	0	2	0	0	0	0	0	0
Design	Operations	1	0	0	2	2	0	0	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Non-Refueling	0	1	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	0	0	0	0	0	0	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	11/17/90	48
Non-Refueling	Shutdown	11/18/90	11/20/90	3
Operation	Operation	11/21/90	12/29/90	39
Non-Refueling	Shutdown	12/30/90	01/07/91	9
Operation	Operation	01/08/91	02/12/91	36
Non-Refueling	Shutdown	02/13/91	03/21/91	37
Operation	Operation	03/22/91	07/18/91	119
Non-Refueling	Shutdown	07/19/91	07/26/91	8
Operation	Operation	07/27/91	09/26/91	62
Non-Refueling	Shutdown	09/27/91	10/08/91	12
Operation	Operation	10/09/91	12/04/91	57
Non-Refueling	Shutdown	12/05/91	12/07/91	3
Operation	Operation	12/08/91	02/16/92	71
Non-Refueling	Shutdown	02/17/92	03/30/92	43
Operation	Operation	03/31/92	04/18/92	19
Non-Refueling	Shutdown	04/19/92	04/26/92	8
Operation	Operation	04/27/92	05/01/92	5
Non-Refueling	Shutdown	05/02/92	07/15/92	76
Operation	Operation	07/17/92	07/18/92	2
Non-Refueling	Shutdown	07/19/92	07/31/92	13

Phase	Phase type	Start	End	Length
Operation	Operation	08/01/92	01/26/93	179
Pre-Refueling	Operation	01/27/93	02/20/93	25
Refueling	Shutdown	02/21/93	04/11/93	50
Start-up	Operation	04/12/93	05/06/93	25
Operation	Operation	05/07/93	09/30/93	147

Time used in calculations

Trend Calculations				Deviation Calculations			
Op	11/15/92-09/30/93	270 days (incl.	25 days s/u)	Op	09/17/91-09/30/93	540 days (incl.	25 days s/u)
S/D	06/20/92-04/11/93	90 days (incl.	50 days ref)	S/D	02/27/92-04/11/93	180 days (incl.	50 days ref)
FOR	11/09/92-09/30/93	270 days		FOR	02/12/92-09/30/93	540 days	

TABLE 9.60 NINE MILE PT. 2

Type	Phase	Year - Calendar Quarter 90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	1	2	0	0	1	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	1	0	1	0	0	2	1	1	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	3	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	1	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	0	0	1	0	0	0	0	1	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	1	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		0	3	13	49	8	8	96	24	5	0	0	0
EFO/1000 HRS		0.00	0.61	0.00	0.78	0.48	0.69	5.44	0.53	0.47	0.00	0.00	0.00
CRIT. HRS		0	1649	1967	1287	2069	1440	184	1883	2142	2160	2183	2208
RAD		183	61	22	31	19	87	204	16	18	18	25	NA
CAUSE CODES:													
Admin.	Operations	0	4	4	1	1	2	0	3	0	1	1	3
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	1	0	0	0	0	0
	Refueling	6	0	0	0	0	1	3	0	0	0	0	0
	Non-Refueling	0	0	0	2	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	0	0	1	0	1	0	0	0	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	0	1	3	0	0	1	0	1	1	1	0	0
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	4	0	0	0	0	2	2	0	0	0	0	0
	Non-Refueling	0	0	0	1	0	0	0	0	0	0	0	0
Maint.	Operations	0	4	6	2	1	3	0	1	4	2	1	3
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	9	0	0	0	0	3	6	0	0	0	0	0
	Non-Refueling	0	0	0	2	0	0	0	0	0	0	0	0
Design	Operations	0	2	1	1	0	0	0	1	0	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	1	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	1	0	0	0	0
	Refueling	0	1	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Refueling	Shutdown	10/01/90	01/18/91	110
Start-up	Operation	01/19/91	02/12/91	25
Operation	Operation	02/13/91	03/31/91	47
Non-Refueling	Shutdown	04/01/91	04/08/91	8
Operation	Operation	04/09/91	08/13/91	127
Non-Refueling	Shutdown	08/14/91	09/18/91	36
Operation	Operation	09/19/91	12/07/91	80
Non-Refueling	Shutdown	12/08/91	12/09/91	2
Operation	Operation	12/10/91	01/25/92	47
Non-Refueling	Shutdown	01/26/92	01/28/92	3
Operation	Operation	01/29/92	02/09/92	11
Pre-Refueling	Operation	02/09/92	03/04/92	25
Refueling	Shutdown	03/05/92	06/16/92	104
Start-up	Operation	06/17/92	06/22/92	6
Non-Refueling	Shutdown	06/23/92	06/25/92	3
Start-up	Operation	06/26/92	07/14/92	19
Operation	Operation	07/15/92	08/29/92	46
Non-Refueling	Shutdown	08/30/92	09/07/92	9
Operation	Operation	09/08/92	09/30/93	388

Time used in calculations

Trend Calculations				Deviation Calculations			
Op	01/04/93-09/30/93	270 days (incl.	0 days s/u)	Op	12/12/91-09/30/93	540 days (incl.	25 days s/u)
S/D	04/01/92-09/07/92	89 days (incl.	77 days ref)	S/D	01/04/91-09/07/92	180 days (incl.	118 days ref)
FOR	01/04/93-09/30/93	270 days		FOR	12/21/91-09/30/93	540 days	

TABLE 9.61 NORTH ANNA 1

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	1	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	2	1	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	2	0	0	0	0	0	0	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	1	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	3	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		0	0	15	15	0	0	0	0	0	0	0	0
EFO/1000 HRS		0.00	0.00	0.51	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CRIT. HRS		2209	843	1960	1880	2015	642	2183	2208	2209	84	1974	2208
RAD		131	259	28	16	12	218	58	8	5	288	12	NA
CAUSE CODES:													
Admin.	Operations	1	0	2	3	0	2	2	2	3	0	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	2	0
	Refueling	0	3	0	0	0	0	0	0	0	4	0	0
	Non-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
Lic. Oper.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	1	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	1	0
	Non-Refueling	0	0	1	0	1	0	0	0	0	0	0	0
Oth. Per.	Operations	1	0	2	1	1	0	0	0	0	0	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	2	0
	Refueling	0	0	0	0	0	0	0	0	0	2	0	0
	Non-Refueling	0	0	0	1	0	1	0	0	0	0	0	0
Maint.	Operations	1	0	5	5	2	3	2	2	3	0	2	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	1	0	0	0	0	0	0	0	0	4	0
	Refueling	0	4	0	0	0	0	0	0	0	6	0	0
	Non-Refueling	0	0	0	1	1	4	0	0	0	0	0	0
Design	Operations	0	0	1	0	0	0	0	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	2	0	0
	Non-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
Misc.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	12/20/90	81
Pre-Refueling	Operation	12/21/90	01/14/91	25
Refueling	Shutdown	01/15/91	03/04/91	48
Start-up	Operation	03/05/91	03/29/91	25
Operation	Operation	03/30/91	05/11/91	43
Non-Refueling	Shutdown	05/12/91	05/20/91	9
Operation	Operation	05/21/91	07/05/91	46
Non-Refueling	Shutdown	07/06/91	07/16/91	11
Operation	Operation	07/17/91	12/23/91	160
Non-Refueling	Shutdown	12/24/91	03/04/92	72
Operation	Operation	03/05/92	12/10/92	281
Pre-Refueling	Operation	12/11/92	01/04/93	23
Refueling	Shutdown	01/05/93	04/06/93	92
Start-up	Operation	04/07/93	05/01/93	25
Operation	Operation	05/02/93	09/30/93	152

Time used in calculations

Trend Calculations			Deviation Calculations		
Op	10/04/92-09/30/93	270 days (incl. 25 days s/u)	Op	10/28/91-09/30/93	540 days (incl. 25 days s/u)
S/D	01/07/93-04/06/93	90 days (incl. 90 days ref)	S/D	05/16/91-04/06/93	180 days (incl. 92 days ref)
FOR	10/01/92-09/30/93	268 days	FOR	10/22/91-09/30/93	540 days

TABLE 9.62 NORTH ANNA 2

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	1	0	1	0	1	0	0	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	1	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	1	1	0	0	0	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	0	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	1	0	0	0	0	0	0	1	0	0	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	1
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	0	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		1	0	0	8	2	2	0	2	0	0	11	0
EFO/1000 HRS		0.00	0.00	0.00	0.96	0.46	0.74	0.00	0.46	0.00	0.00	0.51	0.00
CRIT. HRS		1442	2160	2183	2092	2167	1347	1567	2185	2209	2160	1952	1633
RAD		131	259	28	16	12	218	58	8	5	288	12	NA
CAUSE CODES:													
Admin.	Operations	1	2	3	4	1	0	1	2	3	2	3	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	1	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	2	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	1	0
Lic. Oper.	Operations	0	1	2	0	0	0	0	1	1	0	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	1	0	0	0	0	0	1	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	1	0	0	0	0	0
Oth. Per.	Operations	0	0	0	2	1	0	1	0	0	1	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	0	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	0	2	4	7	2	1	2	1	3	2	3	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	1
	Startup	0	0	0	0	0	0	1	0	0	0	0	0
	Refueling	3	0	0	0	0	6	3	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	1	0	0	0	1	0
Design	Operations	0	0	0	0	0	1	0	2	0	1	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	1
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	2	0	0	0	0	0	0	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Refueling	Shutdown	10/01/90	10/29/90	29
Start-up	Operation	10/30/90	11/23/90	25
Operation	Operation	11/24/90	09/20/91	301
Non-Refueling	Shutdown	09/21/91	09/24/91	4
Operation	Operation	09/25/91	02/03/92	132
Pre-Refueling	Operation	02/04/92	02/28/92	25
Refueling	Shutdown	02/29/92	04/19/92	51
Start-up	Operation	04/20/92	04/21/92	2
Non-Refueling	Shutdown	04/22/92	04/24/92	3
Start-up	Operation	04/25/92	05/17/92	23
Operation	Operation	05/18/92	04/16/93	334
Non-Refueling	Shutdown	04/17/93	04/19/93	3
Operation	Operation	04/20/93	04/24/93	5
Non-Refueling	Shutdown	04/25/93	04/27/93	3
Operation	Operation	04/28/93	08/15/93	110
Pre-Refueling	Operation	08/16/93	09/09/93	25
Refueling	Shutdown	09/10/93	09/30/93	21

Time used in calculations

Trend Calculations			Deviation Calculations		
Op	12/08/92-09/09/93	270 days (incl. 0 days s/u)	Op	01/19/92-09/09/93	540 days (incl. 25 days s/u)
S/D	04/01/92-09/30/93	49 days (incl. 40 days ref)	S/D	10/01/90-09/30/93	114 days (incl. 101 days ref)
FOR	12/11/92-09/07/93	270 days	FOR	01/14/92-09/07/93	540 days

TABLE 9.63 OCONEE 1

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	1	0	0	0	2	0	1	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	1	0	0	0	0	0	0	0
SSA	Operations	0	0	1	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	1	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	1	1	2	1	0	1	0	4	2	0	3	0
	Pre-Refueling	0	0	0	0	0	0	0	0	2	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	1	0	0	0	0	1	1	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		0	0	2	14	2	3	20	0	6	5	0	3
EFO/1000 HRS		0.00	0.00	0.46	2.57	0.46	0.47	1.14	0.00	0.00	2.11	0.00	0.00
CRIT. HRS		2209	2160	2153	778	2196	2134	1758	2208	1487	1411	2183	2144
RAD		42	81	10	66	28	75	11	101	29	21	0	NA
CAUSE CODES:													
Admin.	Operations	1	0	1	0	0	1	4	3	2	0	1	2
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	1	0	0
	Refueling	0	0	0	1	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	0	0	1	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	1	0	0	0	0	1	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	0	0	2	0	0	1	1	1	1	0	0	2
	Pre-Refueling	0	0	0	0	0	0	0	0	1	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	1	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	0	0	2	0	0	3	3	3	2	0	1	1
	Pre-Refueling	0	0	0	0	0	0	0	0	1	0	0	0
	Startup	0	0	0	0	1	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Design	Operations	1	1	4	1	1	0	1	3	2	0	2	1
	Pre-Refueling	0	0	0	0	0	0	0	0	2	0	0	0
	Startup	0	0	0	0	1	0	0	0	0	1	0	0
	Refueling	0	0	0	1	0	0	0	0	1	1	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	0	0	0	0	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	07/10/91	283
Pre-Refueling	Operation	07/11/91	08/04/91	25
Refueling	Shutdown	08/05/91	09/22/91	49
Start-up	Operation	09/23/91	09/24/91	2
Non-Refueling	Shutdown	09/25/91	09/27/91	3
Start-up	Operation	09/28/91	10/20/91	23
Operation	Operation	10/21/91	05/25/92	218
Non-Refueling	Shutdown	05/26/92	06/04/92	10
Operation	Operation	06/05/92	11/11/92	160
Pre-Refueling	Operation	11/12/92	12/06/92	25
Refueling	Shutdown	12/07/92	01/27/93	52
Start-up	Operation	01/28/93	02/21/93	25
Operation	Operation	02/22/93	09/30/93	221

Time used in calculations

Trend Calculations			Deviation Calculations		
Op	11/13/92-09/30/93	270 days (incl. 25 days s/u)	Op	02/07/92-09/30/93	540 days (incl. 25 days s/u)
S/D	05/26/92-01/27/93	62 days (incl. 52 days ref)	S/D	08/05/91-01/27/93	114 days (incl. 101 days ref)
FOR	11/04/92-09/30/93	270 days	FOR	02/08/92-09/30/93	540 days

TABLE 9.64 OCONEE 2

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	0	0	0	0	0	1	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	0	2	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	1	3	2	0	0	0	4	5	1	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	1	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	3	0	0	0	0	2	0
	Non-Refueling	1	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		14	0	0	0	0	0	2	0	11	0	0	1
EFO/1000 HRS		0.72	0.00	0.00	0.00	0.00	0.00	0.93	0.00	0.49	0.00	0.00	0.00
CRIT. HRS		1386	2160	2183	2208	2209	816	2150	2208	2056	2160	886	2188
RAD		42	81	10	66	28	75	11	101	29	23	0	NA
CAUSE CODES:													
Admin.	Operations	1	0	1	1	0	0	1	1	1	0	0	2
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	3	0	0	0	0	1	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	0	0	1	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	1	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	3	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	0	0	1	0	1	0	0	1	3	0	0	2
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	0	0	1	0	1	0	0	2	2	0	0	2
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	4	0	0	0	0	2	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Design	Operations	0	1	5	2	2	0	1	3	5	2	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	1	0
	Startup	1	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	1	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	0	0	0	0	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	1	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0		0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Refueling	Shutdown	10/01/90	10/25/90	25
Start-up	Operation	10/26/90	11/08/90	14
Non-Refueling	Shutdown	11/09/90	11/16/90	8
Start-up	Operation	11/17/90	11/27/90	11
Operation	Operation	11/28/90	12/17/91	385
Pre-Refueling	Operation	12/18/91	01/11/92	25
Refueling	Shutdown	01/12/92	02/29/92	49
Start-up	Operation	03/01/92	03/25/92	25
Operation	Operation	03/26/92	10/19/92	208
Non-Refueling	Shutdown	10/20/92	10/24/92	5
Operation	Operation	10/25/92	04/07/93	165
Pre-Refueling	Operation	04/08/93	05/02/93	25
Refueling	Shutdown	05/03/93	06/18/93	47
Start-up	Operation	06/19/93	07/13/93	25
Operation	Operation	07/14/93	09/30/93	79

Time used in calculations

Trend Calculations			Deviation Calculations		
Op	11/18/92-09/30/93	270 days (incl. 25 days s/u)	Op	12/30/91-09/30/93	540 days (incl. 50 days s/u)
S/D	10/20/92-06/18/93	52 days (incl. 47 days ref)	S/D	10/01/90-06/18/93	134 days (incl. 121 days ref)
FOR	11/08/92-09/30/93	270 days	FOR	12/16/91-09/30/93	540 days

TABLE 9.65 OCONEE 3

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	1	1	1	2	1	0	0	-	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	1	0	0	0	0
SSA	Operations	1	0	0	1	0	2	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	1	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	1	1	1	2	0	1	0	0	3	2	3	0
	Pre-Refueling	0	0	0	0	0	0	0	1	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	1	0	0	0
	Refueling	0	0	0	0	0	0	0	2	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	1	0	0	0
FOR (%)		1	0	2	1	43	8	1	4	14	1	0	0
EFO/1000 HRS		0.45	0.00	0.93	0.46	3.13	0.49	0.46	3.34	0.50	0.47	0.00	0.00
CRIT. HRS		2204	1113	2155	2196	1277	2030	2173	600	2001	2146	2183	2208
RAD		42	81	10	66	28	75	11	101	29	23	0	NA
CAUSE CODES:													
Admin.	Operations	1	0	0	1	2	3	0	0	0	2	1	0
	Pre-Refueling	0	2	0	0	0	0	1	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	1	1	0	0	0
	Refueling	0	2	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	0	0	0	1	1	2	0	0	0	1	0	0
	Pre-Refueling	0	1	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	0	0	0	1	0	3	0	0	2	2	0	0
	Pre-Refueling	0	1	0	0	0	0	0	1	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	1	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	1	0	0	0	0	0	0	0
Maint.	Operations	0	0	1	1	0	5	0	0	1	2	2	0
	Pre-Refueling	0	0	0	0	0	0	0	1	0	0	0	0
	Startup	0	0	0	0	0	0	0	2	1	0	0	0
	Refueling	0	1	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	1	0	0	0	0	0	0	0
Design	Operations	1	1	3	2	3	0	1	0	3	3	2	1
	Pre-Refueling	0	0	0	0	0	0	1	0	0	0	0	0
	Startup	0	0	2	0	0	0	0	1	1	0	0	0
	Refueling	0	1	0	0	0	0	0	2	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	1	0	0	0
Misc.	Operations	1	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	1	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	01/19/91	111
Pre-Refueling	Operation	01/20/91	02/13/91	25
Refueling	Shutdown	02/14/91	03/22/91	37
Start-up	Operation	03/23/91	03/24/91	2
Non-Refueling	Shutdown	03/25/91	03/28/91	4
Start-up	Operation	03/29/91	04/20/91	23
Operation	Operation	04/21/91	11/23/91	217
Non-Refueling	Shutdown	11/24/91	12/31/91	38
Operation	Operation	01/01/92	06/28/92	180
Pre-Refueling	Operation	06/29/92	07/21/92	23
Non-Refueling	Shutdown	07/22/92	07/23/92	2
Pre-Refueling	Operation	07/24/92	07/25/92	2
Refueling	Shutdown	07/26/92	09/23/92	60
Start-up	Operation	09/24/92	10/05/92	12
Non-Refueling	Shutdown	10/06/92	10/13/92	8
Start-up	Operation	10/14/92	10/26/92	13
Operation	Operation	10/27/92	09/30/93	339

Time used in calculations

Trend Calculations				Deviation Calculations			
Op	01/04/93-09/30/93	270 days (incl.	0 days s/u)	Op	01/30/92-09/30/93	540 days (incl.	25 days s/u)
S/D	07/22/92-10/13/92	70 days (incl.	60 days ref)	S/D	02/14/91-10/13/92	149 days (incl.	97 days ref)
FOR	01/04/93-09/30/93	270 days		FOR	02/01/92-09/30/93	540 days	

TABLE 9.66 OYSTER CREEK

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	1	0	0	2	2	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	2	0	0	2	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	1	0	0	0	0	0	0	0	1	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	2	0	0	0	0	0	1	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	1	0	0	0	0	0	0	1	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		0	0	0	14	5	0	9	4	0	0	0	0
EFO/1000 HRS		0.00	0.00	0.00	1.04	0.00	0.00	1.10	0.93	0.00	0.00	0.00	0.00
CRIT. HRS		2209	1111	124	1930	2133	2184	1825	2140	1396	1091	2183	2208
RAD		61	398	661	45	80	63	66	62	465	313	35	NA
CAUSE CODES:													
Admin.	Operations	2	0	0	1	0	0	3	0	0	0	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	2	0	0	0	0	0	0	0	2	0	0
	Non-Refueling	0	0	0	0	1	0	0	0	0	0	0	0
Lic. Oper.	Operations	1	0	0	1	0	0	2	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	0	0	0	0	0	0	1	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	1	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	3	0	0	1	1	0	6	2	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	1	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	1	2	0	0
	Non-Refueling	0	0	0	0	1	0	0	0	0	0	0	0
Design	Operations	1	0	0	0	1	1	1	1	0	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	1	0	0	0	0	0	0	1	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	0	0	0	0	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	01/22/91	114
Pre-Refueling	Operation	01/23/91	02/16/91	25
Refueling	Shutdown	02/17/91	06/24/91	128
Start-up	Operation	06/25/91	07/19/91	25
Operation	Operation	07/20/91	07/22/91	3
Non-Refueling	Shutdown	07/23/91	07/30/91	8
Operation	Operation	07/31/91	08/22/91	23
Non-Refueling	Shutdown	08/23/91	08/24/91	2
Operation	Operation	08/25/91	11/01/91	69
Non-Refueling	Shutdown	11/02/91	11/03/91	2
Operation	Operation	11/04/91	05/03/92	182
Non-Refueling	Shutdown	05/04/92	05/05/92	2
Operation	Operation	05/06/92	05/30/92	25
Non-Refueling	Shutdown	05/31/92	06/06/92	7
Operation	Operation	06/07/92	11/05/92	152
Pre-Refueling	Operation	11/06/92	11/30/92	25
Refueling	Shutdown	12/01/92	02/13/93	75
Start-up	Operation	02/14/93	03/10/93	25
Operation	Operation	03/11/93	09/30/93	204

Time used in calculations

Trend Calculations			Deviation Calculations		
Op	10/21/92-09/30/93	270 days (incl. 25 days s/u)	Op	01/16/92-09/30/93	540 days (incl. 25 days s/u)
S/D	05/04/92-02/13/93	84 days (incl. 75 days ref)	S/D	04/02/91-02/13/93	180 days (incl. 159 days ref)
FOR	10/15/92-09/30/93	270 days	FOR	01/10/92-09/30/93	540 days

TABLE 9.67 PALISADES

Type	Phase	Year - Calendar Quarter 90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	2	1	0	0	4	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	1	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	1	0	0	0	1	3	0	0	0	0	1
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	1	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	0	0	1	0	1	0	0	0	2	0	0
	Pre-Refueling	0	0	0	0	0	2	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	5	0	0	0	0	0	1
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		0	10	0	7	6	1	0	24	10	0	27	0
EFO/1000 HRS		0.00	2.05	0.00	0.96	0.48	1.13	0.00	2.06	0.50	0.00	0.00	0.00
CRIT. HRS		0	489	2183	2080	2093	887	1864	1942	1993	2160	1143	0
RAD		505	183	5	8	5	264	14	6	8	6	156	NA
CAUSE CODES:													
Admin.	Operations	0	0	3	1	3	0	0	2	0	0	0	0
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	2	5	0	0	0	9	3	0	0	0	0	1
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	0	0	2	2	0	0	0	1	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	2	0	0	0	0	5	2	0	0	0	0	1
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	0	0	4	2	3	1	0	3	1	2	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	1	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	3	5	0	0	0	5	5	0	0	0	1	3
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Design	Operations	0	0	1	1	1	0	0	3	0	0	0	0
	Pre-Refueling	0	0	0	0	0	3	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	9	0	0	0	0	0	3
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Refueling	Shutdown	10/01/90	03/01/91	152
Start-up	Operation	03/02/91	03/03/91	2
Non-Refueling	Shutdown	03/04/91	03/09/91	6
Start-up	Operation	03/10/91	04/01/91	23
Operation	Operation	04/02/91	07/03/91	93
Non-Refueling	Shutdown	07/04/91	07/06/91	3
Operation	Operation	07/07/91	12/09/91	156
Non-Refueling	Shutdown	12/10/91	12/13/91	4
Operation	Operation	12/14/91	01/14/92	32
Pre-Refueling	Operation	01/15/92	02/06/92	23
Non-Refueling	Shutdown	02/07/92	02/08/92	2
Pre-Refueling	Operation	02/09/92	02/10/92	2
Refueling	Shutdown	02/11/92	04/07/92	57
Start-up	Operation	04/08/92	04/09/92	2
Non-Refueling	Shutdown	04/10/92	04/15/92	6
Start-up	Operation	04/16/92	05/08/92	23
Operation	Operation	05/09/92	07/24/92	77
Non-Refueling	Shutdown	07/25/92	07/27/92	3
Operation	Operation	07/28/92	08/14/92	18
Non-Refueling	Shutdown	08/15/92	08/16/92	2

Phase	Phase type	Start	End	Length
Operation	Operation	08/17/92	10/30/92	75
Non-Refueling	Shutdown	10/31/92	11/06/92	7
Operation	Operation	11/07/92	04/25/93	170
Pre-Refueling	Operation	04/26/93	04/28/93	3
Non-Refueling	Shutdown	04/29/93	05/15/93	17
Pre-Refueling	Operation	05/16/93	06/06/93	22
Refueling	Shutdown	06/07/93	09/30/93	116

Time used in calculations

Trend Calculations

Op	10/01/92-06/06/93	22' days (incl.	0 days s/u)
S/D	07/03/93-09/30/93	89 days (incl.	90 days ref)
FOR	10/01/92-06/04/93	247 days	

Deviation Calculations

Op	09/08/91-06/06/93	540 days (incl.	25 days s/u)
S/D	03/10/92-09/30/93	180 days (incl.	145 days ref)
FOR	10/02/91-06/04/93	540 days	

TABLE 9.68 PALO VERDE 1

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	1	1	0	0	1	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	1	0	0	1	0	0	0	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	1	0	0	0	0	0	0	0	0	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	1	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		0	0	0	6	5	25	0	2	4	2	2	0
EFO/1000 HRS		0.00	0.00	0.00	0.50	0.00	1.22	0.00	0.00	0.46	0.47	0.46	0.00
CRIT. HRS		2208	1318	2184	1983	2115	822	983	2158	2154	2130	2184	1560
RAD		8	37	62	12	91	59	51	17	54	21	68	NA
CAUSE CODES:													
Admin.	Operations	2	0	0	1	0	1	0	0	0	0	2	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	1	0	0	0	0	0
	Non-Refueling	0	2	0	0	0	0	1	0	0	0	0	0
Lic. Oper.	Operations	0	0	0	0	1	1	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
Oth. Per.	Operations	1	1	0	0	0	0	0	1	0	2	0	0
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	1	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	1	1	1	1	0	1	0	1	0	3	2	0
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	1	3	0	0	0	0	0
	Non-Refueling	0	2	0	0	0	0	0	0	0	0	0	0
Design	Operations	1	1	0	1	1	1	0	2	3	1	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	1	0	0	0	0	0
	Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	1	1	1	0	0	0	0	0
Misc.	Operations	0	0	1	1	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	01/12/91	104
Non-Refueling	Shutdown	01/13/91	02/14/91	33
Operation	Operation	02/15/91	09/14/91	212
Non-Refueling	Shutdown	09/15/91	09/23/91	9
Operation	Operation	09/24/91	10/27/91	34
Non-Refueling	Shutdown	10/28/91	10/30/91	3
Operation	Operation	10/31/91	01/02/92	64
Non-Refueling	Shutdown	01/03/92	01/12/92	10
Operation	Operation	01/13/92	01/23/92	11
Pre-Refueling	Operation	01/24/92	02/17/92	25
Refueling	Shutdown	02/18/92	05/12/92	85
Start-up	Operation	05/13/92	05/14/92	2
Non-Refueling	Shutdown	05/15/92	05/19/92	5
Start-up	Operation	05/20/92	06/11/92	23
Operation	Operation	06/12/92	09/28/92	109
Non-Refueling	Shutdown	09/29/92	09/30/92	2
Operation	Operation	10/01/92	08/11/93	315
Pre-Refueling	Operation	08/12/93	09/05/93	25
Refueling	Shutdown	09/06/93	09/30/93	25

Time used in calculations

Trend Calculations				Deviation Calculations			
Op	12/10/92-09/05/93	270 days (incl.	0 days s/u)	Op	12/04/91-09/05/93	540 days (incl.	25 days s/u)
S/D	04/01/92-09/30/93	74 days (incl.	67 days ref)	S/D	01/13/91-09/30/93	172 days (incl.	110 days ref)
FOR	12/08/92-09/03/93	270 days		FOR	12/05/91-09/03/93	540 days	

TABLE 9.69 PALO VERDE 2

Type	Phase	Year - Calendar Quarter 90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	1	0	1	0	0	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	1	0	0	0	0	0	0
SSA	Operations	0	0	0	0	0	1	1	0	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	1	1	0	0	0	0	1	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	1	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		0	0	0	11	0	10	0	0	2	6	0	0
EFO/1000 HRS		0.00	0.00	0.00	1.01	0.00	1.04	0.00	0.00	0.00	0.58	0.00	0.00
CRIT. HRS		2208	2160	2184	1990	385	1917	2184	2208	2170	1733	0	815
RAD		8	37	62	12	91	59	51	17	54	21	68	NA
CAUSE CODES:													
Admin.	Operations	0	2	0	1	0	1	2	0	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	2	0	0	0	0	0	2	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	1	0	0	2	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	1	0	0	0	0	0	0
	Refueling	0	0	0	0	1	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	1	0	2	0	0	0	0	0	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	1	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	1	2	2	2	0	0	2	0	2	0	0	0
	Pre-Refueling	0	0	0	0	1	0	0	0	0	1	0	0
	Startup	0	0	0	0	1	0	0	0	0	0	0	0
	Refueling	0	0	0	0	1	0	0	0	0	0	3	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Design	Operations	1	1	0	1	0	0	3	2	2	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Startup	0	0	0	0	0	1	0	0	0	0	0	0
	Refueling	0	0	0	0	2	0	0	0	0	0	1	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	1
Misc.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	08/09/91	313
Non-Refueling	Shutdown	08/10/91	08/13/91	4
Operation	Operation	08/14/91	08/16/91	3
Non-Refueling	Shutdown	08/17/91	08/18/91	2
Operation	Operation	08/19/91	09/23/91	36
Pre-Refueling	Operation	09/24/91	10/18/91	25
Refueling	Shutdown	10/19/91	12/30/91	73
Start-up	Operation	12/31/91	01/01/92	2
Non-Refueling	Shutdown	01/02/92	01/05/92	4
Start-up	Operation	01/06/92	01/28/92	23
Operation	Operation	01/29/92	03/23/92	55
Non-Refueling	Shutdown	03/24/92	03/26/92	3
Operation	Operation	03/27/92	02/19/93	330
Pre-Refueling	Operation	02/20/93	03/16/93	25
Refueling	Shutdown	03/17/93	08/09/93	146
Start-up	Operation	08/10/93	08/11/93	2
Non-Refueling	Shutdown	08/12/93	08/26/93	15
Start-up	Operation	08/27/93	09/18/93	23
Operation	Operation	09/19/93	09/30/93	12

Time used in calculations

Trend Calculations				Deviation Calculations			
Op	10/01/92-09/30/93	204 days (incl.	25 days s/u)	Op	08/06/91-09/30/93	540 days (incl.	50 days s/u)
S/D	05/27/93-08/26/93	90 days (incl.	75 days ref)	S/D	12/19/91-08/26/93	180 days (incl.	158 days ref)
FOR	10/01/92-09/30/93	199 days		FOR	08/03/91-09/30/93	540 days	

TABLE 9.70 PALO VERDE 3

Type	Phase	Year - Calendar Quarter 90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	1	0	0	0	1	1	0	0	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	1	1	1	1	0	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	2	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	1	1	0	0	0	0	1	1	0	0	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		2	0	30	4	18	2	9	0	0	4	2	0
EFO/1000 HRS		0.46	0.00	1.56	0.47	0.00	0.46	0.00	0.00	0.00	0.48	0.46	0.00
CRIT. HRS		2180	1777	640	2147	1855	2152	2002	1921	935	2089	2184	2208
RAD		8	37	62	12	81	59	51	17	54	21	68	NA
CAUSE CODES:													
Admin.	Operations	0	2	0	2	0	1	1	1	0	0	2	0
	Pre-Refueling	0	0	0	0	0	0	0	1	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	1	0	1	0	0	0	0	0
Lic. Oper.	Operations	0	0	0	0	0	1	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	2	0	0	0
	Non-Refueling	0	0	0	0	1	0	0	0	0	0	0	0
Oth. Per.	Operations	1	0	0	1	1	1	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	1	0	0	0	0	0	0	0
Maint.	Operations	1	2	0	3	0	1	0	1	0	1	2	1
	Pre-Refueling	0	1	0	0	0	0	0	1	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	1	0	0	0
	Non-Refueling	0	0	0	0	2	0	1	0	0	0	0	0
Design	Operations	2	1	0	2	2	2	3	1	0	1	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	1	0	0	0
	Refueling	0	0	0	0	0	0	0	0	1	0	0	0
	Non-Refueling	0	0	0	0	1	0	0	0	0	0	0	0
Misc.	Operations	1	0	0	0	1	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	02/21/91	144
Pre-Refueling	Operation	02/22/91	03/18/91	25
Refueling	Shutdown	03/19/91	05/22/91	65
Start-up	Operation	05/23/91	05/24/91	2
Non-Refueling	Shutdown	05/25/91	05/29/91	5
Start-up	Operation	05/30/91	06/18/91	21
Non-Refueling	Shutdown	06/20/01	06/21/91	2
Start-up	Operation	06/22/91	06/23/91	2
Operation	Operation	06/24/91	10/27/91	126
Non-Refueling	Shutdown	10/28/91	10/29/91	2
Operation	Operation	10/30/91	11/14/91	16
Non-Refueling	Shutdown	11/15/91	11/24/91	10
Operation	Operation	11/25/91	05/07/92	165
Non-Refueling	Shutdown	05/08/92	05/13/92	6
Operation	Operation	05/14/92	08/27/92	106
Pre-Refueling	Operation	08/28/92	09/21/92	25
Refueling	Shutdown	09/22/92	11/17/92	57
Start-up	Operation	11/18/92	11/19/92	2
Non-Refueling	Shutdown	11/20/92	11/21/92	2
Start-up	Operation	11/22/92	12/14/92	23
Operation	Operation	12/15/92	02/04/93	52
Non-Refueling	Shutdown	02/05/93	02/06/93	2
Operation	Operation	02/07/93	09/30/93	236

Time used in calculations

Trend Calculations				Deviation Calculations			
Op	01/02/83-09/30/93	270 days (incl.	0 days s/u)	Op	02/02/82-09/30/93	540 days (incl.	25 days s/u)
S/D	05/08/82-02/06/93	67 days (incl.	57 days ref)	S/D	03/19/91-02/06/93	151 days (incl.	122 days ref)
FOR	01/04/83-09/30/93	270 days		FOR	02/01/82-09/30/93	540 days	

TABLE 9.71 PEACH BOTTOM 2

Type	Phase	Year - Calendar Quarter 90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	1	0	0	1	2	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	0	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	2	0	1	0	2	2	1	0	0	2	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
FOR (%)		6	0	38	3	21	5	17	19	6	8	4	0
TFO/1000 HRS		0.00	0.00	0.78	0.46	1.09	0.48	1.63	1.20	1.78	0.63	0.47	0.00
CRIT. HRS		2124	264	1289	2170	1831	2068	1839	1661	562	1594	2125	2010
RAD		61	210	34	55	219	29	37	63	137	33	31	NA
CAUSE CODES:													
Admin.	Operations	5	0	2	6	1	2	0	1	0	1	2	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	2	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	1	4	0	0	0
	Non-Refueling	1	0	2	0	0	0	0	0	0	1	0	0
Lic. Oper.	Operations	0	0	1	1	0	0	0	1	0	0	1	0
	Pre-Refueling	0	0	0	0	0	0	0	2	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	0	0	0	0
	Refueling	0	0	1	0	0	0	0	1	0	0	0	0
	Non-Refueling	0	0	1	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	4	0	2	3	2	1	2	0	0	1	2	0
	Pre-Refueling	0	0	0	0	0	0	0	1	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	1	0	0	0	0	0	1	2	0	0	0
	Non-Refueling	0	0	1	0	0	0	0	0	0	0	0	0
Maint.	Operations	4	0	5	9	5	5	5	3	0	3	5	0
	Pre-Refueling	0	0	0	0	0	0	0	1	0	0	0	0
	Startup	0	0	2	0	0	0	0	0	0	0	0	0
	Refueling	0	4	1	0	0	0	0	1	5	0	0	0
	Non-Refueling	0	0	3	0	1	0	0	0	0	1	0	1
Design	Operations	1	0	1	1	1	0	0	3	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	2	0	0	0	0	0	1	0	0	0
	Refueling	0	2	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
Misc.	Operations	0	0	0	1	0	0	1	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	11/15/90	45
Non-Refueling	Shutdown	11/16/90	11/19/90	4
Operation	Operation	11/20/90	12/19/90	30
Pre-Refueling	Operation	12/20/90	01/13/91	25
Refueling	Shutdown	01/14/91	04/11/91	88
Start-up	Operation	04/12/91	05/02/91	21
Non-Refueling	Shutdown	05/03/91	05/16/91	14
Start-up	Operation	05/17/91	05/20/91	4
Operation	Operation	05/21/91	06/07/91	18
Non-Refueling	Shutdown	06/08/91	06/11/91	4
Operation	Operation	06/12/91	06/27/91	16
Non-Refueling	Shutdown	06/28/91	06/29/91	2
Operation	Operation	06/30/91	10/17/91	110
Non-Refueling	Shutdown	10/18/91	10/20/91	3
Operation	Operation	10/21/91	12/05/91	46
Non-Refueling	Shutdown	12/06/91	12/16/91	11
Operation	Operation	12/17/91	03/27/92	102
Non-Refueling	Shutdown	03/28/92	04/03/92	7
Operation	Operation	04/04/92	05/20/92	47
Non-Refueling	Shutdown	05/21/92	05/26/92	6

Phase	Phase type	Start	End	Length
Operation	Operation	05/27/92	07/17/92	52
Non-Refueling	Shutdown	07/18/92	07/23/92	6
Operation	Operation	07/24/92	08/18/92	26
Pre-Refueling	Operation	08/19/92	09/12/92	25
Refueling	Shutdown	09/13/92	12/04/92	83
Start-up	Operation	12/05/92	12/29/92	25
Operation	Operation	12/30/92	01/02/93	4
Non-Refueling	Shutdown	01/03/93	01/13/93	11
Operation	Operation	01/14/93	03/02/93	48
Non-Refueling	Shutdown	03/03/93	03/13/93	11
Operation	Operation	03/14/93	08/11/93	151
Non-Refueling	Shutdown	08/12/93	08/15/93	4
Operation	Operation	08/16/93	09/30/93	46

Time used in calculations

Trend Calculations			Deviation Calculations		
Op	12/09/92-09/30/93	270 days (incl. 21 days s/u)	Op	11/22/91-09/30/93	540 days (incl. 25 days s/u)
S/D	10/02/92-08/15/93	90 days (incl. 64 days ref)	S/D	03/25/91-08/15/93	180 days (incl. 101 days ref)
FOR	12/10/92-09/30/93	283 days	FOR	12/10/91-09/30/93	540 days

TABLE 9.72 PEACH BOTTOM 3

Type	Phase	Year - Calendar Quarter 90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	1	0	1	0	0	1	1	1	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	1	0	0	0	0	0	0	1	1	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	1	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	1	1	0	0	1	1	0	1	1	0	2
	Pre-Refueling	0	0	0	2	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	1	1	0	0	0	0	0	0	0
	Non-Refueling	0	0	1	0	0	0	0	0	0	0	0	0
FOR (%)		0	7	29	9	0	1	0	18	28	6	0	2
EFO/1000 HRS		0.00	0.49	0.00	0.60	0.00	0.93	0.00	1.07	1.24	0.49	0.00	0.00
CRIT. HRS		1584	2041	1644	1675	0	2158	2054	1876	1606	2060	2183	1571
RAD		61	210	34	55	219	29	37	63	137	33	31	NA
CAUSE CODES:													
Admin.	Operations	2	3	1	0	0	2	0	0	3	0	1	1
	Pre-Refueling	0	0	0	2	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	1	0	0	0	0	0	0
	Refueling	0	0	0	0	3	0	0	0	0	0	0	0
	Non-Refueling	2	0	5	0	0	0	0	0	1	1	0	0
Lic. Oper.	Operations	1	2	0	0	0	0	0	0	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	1	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	3	0	2	0	0	1	2	1	1	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	1	0	0	0	0	0	0
	Refueling	0	0	0	0	1	0	0	0	0	0	0	0
	Non-Refueling	2	0	2	0	0	0	0	0	0	0	0	0
Maint.	Operations	3	3	2	2	0	2	4	1	5	2	1	2
	Pre-Refueling	0	0	0	2	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	1	0	0	0	0	0	0
	Refueling	0	0	0	2	3	0	0	0	0	0	0	0
	Non-Refueling	2	0	6	1	0	0	0	0	0	1	0	0
Design	Operations	0	1	1	0	0	0	0	2	2	1	0	1
	Pre-Refueling	0	0	0	1	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	1	0	1	1	0	0	0	1	0	1	0	0
Misc.	Operations	0	0	0	1	0	0	0	0	1	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	1	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	10/27/90	27
Non-Refueling	Shutdown	10/28/90	11/20/90	24
Operation	Operation	11/21/90	01/16/91	57
Non-Refueling	Shutdown	01/17/91	01/20/91	4
Operation	Operation	01/21/91	05/02/91	102
Non-Refueling	Shutdown	05/03/91	05/23/91	21
Operation	Operation	05/24/91	07/07/91	45
Non-Refueling	Shutdown	07/08/91	07/12/91	5
Operation	Operation	07/13/91	08/22/91	41
Pre-Refueling	Operation	08/23/91	09/16/91	25
Refueling	Shutdown	09/17/91	12/31/91	106
Start-up	Operation	01/01/92	01/25/92	25
Operation	Operation	01/26/92	05/05/92	101
Non-Refueling	Shutdown	05/06/92	05/08/92	3
Operation	Operation	05/09/92	07/04/92	57
Non-Refueling	Shutdown	07/05/92	07/09/92	5
Operation	Operation	07/10/92	07/14/92	5
Non-Refueling	Shutdown	07/15/92	07/20/92	6
Operation	Operation	07/21/92	10/15/92	87
Non-Refueling	Shutdown	10/16/92	11/07/92	23

Phase	Phase type	Start	End	Length
Operation	Operation	11/08/92	03/07/93	120
Non-Refueling	Shutdown	03/08/93	03/10/93	3
Operation	Operation	03/11/93	07/04/93	116
Non-Refueling	Shutdown	07/05/93	07/14/93	10
Operation	Operation	07/15/93	08/26/93	43
Pre-Refueling	Operation	08/27/93	09/20/93	25
Refueling	Shutdown	09/21/93	09/30/93	10

Time used in calculations

Trend Calculations

Op	12/12/92-09/20/93	270 days (incl.	0 days s/u)
S/D	05/06/92-09/30/93	60 days (incl.	10 days ref)
FOR	12/09/92-09/18/93	270 days	

Deviation Calculations

Op	02/09/92-09/20/93	540 days (incl.	0 days s/u)
S/D	05/15/91-09/30/93	180 days (incl.	116 days ref)
FOR	03/08/92-09/18/93	540 days	

TABLE 9.73 PERRY

Type	Phase	Year - Calendar Quarter 90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	0	0	0	0	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	1	0	0	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	1	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	1	0
SSF	Operations	0	2	0	0	4	1	0	1	1	0	2	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	1	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	1	0
FOR (%)		0	0	18	1	15	5	26	4	8	19	69	20
EFO/1000 HRS		0.00	0.00	0.55	0.45	1.04	0.00	1.88	0.46	0.49	1.48	0.00	0.55
CRIT. HRS		107	2122	1805	2208	1919	1874	530	2167	2058	677	708	1820
RAD		391	33	60	18	26	81	458	10	21	152	36	NA
CAUSE CODES:													
Admin.	Operations	0	2	1	1	2	1	0	0	4	1	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	2	0	0	0	0	0	0	0	0	0	0
	Refueling	9	0	0	0	0	0	5	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	1	0	0	3	1	0
Lic. Oper.	Operations	0	1	0	0	0	0	0	0	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	5	0	0	0
	Startup	0	2	0	0	0	0	0	0	6	0	0	0
	Refueling	1	0	0	0	0	0	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	0	0	0	4	5	0	0	2	2	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	1	0	0	0	0	0	0	0	0	0	0	0
	Refueling	3	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	2	1	0
Maint.	Operations	0	5	2	4	6	1	0	2	6	3	1	3
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Startup	0	1	0	0	1	0	0	0	0	0	0	0
	Refueling	9	0	0	0	0	4	6	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	1	0	0	3	1	0
Design	Operations	0	1	0	0	6	0	0	1	1	2	0	0
	Pre-Refueling	0	0	0	0	0	2	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Non-Refueling	0	0	1	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	0	0	1	0	0	0	0	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Refueling	Shutdown	10/01/90	12/24/90	85
Start-up	Operation	12/25/90	01/18/91	25
Operation	Operation	01/19/91	04/02/91	74
Non-Refueling	Shutdown	04/03/91	04/16/91	14
Operation	Operation	04/17/91	12/22/91	250
Non-Refueling	Shutdown	12/23/91	01/02/92	11
Operation	Operation	01/03/92	02/27/92	56
Pre-Refueling	Operation	02/28/92	03/23/92	25
Refueling	Shutdown	03/24/92	05/25/92	63
Start-up	Operation	05/26/92	05/28/92	3
Non-Refueling	Shutdown	05/29/92	06/08/92	11
Start-up	Operation	06/09/92	06/30/92	22
Operation	Operation	07/01/92	10/24/92	116
Non-Refueling	Shutdown	10/25/92	10/29/92	5
Operation	Operation	10/30/92	01/09/93	72
Non-Refueling	Shutdown	01/10/93	03/05/93	55
Operation	Operation	03/06/93	03/26/93	21
Non-Refueling	Shutdown	03/27/93	05/31/93	66
Operation	Operation	06/01/93	07/09/93	39
Non-Refueling	Shutdown	07/10/93	07/23/93	14

Phase	Phase type	Start	End	Length
Operation	Operation	07/24/93	09/30/93	69

Time used in calculations

Trend Calculations			Deviation Calculations		
Op	10/01/92-09/30/93	225 days (incl. 0 days s/u)	Op	08/28/91-09/30/93	540 days (incl. 25 days s/u)
S/D	02/24/93-07/23/93	90 days (incl. 0 days ref)	S/D	04/27/92-07/23/93	180 days (incl. 29 days ref)
FOR	11/03/92-09/30/93	270 days	FOR	11/20/91-09/30/93	540 days

TABLE 9.74 PILGRIM

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	0	0	0	0	0	2	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	1	0
SSA	Operations	0	0	0	0	2	0	0	1	1	0	0	2
	Pre-Refueling	0	0	0	0	0	0	0	0	0	2	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	1	0
	Non-Refueling	0	0	0	0	0	0	1	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	1	4	0	0	2	1	1	1	1	3	1	3
	Pre-Refueling	0	0	0	0	0	0	0	0	0	2	0	0
	Startup	0	0	0	1	0	0	0	0	0	0	1	0
	Refueling	0	0	0	1	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		0	0	14	0	25	6	14	0	15	4	9	6
EFO/1000 HRS		0.00	0.00	0.00	0.00	0.00	0.49	0.00	0.00	0.77	0.48	1.24	0.48
CRIT. HRS		2209	2160	690	1213	1697	2055	1935	2208	1300	2082	808	2060
RAD		47	43	336	166	59	53	40	36	152	56	313	NA
CAUSE CODES:													
Admin.	Operations	2	2	0	0	2	3	1	4	2	1	0	3
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	1	0
	Refueling	0	0	3	3	0	0	0	0	0	0	1	0
	Non-Refueling	0	0	0	0	0	0	1	0	0	0	0	0
Lic. Oper.	Operations	0	0	0	0	1	0	0	0	0	1	0	0
	Pre-Refueling	0	0	1	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	1	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	1	0	0	0	0	0
Oth. Per.	Operations	1	0	0	0	1	0	0	2	1	1	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	3	2	0	0	0	0	0	0	2	0
	Non-Refueling	0	0	0	0	0	0	0	0	1	0	0	0
Maint.	Operations	2	5	0	0	3	2	1	4	2	3	1	3
	Pre-Refueling	0	0	1	0	0	0	0	0	0	1	0	0
	Startup	0	0	0	1	0	0	0	0	0	0	2	0
	Refueling	0	0	7	3	0	0	0	0	0	0	4	0
	Non-Refueling	0	0	0	0	0	0	2	0	0	0	0	0
Design	Operations	1	2	0	0	2	2	1	1	2	0	0	3
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	1	1	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	1	0	0	0	0	0	0	1	0	0
Misc.	Operations	0	0	0	0	1	0	0	0	1	2	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	1	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	04/07/91	189
Pre-Refueling	Operation	04/08/91	04/29/91	22
Non-Refueling	Shutdown	04/30/91	05/01/91	2
Pre-Refueling	Operation	05/02/91	05/04/91	3
Refueling	Shutdown	05/05/91	08/10/91	98
Start-up	Operation	08/11/91	09/04/91	25
Operation	Operation	09/05/91	10/30/91	56
Non-Refueling	Shutdown	10/31/91	11/20/91	21
Operation	Operation	11/21/91	03/26/92	127
Non-Refueling	Shutdown	03/27/92	04/11/92	16
Operation	Operation	04/12/92	10/24/92	196
Non-Refueling	Shutdown	10/25/92	11/22/92	28
Operation	Operation	11/23/92	12/13/92	21
Non-Refueling	Shutdown	12/14/92	12/16/92	3
Operation	Operation	12/17/92	03/07/93	81
Pre-Refueling	Operation	03/08/93	03/13/93	6
Non-Refueling	Shutdown	03/14/93	03/15/93	2
Pre-Refueling	Operation	03/16/93	04/03/93	19
Refueling	Shutdown	04/04/93	05/26/93	53
Start-up	Operation	05/27/93	06/20/93	25
Operation	Operation	06/21/93	07/22/93	32
Non-Refueling	Shutdown	07/23/93	07/24/93	2
Operation	Operation	07/25/93	09/30/93	68

Time used in calculations

Trend Calculations			Deviation Calculations		
Op	10/07/92-09/30/93	270 days (incl. 25 days s/u)	Op	12/26/91-09/30/93	540 days (incl. 25 days s/u)
S/D	04/11/92-07/24/93	90 days (incl. 53 days ref)	S/D	06/18/91-07/24/93	180 days (incl. 107 days ref)
FOR	10/03/92-09/30/93	270 days	FOR	01/07/92-09/30/93	540 days

TABLE 9.75 POINT BEACH 1

		Year - Calendar Quarter											
Type	Phase	90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	1	0	0	0	0	0	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	1	0	0	0	0	0	0	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	1	0	0	0	0	0	0	1	2	2	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Startup	0	0	0	0	0	0	1	0	0	0	0	0
	Refueling	0	0	1	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	1	0	0	0	0	0	0	0
FOR (%)		0	0	2	0	4	0	3	0	1	0	0	0
EFO/1000 HRS		0.00	0.00	1.78	0.00	0.00	0.00	1.10	0.00	0.46	0.00	0.00	0.00
CRIT. HRS		2209	2160	1126	2208	2129	2184	905	2208	2196	2046	1373	2208
RAD		83	8	59	6	58	5	58	4	61	3	40	NA
CAUSE CODES:													
Admin.	Operations	0	0	0	1	1	1	0	0	1	2	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Startup	0	0	0	0	0	0	1	0	0	0	0	0
	Refueling	0	0	0	0	0	0	2	0	0	0	3	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	0	0	0	1	0	1	0	0	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	1	0	0	0	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	1
Oth. Per.	Operations	0	0	2	1	1	1	0	0	0	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	1	0	0	0	0	0
	Refueling	0	0	0	0	0	0	1	0	0	0	1	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	0	0	3	3	4	2	0	0	2	2	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Startup	0	0	0	0	0	0	1	0	0	0	0	0
	Refueling	0	0	2	0	0	0	2	0	0	0	2	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Design	Operations	1	0	0	1	0	0	0	1	1	0	0	0
	Pre-Refueling	0	0	1	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	1	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	03/15/91	166
Pre-Refueling	Operation	03/16/91	04/09/91	25
Refueling	Shutdown	04/10/91	05/16/91	37
Start-up	Operation	05/17/91	06/10/91	25
Operation	Operation	06/11/91	11/27/91	170
Non-Refueling	Shutdown	11/28/91	11/29/91	2
Operation	Operation	11/30/91	03/17/92	109
Pre-Refueling	Operation	03/18/92	04/11/92	25
Refueling	Shutdown	04/12/92	05/28/92	47
Start-up	Operation	05/29/92	05/31/92	3
Non-Refueling	Shutdown	06/01/92	06/04/92	4
Start-up	Operation	06/05/92	06/26/92	22
Operation	Operation	06/27/92	03/05/93	252
Pre-Refueling	Operation	03/06/93	03/30/93	25
Refueling	Shutdown	03/31/93	05/01/93	32
Start-up	Operation	05/02/93	05/26/93	25
Operation	Operation	05/27/93	09/30/93	127

Time used in calculations

Trend Calculations			Deviation Calculations		
Op	12/03/92-09/30/93	270 days (incl. 25 days s/u)	Op	01/17/92-09/30/93	540 days (incl. 50 days s/u)
S/D	04/12/92-05/01/93	83 days (incl. 79 days ref)	S/D	04/10/91-05/01/93	122 days (incl. 116 days ref)
FOR	11/24/92-09/30/93	270 days	FOR	01/04/92-09/30/93	540 days

TABLE 9.75 POINT BEACH 2

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	0	1	0	0	0	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	1	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	0	0	0	0	0	0	0	0	3	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	1	0	0	0
	Refueling	0	0	0	0	0	0	0	0	1	0	0	0
	Non-Refueling	0	0	0	1	1	0	0	0	0	0	0	0
FOR (%)		0	0	0	0	4	0	0	0	0	1	0	0
EFO/1000 HRS		0.00	0.00	0.00	0.00	1.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CRIT. HRS		1188	2160	2183	2138	1164	2184	2183	2094	1085	2148	2183	2070
RAD		83	9	59	6	58	5	58	4	61	3	40	NA
CAUSE CODES:													
Admin.	Operations	0	0	0	0	0	0	1	0	0	4	2	0
	Pre-Refueling	0	0	0	0	0	0	0	1	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	1	0	0	0
	Refueling	1	0	0	0	0	0	0	0	1	0	0	0
	Non-Refueling	0	0	0	0	2	0	0	0	0	0	0	0
Lic. Oper.	Operations	0	0	0	1	0	0	0	0	0	2	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	0	0	2	0	1	1	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	1	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	0	0	0	2	0	0	0
	Non-Refueling	0	0	0	0	2	0	0	0	0	0	0	0
Maint.	Operations	0	0	2	0	1	1	1	0	0	5	2	1
	Pre-Refueling	0	0	0	0	0	0	0	1	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	1	0	0	0
	Refueling	3	0	0	0	0	0	0	0	3	0	0	0
	Non-Refueling	0	0	0	0	4	0	0	0	0	0	0	0
Design	Operations	1	0	1	0	0	0	0	1	0	0	1	0
	Pre-Refueling	0	0	0	0	0	0	0	1	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	2	0	0	0
	Non-Refueling	0	0	0	1	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Pre-Refueling	Operation	10/01/90	10/08/90	8
Refueling	Shutdown	10/09/90	11/14/90	37
Start-up	Operation	11/15/90	12/09/90	25
Operation	Operation	12/10/90	09/28/91	293
Non-Refueling	Shutdown	09/29/91	11/11/91	44
Operation	Operation	11/12/91	09/03/92	297
Pre-Refueling	Operation	09/04/92	09/28/92	25
Refueling	Shutdown	09/29/92	11/13/92	46
Start-up	Operation	11/14/92	12/08/92	25
Operation	Operation	12/09/92	09/02/93	268
Pre-Refueling	Operation	09/03/93	09/27/93	25
Refueling	Shutdown	09/28/93	09/30/93	3

Time used in calculations

Trend Calculations			Deviation Calculations		
Op	01/01/93-09/27/93	270 days (incl. 0 days s/u)	Op	02/20/92-09/27/93	540 days (incl. 25 days s/u)
STD	09/29/82-09/30/93	48 days (incl. 48 days ref)	STD	10/09/90-09/30/93	130 days (incl. 86 days ref)
FOR	12/29/82-09/25/93	270 days	FOR	02/09/92-09/25/93	540 days

TABLE 9.77 PRAIRIE ISLAND 1

Type	Phase	Year - Calendar Quarter 90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	1	0	0	1	0	0	0	0	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	0	0	0	0	3	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	1	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	3	0	0	0	0	0	0
POR (%)		1	0	0	5	0	0	0	6	30	1	0	0
EFO/1000 HRS		0.46	0.00	0.00	0.47	0.00	0.00	0.00	0.48	0.00	0.00	0.00	0.00
CRIT. HRS		2189	2160	1487	2123	2209	2184	2183	2075	409	1908	2183	2208
RAD		2	1	44	3	2	32	1	3	69	4	1	NA
CAUSE CODES:													
Admin.	Operations	4	1	0	0	0	3	0	3	0	2	1	3
	Pre-Refueling	0	0	1	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	1	0	0	0	0	0	0	0	0
	Refueling	0	0	1	0	0	0	0	0	1	2	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	0	0	0	0	0	0	0	0	0	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	0	0	1	0	0	1	0	1	0	2	0	2
	Pre-Refueling	0	0	3	0	0	0	0	0	1	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	1	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	3	2	0	0	0	3	0	4	0	3	2	4
	Pre-Refueling	0	0	4	0	0	0	0	1	1	0	0	0
	Startup	0	0	0	1	0	0	0	0	0	0	0	0
	Refueling	0	0	1	0	0	0	0	0	1	1	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Design	Operations	1	1	0	0	0	3	2	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	1	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	1	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	05/06/91	220
Pre-Refueling	Operation	05/09/91	06/02/91	25
Refueling	Shutdown	06/03/91	06/26/91	24
Start-up	Operation	06/27/91	07/21/91	25
Operation	Operation	07/22/91	08/16/91	26
Non-Refueling	Shutdown	08/17/91	08/18/91	2
Operation	Operation	08/19/91	09/20/92	399
Pre-Refueling	Operation	09/21/92	09/25/92	5
Non-Refueling	Shutdown	09/26/92	10/06/92	11
Pre-Refueling	Operation	10/07/92	10/26/92	20
Refueling	Shutdown	10/27/92	01/08/93	74
Start-up	Operation	01/09/93	01/09/93	1
Non-Refueling	Shutdown	01/10/93	01/11/93	2
Start-up	Operation	01/12/93	02/04/93	24
Operation	Operation	02/05/93	09/30/93	238

Time used in calculations

Trend Calculations			Deviation Calculations		
Op	10/20/92-09/30/93	270 days (incl. 25 days s/u)	Op	01/13/92-09/30/93	540 days (incl. 25 days s/u)
S/D	09/26/92-01/11/93	87 days (incl. 74 days ref)	S/D	06/03/91-01/11/93	113 days (incl. 98 days ref)
FOR	10/16/92-09/30/93	270 days	FOR	01/20/92-09/30/93	540 days

TABLE 9.78 PRAIRIE ISLAND 2

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	1	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	1	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0		0	0	0
	Startup	0	0	0	0	0	0	0	0		0	0	0
	Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	2	0	0	0	0	0	0
	Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		1	0	0	0	0	0	0	0	0	0	0	0
EFO/1000 HRS		0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CRIT. HRS		2027	2160	2183	2208	2209	1595	2183	2208	551	1820	2183	2208
RAD		2	1	44	3	2	32	1	3	69	4	1	NA
CAUSE CODES:													
Admin.	Operations	3	1	1	2	0	0	0	3	0	1	2	2
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	1	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	2	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	1	2	0	0
Lic. Oper.	Operations	0	0	0	0	0	0	0	0	0	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	0	0	3	0	0	0	0	0	0	0	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	3	0	0	0	0	1	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	1	0	0	0
Maint.	Operations	3	2	3	1	0	0	0	3	0	1	1	2
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	4	0	0	0	0	1	0	0	0	0	0	0
	Refueling	0	0	0	0	0	3	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	1	1	0	0
Design	Operations	1	1	0	0	0	0	1	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	1	0	0	0	0	0	0
	Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Refueling	Shutdown	10/01/90	10/05/90	5
Start-up	Operation	10/06/90	10/30/90	25
Operation	Operation	10/31/90	01/24/92	451
Pre-Refueling	Operation	01/25/92	02/18/92	25
Refueling	Shutdown	02/19/92	03/10/92	21
Start-up	Operation	03/11/92	03/12/92	2
Non-Refueling	Shutdown	03/13/92	03/14/92	2
Start-up	Operation	03/15/92	04/06/92	23
Operation	Operation	04/07/92	10/23/92	200
Non-Refueling	Shutdown	10/24/92	01/10/93	79
Operation	Operation	01/11/93	09/30/93	263

Time used in calculations

Trend Calculations			Deviation Calculations		
Op	10/17/92-09/30/93	270 days (incl. 0 days s/u)	Op	12/29/91-09/30/93	540 days (incl. 25 days s/u)
S/D	10/24/92-01/10/93	79 days (incl. 0 days ref)	S/D	10/01/90-01/10/93	107 days (incl. 26 days ref)
FOR	10/16/92-09/30/93	270 days	FOR	12/26/91-09/30/93	540 days

TABLE 9.79 QUAD CITIES 1

Type	Phase	Year - Calendar Quarter 90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	0	1	1	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	0	0	2	3	1	5	2	0	2	1	1
	Pre-Refueling	2	0	0	0	0	0	0	2	0	0	0	0
	Startup	0	0	3	0	0	0	0	0	0	0	0	0
	Refueling	1	2	0	0	0	0	0	1	4	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	1	2
FOR (%)		0	0	56	0	9	13	7	5	0	4	12	24
EFO/1000 HRS		0.00	0.00	0.00	0.00	0.49	0.52	0.00	0.54	0.00	0.47	0.00	0.00
CRIT. HRS		1012	0	779	2208	2043	1911	2060	1867	411	2105	1924	1720
RAD		124	143	33	33	45	248	37	59	233	132	153	NA
CAUSE CODES:													
Admin.	Operations	0	0	0	1	2	3	4	1	0	3	1	5
	Pre-Refueling	1	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	2	0	0	0	0	0	0	0	0	0
	Refueling	3	6	0	0	0	0	0	1	1	0	0	0
	Non-Refueling	0	0	1	0	0	0	0	0	0	0	0	1
Lic. Oper.	Operations	0	0	0	1	0	1	0	1	0	0	1	3
	Pre-Refueling	1	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	1	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	1	0
Oth. Per.	Operations	0	0	0	0	1	1	3	1	0	0	0	3
	Pre-Refueling	1	0	0	0	0	0	0	1	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	2	1	0	0	0	0	0	1	2	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	0	0	0	4	8	6	6	2	0	3	1	8
	Pre-Refueling	2	0	0	0	0	0	0	4	0	0	0	0
	Startup	0	0	2	0	0	0	0	0	0	0	0	0
	Refueling	6	8	1	0	0	0	0	1	6	0	0	0
	Non-Refueling	0	0	1	0	0	1	0	0	0	0	0	2
Design	Operations	0	0	0	2	3	1	4	2	0	0	1	2
	Pre-Refueling	2	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	2	0	0	0	0	0	0	0	0	0
	Refueling	1	2	0	0	0	0	0	0	1	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	0	0	0	1	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	1	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	10/19/90	19
Pre-Refueling	Operation	10/20/90	11/13/90	25
Refueling	Shutdown	11/14/90	04/19/91	157
Start-up	Operation	04/20/91	04/21/91	2
Non-Refueling	Shutdown	04/22/91	04/23/91	2
Start-up	Operation	04/24/91	05/16/91	23
Operation	Operation	05/17/91	05/22/91	6
Non-Refueling	Shutdown	05/23/91	06/23/91	32
Operation	Operation	06/24/91	02/07/92	229
Non-Refueling	Shutdown	02/08/92	02/17/92	10
Operation	Operation	02/18/92	08/15/92	180
Non-Refueling	Shutdown	08/16/92	08/17/92	2
Operation	Operation	08/18/92	08/27/92	10
Pre-Refueling	Operation	08/28/92	09/21/92	25
Refueling	Shutdown	09/22/92	12/13/92	83
Start-up	Operation	12/14/92	01/07/93	25
Operation	Operation	01/08/93	06/19/93	163
Non-Refueling	Shutdown	06/20/93	07/19/93	30
Operation	Operation	07/20/93	09/30/93	73

Time used in calculations

Trend Calculations			Deviation Calculations		
Op	12/14/92-09/30/93	261 days (incl. 25 days s/u)	Op	12/06/91-09/30/93	540 days (incl. 25 days s/u)
S/D	10/15/92-07/19/93	90 days (incl. 60 days ref)	S/D	03/30/91-07/19/93	180 days (incl. 104 days ref)
FOR	01/04/93-09/30/93	270 days	FOR	01/12/92-09/30/93	540 days

TABLE 9.80 QUAD CITIES 2

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	2	0	0	0	0	0	0	0	0	2	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	1	0
SSA	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	2	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	3	3	1	1	1	0	1	5	2	2	0	3
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	2	0	0	0	2	1
	Refueling	0	0	0	0	0	1	2	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	1	0
/OR (%)		5	4	18	16	8	0	0	0	0	13	58	39
EFO/1000 HRS		0.48	0.48	0.00	0.54	0.00	0.00	0.00	0.00	0.00	1.44	2.57	0.00
CRIT. HRS		2083	2086	1802	1867	2041	0	1275	2208	2209	1392	388	1441
RAD		124	143	33	33	45	249	37	59	233	132	153	NA
CAUSE CODES:													
Admin.	Operations	3	3	2	1	1	0	0	1	0	2	0	7
	Pre-Refueling	0	0	0	0	0	0	0	0	0	2	0	0
	Startup	0	0	0	0	0	0	2	0	0	0	0	1
	Refueling	0	0	0	0	0	7	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	1
Lic. Oper.	Operations	2	0	0	2	0	0	0	0	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	1	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	1	1
Oth. Per.	Operations	3	0	0	0	0	0	0	2	1	1	0	3
	Pre-Refueling	0	0	0	0	2	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	1	0
	Refueling	0	0	0	0	0	3	1	0	0	0	1	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	1
Maint.	Operations	6	3	2	6	3	0	2	4	2	5	0	5
	Pre-Refueling	0	0	0	0	3	1	0	0	0	2	0	0
	Startup	0	0	0	0	0	0	4	0	0	0	3	1
	Refueling	0	0	0	0	0	9	3	0	0	1	2	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	1	0	1
Design	Operations	4	3	1	2	2	0	1	1	1	0	0	2
	Pre-Refueling	0	0	0	0	2	0	0	0	0	1	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	1	4	0	0	0	1	0
	Non-Refueling	0	0	0	0	1	0	0	0	0	0	0	0
Misc.	Operations	1	1	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Non-Refueling	Shutdown	10/01/90	10/02/90	2
Operation	Operation	10/03/90	04/07/91	187
Non-Refueling	Shutdown	04/08/91	04/18/91	11
Operation	Operation	04/19/91	09/19/91	154
Non-Refueling	Shutdown	09/20/91	10/05/91	16
Operation	Operation	10/06/91	12/05/91	84
Pre-Refueling	Operation	12/09/91	01/02/92	25
Refueling	Shutdown	01/03/92	05/08/92	127
Start-up	Operation	05/09/92	06/02/92	25
Operation	Operation	06/03/92	01/07/93	219
Non-Refueling	Shutdown	01/08/93	01/12/93	5
Operation	Operation	01/13/93	02/09/93	28
Pre-Refueling	Operation	02/10/93	03/06/93	25
Refueling	Shutdown	03/07/93	05/24/93	79
Start-up	Operation	05/25/93	06/13/93	20
Non-Refueling	Shutdown	06/14/93	07/07/93	24
Start-up	Operation	07/08/93	07/12/93	5
Operation	Operation	07/13/93	07/15/93	3
Non-Refueling	Shutdown	07/16/93	07/24/93	9
Operation	Operation	07/25/93	08/31/93	38
Non-Refueling	Shutdown	09/01/93	09/13/93	13
Operation	Operation	09/14/93	09/30/93	17

Time used in calculations

Trend Calculations			Deviation Calculations		
Op	10/01/92-09/30/93	235 days (incl. 25 days s/u)	Op	07/11/91-09/30/93	540 days (incl. 50 days s/u)
S/D	04/11/93-09/13/93	90 days (incl. 44 days ref)	S/D	03/20/92-09/13/93	180 days (incl. 129 days ref)
FOR	10/14/92-09/30/93	270 days	FOR	09/08/91-09/30/93	540 days

TABLE 9.81 RIVER BEND

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	0	0	0	0	0	1	0	0	1
	Pre-Refueling	0	0	0	0	0	2	0	0	0	0	0	0
	Startup	1	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	4
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	1	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	1	2	0	0	0	0	0	4	2	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	2	0	0	0	0	2	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	1
FOR (%)		16	9	1	0	35	43	0	20	13	0	65	48
EFO/1000 HRS		0.00	0.00	0.46	0.00	1.35	0.96	0.00	1.94	0.52	0.00	1.41	0.78
CRIT. HRS		662	1989	2183	1902	1479	1045	0	516	1927	2180	711	1285
RAD		368	43	26	27	31	63	393	221	33	20	66	NA
CAUSE CODES:													
Admin.	Operations	0	3	2	1	2	0	0	0	2	2	1	2
	Pre-Refueling	0	0	0	0	0	2	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	9	0	0	0	0	0	2	4	0	0	0	0
	Non-Refueling	0	0	0	0	3	0	0	0	1	0	7	3
Lic. Oper.	Operations	0	0	0	0	0	0	0	0	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	0	0	1	0	0	0	0
	Non-Refueling	0	0	0	0	1	0	0	0	0	0	1	0
Oth. Per.	Operations	0	0	2	1	0	0	0	0	2	3	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	1	1	0	0	0
	Refueling	7	0	0	0	0	1	2	0	0	0	0	0
	Non-Refueling	0	0	0	1	0	0	0	0	0	0	1	1
Maint.	Operations	0	2	4	3	2	0	0	0	7	4	2	1
	Pre-Refueling	0	0	0	0	0	2	0	0	0	0	0	0
	Startup	2	0	0	0	0	0	0	1	1	0	0	0
	Refueling	13	0	0	0	0	1	4	6	0	0	0	0
	Non-Refueling	0	0	0	0	1	0	0	0	1	0	7	3
Design	Operations	0	2	2	3	0	0	0	0	1	1	0	1
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Startup	1	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	1	0	0	0	0	0	0
	Non-Refueling	0	0	0	1	1	0	0	0	0	0	0	0
Misc.	Operations	0	1	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	1	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Refueling	Shutdown	10/01/90	11/29/90	60
Start-up	Operation	11/30/90	12/12/90	13
Non-Refueling	Shutdown	12/13/90	12/14/90	2
Start-up	Operation	12/15/90	12/26/90	12
Operation	Operation	12/27/90	02/27/91	63
Non-Refueling	Shutdown	02/28/91	03/05/91	6
Operation	Operation	03/06/91	09/22/91	201
Non-Refueling	Shutdown	09/23/91	10/04/91	12
Operation	Operation	10/05/91	12/07/91	64
Non-Refueling	Shutdown	12/08/91	01/17/92	41
Operation	Operation	01/18/92	02/09/92	23
Pre-Refueling	Operation	02/10/92	02/15/92	6
Non-Refueling	Shutdown	02/16/92	02/17/92	2
Pre-Refueling	Operation	02/18/92	03/05/92	17
Non-Refueling	Shutdown	03/06/92	03/10/92	5
Pre-Refueling	Operation	03/11/92	03/12/92	2
Refueling	Shutdown	03/13/92	09/04/92	176
Start-up	Operation	09/05/92	09/11/92	7
Non-Refueling	Shutdown	09/12/92	09/13/92	2
Start-up	Operation	09/14/92	10/01/92	18

Phase	Phase type	Start	End	Length
Operation	Operation	10/02/92	11/15/92	46
Non-Refueling	Shutdown	11/17/92	11/18/92	2
Operation	Operation	11/19/92	12/06/92	18
Non-Refueling	Shutdown	12/07/92	12/12/92	6
Operation	Operation	12/13/92	04/17/93	126
Non-Refueling	Shutdown	04/18/93	05/30/93	43
Operation	Operation	05/31/93	06/01/93	2
Non-Refueling	Shutdown	06/02/93	06/16/93	15
Operation	Operation	06/17/93	07/13/93	27
Non-Refueling	Shutdown	07/14/93	07/30/93	17
Operation	Operation	07/31/93	08/10/93	11
Non-Refueling	Shutdown	08/11/93	08/29/93	19
Operation	Operation	08/30/93	09/30/93	32

Time used in calculations

Trend Calculations			Deviation Calculations		
Op	10/01/92-09/30/93	263 days (incl. 1 days s/u)	Op	05/05/91-09/30/93	540 days (incl. 25 days s/u)
S/D	04/22/93-08/29/93	80 days (incl. 0 days ref)	S/D	06/21/92-08/29/93	180 days (incl. 76 days ref)
FOR	12/25/92-08/30/93	270 days	FOR	09/15/91-09/30/93	540 days

TABLE 9.82 ROBINSON 2

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	1	0	0	0	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	2	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	1	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	1	0	0	0	0
SSF	Operations	0	0	0	1	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	1	0	0	0	0
	Refueling	0	1	0	0	0	0	5	0	0	0	0	1
	Non-Refueling	0	0	0	0	0	0	0	1	0	0	0	0
FOR (%)		0	0	0	4	0	0	0	38	0	0	0	0
EFO/1000 HRS		0.00	0.00	0.00	0.47	0.00	0.00	0.00	1.45	0.00	0.00	0.00	0.00
CRIT. HRS		0	593	2183	2146	2209	2089	194	1375	2208	2160	2183	1730
RAD		345	154	15	13	12	21	298	22	14	17	35	NA
CAUSE CODES:													
Admin.	Operations	0	0	1	3	0	2	0	1	2	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	1	0	0	0	0	2	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	1	0	0	0	0	0
Lic. Oper.	Operations	0	0	1	1	0	0	0	0	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	1	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	0	0	1	2	0	0	0	2	2	0	0	2
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	1	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	0	0	1	4	0	3	0	3	4	1	1	2
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	1	0	0	0	0
	Refueling	0	0	0	0	0	0	3	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	1	0	0	0	0	0
Design	Operations	0	0	0	2	0	1	0	0	3	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	2	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	1	0	0	0	0
Misc.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	1	0	0	0	0	0	1	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Refueling	Shutdown	10/01/90	02/28/91	151
Start-up	Operation	03/01/91	03/25/91	25
Operation	Operation	03/26/91	03/04/92	345
Pre-Refueling	Operation	03/05/92	03/27/92	23
Non-Refueling	Shutdown	03/28/92	03/29/92	2
Pre-Refueling	Operation	03/30/92	03/31/92	2
Refueling	Shutdown	04/01/92	06/16/92	77
Start-up	Operation	06/17/92	06/18/92	2
Non-Refueling	Shutdown	06/19/92	06/21/92	3
Start-up	Operation	06/22/92	07/09/92	18
Non-Refueling	Shutdown	07/10/92	07/11/92	2
Start-up	Operation	07/12/92	07/15/92	3
Operation	Operation	07/17/92	08/22/92	37
Non-Refueling	Shutdown	08/23/92	09/22/92	31
Operation	Operation	09/23/92	08/19/93	331
Pre-Refueling	Operation	08/20/93	09/13/93	25
Refueling	Shutdown	09/14/93	09/30/93	17

Time used in calculations

Trend Calculations			Deviation Calculations		
Op	12/18/92-09/13/93	270 days (incl. 0 days s/u)	Op	11/29/91-09/13/93	540 days (incl. 25 days s/u)
S/D	05/11/92-09/30/93	90 days (incl. 54 days ref)	S/D	01/12/91-09/30/93	180 days (incl. 142 days ref)
FOR	12/15/92-09/11/93	270 days	FOR	12/22/91-09/11/93	540 days

TABLE 9.83 SALEM 1

Type	Phase	Year - Calendar Quarter 90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	1	0	0	0	0	0	0	1	1	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	2	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	1	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	1	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	1	0	1	0	0	0	0	0	1	0	1	1
	Pre-Refueling	0	2	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	1	0	0	0	0	1	0	0	0	0
	Refueling	0	0	0	0	0	0	1	0	0	0	0	0
	Non-Refueling	0	0	0	1	0	0	0	0	0	0	0	0
FOR (%)		0	0	12	4	0	6	40	52	14	16	13	10
EFO/1000 HRS		0.00	0.00	0.67	0.50	0.00	0.46	0.00	0.00	1.42	0.53	0.52	0.00
CRIT. HRS		2209	950	1490	1988	2209	2184	72	1217	2109	1904	1924	2098
RAD		4	152	14	9	50	8	254	21	3	10	6	NA
CAUSE CODES:													
Admin.	Operations	2	1	2	1	1	2	0	0	0	1	1	0
	Pre-Refueling	0	1	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	3	0	0	0	0	1	0	0	0	0
	Refueling	0	4	0	0	0	0	0	1	0	0	0	0
	Non-Refueling	0	0	0	1	0	0	0	1	0	0	0	0
Lic. Oper.	Operations	0	0	0	0	0	0	0	0	0	0	0	1
	Pre-Refueling	0	0	0	0	0	0	1	0	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
Oth. Per.	Operations	4	0	1	3	1	1	0	0	0	2	1	1
	Pre-Refueling	0	1	0	0	0	1	0	0	0	0	0	0
	Startup	0	0	1	0	0	0	0	1	0	0	0	0
	Refueling	0	3	0	0	0	0	0	1	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	1	0
Maint.	Operations	5	2	5	6	3	4	0	0	3	2	2	1
	Pre-Refueling	0	3	0	0	0	1	0	0	0	0	0	0
	Startup	0	0	3	0	0	0	0	1	0	0	0	0
	Refueling	0	8	0	0	0	0	4	0	0	0	0	0
	Non-Refueling	0	0	0	1	0	0	0	1	0	0	1	0
Design	Operations	2	2	2	1	3	2	0	0	2	4	3	2
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	1	0	0	0	0	2	0	0	0	0
	Refueling	0	3	0	0	0	0	3	1	0	0	0	0
	Non-Refueling	0	0	0	2	0	0	0	1	0	0	0	0
Misc.	Operations	0	0	1	1	0	0	0	0	0	0	0	0
	Pre-Refueling	0	1	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	01/17/91	109
Pre-Refueling	Operation	01/18/91	02/11/91	25
Refueling	Shutdown	02/12/91	04/12/91	60
Start-up	Operation	04/13/91	04/14/91	2
Non-Refueling	Shutdown	04/15/91	04/21/91	7
Start-up	Operation	04/22/91	05/14/91	23
Operation	Operation	05/15/91	06/16/91	33
Non-Refueling	Shutdown	06/17/91	06/25/91	9
Operation	Operation	06/26/91	09/16/91	83
Non-Refueling	Shutdown	09/17/91	09/24/91	8
Operation	Operation	09/25/91	03/12/92	170
Pre-Refueling	Operation	03/13/92	04/06/92	25
Refueling	Shutdown	04/07/92	07/29/92	114
Start-up	Operation	07/30/92	07/31/92	2
Non-Refueling	Shutdown	08/01/92	08/09/92	9
Start-up	Operation	08/10/92	09/01/92	23
Operation	Operation	09/02/92	01/16/93	137
Non-Refueling	Shutdown	01/17/93	01/21/93	5
Operation	Operation	01/22/93	02/16/93	25
Non-Refueling	Shutdown	02/17/93	02/19/93	3

Phase	Phase type	Start	End	Length
Operation	Operation	02/20/93	06/08/93	109
Non-Refueling	Shutdown	06/09/93	06/18/93	10
Operation	Operation	06/19/93	07/11/93	23
Non-Refueling	Shutdown	07/12/93	07/15/93	4
Operation	Operation	07/16/93	09/30/93	77

Time used in calculations

Trend Calculations			Deviation Calculations		
Op	12/13/92-09/30/93	270 days (incl. 0 days s/u)	Op	11/16/91-09/30/93	540 days (incl. 25 days s/u)
S/D	06/01/92-07/15/93	90 days (incl. 59 days ref)	S/D	04/02/91-07/15/93	180 days (incl. 125 days ref)
FOR	01/04/93-09/30/93	270 days	FOR	01/13/92-09/30/93	540 days

TABLE 9.84 SALEM 2

Type	Phase	Year - Crlendar Quarter 90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	0	0	0	0	1	0	0	0	0
	Pre-Refueling	0	0	0	0	1	0	0	0	0	1	0	0
	Startup	0	0	0	0	0	0	2	0	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	1	0	0	0	0	1	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	1	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	1	0
SSF	Operations	2	1	1	0	0	0	0	0	0	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	1	0	0	0	0	0	1	0
	Non-Refueling	0	0	0	0	0	0	1	0	0	0	0	0
FOR (%)		0	0	0	0	59	100	26	23	3	7	100	2
EFO/1000 HRS		0.00	0.00	0.00	0.00	2.11	0.00	0.00	0.56	0.45	1.17	19.08	0.00
CRIT. HRS		2209	2160	1944	2208	948	0	1162	1779	2209	1717	52	2208
RAD		4	152	14	9	50	122	17	4	2	26	74	NA
CAUSE CODES:													
Admin.	Operations	4	3	1	1	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	2	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	2	0	0	0	0	0
	Refueling	0	0	0	0	3	2	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	1	0	0	1	0
Lic. Oper.	Operations	1	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	1	1	0	1	0	0	0	3	1	1	0	0
	Pre-Refueling	0	0	0	0	1	0	0	0	0	1	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	1	0	0	1	0
Maint.	Operations	7	4	3	2	0	0	3	3	1	2	0	0
	Pre-Refueling	0	0	0	0	3	0	0	0	0	1	0	0
	Startup	0	0	0	0	0	0	2	0	0	0	0	0
	Refueling	0	0	0	0	3	6	0	0	0	0	1	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	2	0
Design	Operations	5	6	2	3	1	0	1	2	1	1	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	2	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	1	0
	Refueling	0	0	0	0	2	2	0	0	0	0	2	0
	Non-Refueling	0	0	0	0	0	0	2	1	0	0	2	0
Misc.	Operations	0	0	2	1	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	1	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	05/11/91	223
Non-Refueling	Shutdown	05/12/91	05/20/91	9
Operation	Operation	05/21/91	10/17/91	150
Pre-Refueling	Operation	10/18/91	11/11/91	25
Refueling	Shutdown	11/12/91	03/30/92	140
Start-up	Operation	03/31/92	04/01/92	2
Non-Refueling	Shutdown	04/02/92	04/18/92	17
Start-up	Operation	04/19/92	04/26/92	8
Non-Refueling	Shutdown	04/27/92	05/02/92	6
Start-up	Operation	05/03/92	05/14/92	12
Non-Refueling	Shutdown	05/15/92	05/17/92	3
Start-up	Operation	05/18/92	05/20/92	3
Operation	Operation	05/21/92	06/18/92	29
Non-Refueling	Shutdown	06/19/92	07/14/92	26
Operation	Operation	07/15/92	09/03/92	51
Non-Refueling	Shutdown	09/04/92	09/05/92	2
Operation	Operation	09/06/92	01/28/93	145
Non-Refueling	Shutdown	01/29/93	01/30/93	2
Operation	Operation	01/31/93	02/21/93	22
Pre-Refueling	Operation	02/22/93	03/18/93	25
Refueling	Shutdown	03/19/93	05/18/93	61
Start-up	Operation	05/19/93	05/20/93	2
Non-Refueling	Shutdown	05/21/93	06/02/93	13
Start-up	Operation	06/03/93	06/04/93	2
Non-Refueling	Shutdown	06/05/93	06/26/93	22
Start-up	Operation	06/27/93	07/17/93	21
Operation	Operation	07/18/93	09/30/93	75

Time used in calculations

Trend Calculations			Deviation Calculations		
Op	10/01/92-09/30/93	267 days (incl. 25 days s/u)	Op	06/22/91-09/30/93	540 days (incl. 50 days s/u)
STD	03/25/93-06/26/93	90 days (incl. 55 days ref)	STD	03/03/92-06/26/93	180 days (incl. 89 days ref)
FOR	10/09/92-09/30/93	270 days	FOR	09/03/91-09/30/93	540 days

TABLE 9.85 SAN ONOFRE 2

Type	Phase	Year - Calendar Quarter 90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	1	1	0	0	0	0	1	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	1	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	1	0	0	0	0	0	0	0	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	2	0	0	0	2	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	1
	Refueling	0	0	0	0	1	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		10	3	34	0	0	20	4	2	0	0	0	0
EFO/1000 HRS		1.00	0.48	0.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CRIT. HRS		2004	2103	1449	1130	1051	1744	2122	2167	2209	2160	1560	1352
RAD		45	44	35	38	21	[illegible]	12	5	12	18	87	NA
CAUSE CODES:													
Admin.	Operations	2	3	0	0	0	1	1	1	1	2	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	1
	Refueling	0	0	0	0	1	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	1	0	0	0	0	0	0	1
Lic. Oper.	Operations	0	0	0	0	0	1	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	1
Oth. Per.	Operations	1	1	0	1	0	1	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	1	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	1	0	0	0	0	0	0	0
Maint.	Operations	4	4	1	1	0	4	3	1	1	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	2	2	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	2	0	0	0	0	0	0	1
Design	Operations	1	1	1	0	0	2	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	1
	Refueling	0	0	0	1	1	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	1	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	1	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length	Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	11/23/90	54	Operation	Operation	08/28/93	09/30/93	34
Non-Refueling	Shutdown	11/24/90	11/27/90	4					
Operation	Operation	11/28/90	12/06/90	9					
Non-Refueling	Shutdown	12/07/90	12/09/90	3					
Operation	Operation	12/10/90	04/10/91	122					
Non-Refueling	Shutdown	04/11/91	05/10/91	30					
Operation	Operation	05/11/91	07/23/91	74					
Pre-Refueling	Operation	07/24/91	08/17/91	25					
Refueling	Shutdown	08/18/91	11/07/91	82					
Start-up	Operation	11/08/91	11/09/91	2					
Non-Refueling	Shutdown	11/10/91	11/17/91	8					
Start-up	Operation	11/18/91	12/10/91	23					
Operation	Operation	12/11/91	03/13/92	94					
Non-Refueling	Shutdown	03/14/92	04/01/92	18					
Operation	Operation	04/02/92	05/13/93	407					
Pre-Refueling	Operation	05/14/93	06/07/93	25					
Refueling	Shutdown	06/08/93	07/30/93	53					
Start-up	Operation	07/31/93	08/01/93	2					
Non-Refueling	Shutdown	08/02/93	08/04/93	3					
Start-up	Operation	08/05/93	08/27/93	23					

Time used in calculations

Trend Calculations				Deviation Calculations			
Op	11/08/92-09/30/93	270 days (incl.	25 days s/u)	Op	01/25/92-09/30, 3	540 days (incl.	25 days s/u)
STD	04/01/92-08/04/93	57 days (incl.	53 days ref)	STD	04/26/91-08/04/93	180 days (incl.	135 days ref)
FOR	10/31/92-09/30/93	270 days		FOR	02/04/92-09/30/93	540 days	

TABLE 9.86 SAN ONOFRE 3

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	1	0	0	0	0	1	0	0	1	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	1	0	0	0	0	0	0	0	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	1	1	0	0	0	0	0	0	0	0	1	1
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		0	3	27	0	0	0	19	0	0	4	0	1
EFO/1000 HRS		0.00	0.48	0.57	0.00	0.00	0.00	1.24	0.00	0.00	0.00	0.00	0.46
CRIT. HRS		2209	2094	1759	2208	2209	722	1613	2158	2209	2104	2183	2185
RAD		45	44	35	38	21	79	12	5	12	18	87	NA
CAUSE CODES:													
Admin.	Operations	1	2	1	2	2	0	2	0	1	1	1	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	1	0	1	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	2	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	0	1	0	2	4	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	3	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	2	3	2	3	6	0	2	1	1	1	1	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	5	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	1	0	0	0	0	0
Design	Operations	0	1	0	1	0	0	0	0	0	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	1	0	0	0	0	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	03/15/91	166
Non-Refueling	Shutdown	03/16/91	03/17/91	2
Operation	Operation	03/18/91	05/17/91	61
Non-Refueling	Shutdown	05/18/91	06/02/91	16
Operation	Operation	06/03/91	01/02/92	214
Pre-Refueling	Operation	01/03/92	01/27/92	25
Refueling	Shutdown	01/28/92	03/18/92	51
Start-up	Operation	03/19/92	03/20/92	2
Non-Refueling	Shutdown	03/21/92	03/24/92	4
Start-up	Operation	03/25/92	04/16/92	23
Operation	Operation	04/17/92	04/18/92	2
Non-Refueling	Shutdown	04/19/92	04/22/92	4
Operation	Operation	04/23/92	04/25/92	3
Non-Refueling	Shutdown	04/26/92	05/07/92	12
Operation	Operation	05/08/92	05/15/92	8
Non-Refueling	Shutdown	05/16/92	05/18/92	3
Operation	Operation	05/19/92	09/30/93	500

Time used in calculations

Trend Calculations				Deviation Calculations			
Op	01/04/93-09/30/93	270 days (incl.	0 days s/u)	Op	01/26/92-09/30/93	540 days (incl.	25 days s/u)
S/D	04/19/92-05/18/92	19 days (incl.	0 days ref)	S/D	03/16/91-05/18/92	92 days (incl.	51 days ref)
FOR	01/04/93-09/30/93	270 days		FOR	01/21/92-09/30/93	540 days	

TABLE 9.87 SEABROOK

Type	Phase	Year - Calendar Quarter 90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	1	1	2	0	0	0	0	0	0	1	0	2
	Pre-Refueling	0	0	0	1	0	0	0	1	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	1	0	0	0
SSA	Operations	0	0	1	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	1	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	0	1	0	0	1	1	0	0	1	1	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		20	3	10	18	0	0	0	0	8	8	3	13
EFO/1000 HRS		1.61	0.48	0.50	3.77	0.00	0.00	0.00	0.00	0.88	1.00	0.47	1.02
CRIT. HRS		1861	2100	2020	530	1996	2184	2183	1633	1138	2007	2142	1967
RAD		NA	2	1	74	4	2	1	81	135	2	1	NA
CAUSE CODES:													
Admin.	Operations	0	1	1	0	0	3	2	2	0	2	4	2
	Pre-Refueling	0	0	0	0	0	0	0	4	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	1	0	0	0
	Refueling	0	0	0	0	0	0	0	2	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	1	0	0	0
Lic. Oper.	Operations	0	0	1	0	0	0	0	0	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	1	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	1	1	2	0	0	1	1	0	0	0	1	1
	Pre-Refueling	0	0	0	0	0	0	0	1	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	2	0	0	0	1	1	0	0	0
	Non-Refueling	1	0	0	0	0	0	0	0	0	1	0	0
Maint.	Operations	1	2	2	0	0	4	4	1	1	3	3	4
	Pre-Refueling	0	0	0	0	0	0	0	3	0	0	0	0
	Startup	0	0	0	0	1	0	0	0	1	0	0	0
	Refueling	0	0	0	2	0	0	0	2	2	0	0	0
	Non-Refueling	1	0	0	0	0	0	0	0	1	1	0	0
Design	Operations	1	0	2	0	0	1	0	0	1	1	3	0
	Pre-Refueling	0	0	0	2	0	0	0	2	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	1	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	10/30/90	30
Non-Refueling	Shutdown	10/31/90	11/01/90	2
Operation	Operation	11/02/90	11/09/90	8
Non-Refueling	Shutdown	11/10/90	11/21/90	12
Operation	Operation	11/22/90	04/01/91	131
Non-Refueling	Shutdown	04/02/91	04/04/91	3
Operation	Operation	04/05/91	07/02/91	89
Pre-Refueling	Operation	07/03/91	07/27/91	25
Refueling	Shutdown	07/28/91	10/04/91	69
Start-up	Operation	10/05/91	10/29/91	25
Operation	Operation	10/30/91	08/15/92	291
Pre-Refueling	Operation	08/16/92	09/09/92	25
Refueling	Shutdown	09/10/92	11/04/92	56
Start-up	Operation	11/05/92	11/06/92	2
Non-Refueling	Shutdown	11/07/92	11/10/92	4
Start-up	Operation	11/11/92	12/03/92	23
Operation	Operation	12/04/92	01/14/93	42
Non-Refueling	Shutdown	01/15/93	01/19/93	5
Operation	Operation	01/20/93	09/22/93	246
Non-Refueling	Shutdown	09/23/93	09/28/93	6
Operation	Operation	09/29/93	09/30/93	2

Time used in calculations

Trend Calculations

Op	12/24/92-09/30/93	270 days (incl.	0 days s/u)
S/D	09/10/92-09/28/93	71 days (incl.	56 days ref)
FOR	01/04/93-09/30/93	270 days	

Deviation Calculations

Op	01/29/92-09/30/93	540 days (incl.	25 days s/u)
S/D	10/31/90-09/28/93	157 days (incl.	125 days ref)
FOR	01/31/92-09/30/93	540 days	

TABLE 9.88 SEQUOYAH 1

Type	Phase	Year - Calender Quarter 90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	0	0	0	1	0	2	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	0	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	1	0
	Non-Refueling	0	0	0	0	0	0	1	0	0	0	0	0
SE	Operations	1	0	0	0	0	0	0	1	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	1	0	3	0	0	1	0	3	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	2	1
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (I)		15	7	0	0	0	14	26	0	8	43	100	0
EFO/1000 HRS		0.53	0.49	0.00	0.00	0.00	0.00	1.21	0.00	0.97	1.56	0.00	0.00
CRIT. HRS		1900	2029	2183	2208	462	1874	1656	2207	2056	1281	0	0
RAD		171	9	5	7	336	15	18	5	6	28	200	NA
CAUSE CODES:													
Admin.	Operations	2	2	6	5	0	3	0	0	8	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	2	0	0	0	0	2	4	5
	Non-Refueling	1	0	0	0	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	0	0	0	0	0	1	0	0	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	2	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	1	1	2	4	0	2	1	2	2	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	1	0	0	0	0	2	2	1
	Non-Refueling	1	0	0	0	1	0	0	0	0	0	0	0
Maint.	Operations	5	3	6	5	0	6	3	2	8	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	2	0	0	0	0	4	4	3
	Non-Refueling	0	0	0	0	2	0	1	0	0	0	0	0
Des	Operations	1	0	2	4	0	2	0	2	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	2	0	0	0	0	0	2	1
	Non-Refueling	1	0	0	0	1	0	1	0	0	0	0	0
Misc.	Operations	0	1	0	0	0	0	0	0	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	10/08/90	8
Non-Refueling	Shutdown	10/09/90	10/20/90	12
Operation	Operation	10/21/90	02/18/91	121
Non-Refueling	Shutdown	02/19/91	02/23/91	5
Operation	Operation	02/24/91	09/12/91	201
Pre-Refueling	Operation	09/13/91	10/07/91	25
Refueling	Shutdown	10/08/91	12/07/91	61
Start-up	Operation	12/08/91	12/09/91	2
Non-Refueling	Shutdown	12/10/91	12/15/91	6
Start-up	Operation	12/16/91	01/07/92	23
Operation	Operation	01/08/92	03/19/92	72
Non-Refueling	Shutdown	03/20/92	04/16/92	28
Operation	Operation	04/17/92	04/28/92	12
Non-Refueling	Shutdown	04/29/92	05/01/92	3
Operation	Operation	05/02/92	10/26/92	178
Non-Refueling	Shutdown	10/27/92	10/31/92	5
Operation	Operation	11/01/92	12/31/92	61
Non-Refueling	Shutdown	01/01/93	01/02/93	2
Operation	Operation	01/03/93	02/05/93	34
Non-Refueling	Shutdown	02/06/93	02/07/93	2
Pre-Refueling	Operation	02/08/93	03/02/93	23
Non-Refueling	Shutdown	03/03/93	03/13/93	11
Pre-Refueling	Operation	03/14/93	03/15/93	2
Refueling	Shutdown	03/16/93	09/30/93	199

Time used in calculations

Trend Calculations

Op	10/01/92-03/15/93	146 days (incl.	0 days s/u)
S/D	07/03/93-09/30/93	90 days (incl.	90 days ref)
FOR	10/01/92-04/07/93	189 days	

Deviation Calculations

Op	05/28/91-03/15/93	540 days (incl.	25 days s/u)
S/D	04/04/93-09/30/93	180 days (incl.	180 days ref)
FOR	07/31/91-04/07/93	540 days	

TABLE 9.89 SEQUOYAH 2

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	0	1	1	1	1	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	1	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	1	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	1	0
SE	Operations	0	0	0	0	0	0	0	1	2	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	0	2	0	0	0	0	3	3	0	0	0
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	1	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	2	1
FOR (%)		6	2	0	0	11	3	3	6	0	46	100	100
EFO/1000 HRS		0.00	0.46	0.00	0.00	0.50	0.58	0.90	0.46	0.45	0.77	0.00	0.00
CRIT. HRS		966	2160	2183	2208	1986	1718	1106	2174	2207	1292	0	0
RAD		171	9	5	7	336	154	254	5	6	2	13	NA
CAUSE CODES:													
Admin.	Operations	0	5	5	6	3	3	1	2	8	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	3	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	1	0	0	0	0	0	0	0	0	3	2	3
Lic. Oper.	Operations	0	0	0	0	0	0	1	0	2	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	1	0	0	0	0	0	1	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	1	0
Oth. Per.	Operations	0	5	2	4	2	2	0	3	2	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	2	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	1	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	1	0	0	0	0	1	1	1
Maint.	Operations	0	6	5	5	2	4	2	6	10	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	4	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	1	2	0	0	0	0	0
	Non-Refueling	2	0	0	0	0	0	0	0	0	4	3	2
Design	Operations	0	0	2	4	2	1	0	2	0	0	0	0
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	2	1
Misc.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Refueling	Shutdown	10/01/90	11/02/90	33
Start-up	Operation	11/03/90	11/04/90	2
Non-Refueling	Shutdown	11/05/90	11/11/90	7
Start-up	Operation	11/12/90	11/13/90	2
Non-Refueling	Shutdown	11/14/90	11/19/90	6
Start-up	Operation	11/20/90	12/10/90	21
Operation	Operation	12/11/90	11/07/91	332
Non-Refueling	Shutdown	11/08/91	11/15/91	8
Operation	Operation	11/16/91	02/20/92	97
Pre-Refueling	Operation	02/21/92	03/16/92	25
Refueling	Shutdown	03/17/92	05/06/92	51
Start-up	Operation	05/07/92	05/08/92	2
Non-Refueling	Shutdown	05/09/92	05/13/92	5
Start-up	Operation	05/14/92	06/05/92	23
Operation	Operation	06/06/92	01/06/93	215
Non-Refueling	Shutdown	01/07/93	01/08/93	2
Operation	Operation	01/09/93	03/01/93	52
Non-Refueling	Shutdown	03/02/93	09/30/93	213

Time used in calculations

Trend Calculations				Deviation Calculations			
Op	10/01/92-03/01/93	150 days (incl.	0 days s/u)	Op	07/05/91-03/01/93	540 days (incl.	25 days s/u)
S/D	07/03/93-09/30/93	90 days (incl.	0 days ref)	S/D	04/04/93-09/30/93	180 days (incl.	0 days ref)
FOR	01/04/93-09/30/93	270 days		FOR	02/04/92-09/30/93	540 days	

TABLE 9.90 SOUTH TEXAS 1

Type	Phase	Year - Calender Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	0	2	1	0	0	0	0	0	0
	Pre-Refueling	1	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	0	0	0	0
	Refueling	0	5	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	1	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	1	0
SSF	Operations	0	0	0	0	1	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	2	0	0
	Refueling	0	2	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	1	0	0	0	0	1	1	1
FOR (%)		51	100	5	3	12	4	0	0	98	69	100	100
EFO/1000 HRS		0.90	0.00	0.48	0.47	0.00	0.00	0.00	0.00	0.00	1.39	0.00	0.00
CRIT. HRS		1110	9	2096	2150	1984	2109	2003	1923	86	720	0	0
RAD		67	43	46	10	72	2	5	19	111	20	6	NA
CAUSE CODES:													
Admin.	Operations	0	0	1	1	0	2	2	2	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	1	0	0	0	0
	Startup	0	0	2	0	0	0	0	0	0	6	0	0
	Refueling	0	5	0	0	0	0	0	1	3	0	0	0
	Non-Refueling	0	0	0	0	1	0	0	0	2	3	3	1
Lic. Oper.	Operations	1	0	0	0	1	0	0	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	3	0	0	0	0	0	0	1	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	1	0
Oth. Per.	Operations	0	0	1	0	1	1	0	2	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	1	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	3	0	0	0	0	0	0	1	0	0	0
	Non-Refueling	1	0	0	0	0	0	0	0	0	0	1	0
Maint.	Operations	0	0	2	2	2	2	2	5	0	1	0	0
	Pre-Refueling	1	0	0	0	0	0	0	2	0	0	0	0
	Startup	0	0	2	0	0	0	0	0	0	6	0	0
	Refueling	0	7	0	0	0	0	0	1	2	0	0	0
	Non-Refueling	1	1	0	0	1	0	0	0	2	3	4	1
Design	Operations	0	0	0	1	1	0	0	0	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	1	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	0	0	0	0
	Refueling	0	1	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	1	0	0	0	1	1	0	2
Misc.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	3	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Non-Refueling	Shutdown	10/01/90	10/08/90	8
Operation	Operation	10/09/90	11/01/90	24
Pre-Refueling	Operation	11/02/90	11/24/90	23
Non-Refueling	Shutdown	11/25/90	01/13/91	50
Pre-Refueling	Operation	01/14/91	01/15/91	2
Refueling	Shutdown	01/16/91	03/25/91	69
Start-up	Operation	03/26/91	03/27/91	2
Non-Refueling	Shutdown	03/28/91	03/31/91	4
Start-up	Operation	04/01/91	04/23/91	23
Operation	Operation	04/24/91	10/14/91	174
Non-Refueling	Shutdown	10/15/91	10/21/91	7
Operation	Operation	10/22/91	03/14/92	145
Non-Refueling	Shutdown	03/15/92	03/16/92	2
Operation	Operation	03/17/92	04/05/92	20
Non-Refueling	Shutdown	04/06/92	04/12/92	7
Operation	Operation	04/13/92	08/27/92	137
Pre-Refueling	Operation	08/28/92	09/21/92	25
Refueling	Shutdown	09/22/92	11/19/92	59
Start-up	Operation	11/20/92	11/21/92	2
Non-Refueling	Shutdown	11/22/92	12/26/92	35
Start-up	Operation	12/27/92	01/12/93	17
Non-Refueling	Shutdown	01/13/93	01/18/93	6
Start-up	Operation	01/19/93	01/24/93	6
Operation	Operation	01/25/93	02/04/93	11
Non-Refueling	Shutdown	02/05/93	09/30/93	238

Time used in calculations

Trend Calculations

Op	11/20/92-02/04/93	36 days (incl.	25 days s/u)
S/D	07/03/93-09/30/93	90 days (incl.	0 days ref)
FOR	01/04/93-09/30/93	270 days	

Deviation Calculations

Op	04/21/91-02/04/93	540 days (incl.	28 days s/u)
S/D	04/04/93-09/30/93	180 days (incl.	0 days ref)
FOR	01/29/92-09/30/93	540 days	

TABLE 9.91 SOUTH TEXAS 2

Type	Phase	Year - Calendar Quarter 90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	2	1	0	0	1	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	2	0	0
	Startup	0	0	0	0	1	0	0	0	0	0	0	0
SSA	Operations	0	1	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	1	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	1	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	1	0	0	0	0	1	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	1	0	0	0	0	0	2	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
FOR (%)		0	7	4	0	60	9	0	0	2	49	100	100
EFO/1000 HRS		0.00	0.97	0.00	0.00	2.23	0.98	0.00	0.00	0.46	2.70	0.00	0.00
CRIT. HRS		607	2066	2125	1802	449	2036	2183	2208	2187	740	0	0
RAD		67	43	46	10	72	2	5	1	3	67	60	NA
CAUSE CODES:													
Admin.	Operations	0	3	0	0	0	2	1	2	3	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	2	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	0	0	0	0	2	4	3
	Non-Refueling	0	0	0	0	0	0	0	0	0	3	0	0
Lic. Oper.	Operations	0	1	0	0	0	0	0	0	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	2	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
Oth. Per.	Operations	0	0	1	0	0	0	0	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	2	0	0
	Startup	0	0	0	0	1	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	1	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	0	5	3	0	0	2	4	3	4	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	5	0	0
	Startup	0	0	0	0	1	0	0	0	0	0	0	0
	Refueling	3	0	0	0	0	0	0	0	0	1	4	3
	Non-Refueling	0	0	0	0	0	0	0	0	0	3	0	0
Design	Operations	0	1	0	1	0	0	0	0	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	2	0	0	0	0	0	0	2
	Non-Refueling	0	0	0	0	0	0	0	0	0	2	0	0
Misc.	Operations	0	0	1	1	0	1	0	0	2	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Pre-Refueling	Operation	10/01/90	10/02/90	2
Refueling	Shutdown	10/03/90	11/30/90	58
Start-up	Operation	12/01/90	12/02/90	2
Non-Refueling	Shutdown	12/03/90	12/05/90	3
Start-up	Operation	12/06/90	12/28/90	23
Operation	Operation	12/29/90	05/22/91	145
Non-Refueling	Shutdown	05/23/91	05/24/91	2
Operation	Operation	05/25/91	08/22/91	90
Pre-Refueling	Operation	08/23/91	09/16/91	25
Refueling	Shutdown	09/17/91	12/04/91	79
Start-up	Operation	12/05/91	12/06/91	2
Non-Refueling	Shutdown	12/07/91	12/10/91	4
Start-up	Operation	12/11/91	01/02/92	23
Operation	Operation	01/03/92	01/22/92	20
Non-Refueling	Shutdown	01/23/92	01/26/92	4
Operation	Operation	01/27/92	12/27/92	336
Non-Refueling	Shutdown	12/28/92	12/29/92	2
Operation	Operation	12/30/92	01/09/93	11
Pre-Refueling	Operation	01/10/93	01/23/93	14
Non-Refueling	Shutdown	01/24/93	01/25/93	2

Phase	Phase type	Start	End	Length
Pre-Refueling	Operation	01/26/93	02/03/93	9
Non-Refueling	Shutdown	02/04/93	03/01/93	26
Pre-Refueling	Operation	03/02/93	03/03/93	2
Refueling	Shutdown	03/04/93	09/30/93	211

Time used in calculations

Trend Calculations			Deviation Calculations		
Op	10/01/92-03/03/93	124 days (incl. 0 days s/u)	Op	05/15/91-03/03/93	540 days (incl. 25 days s/u)
S/D	07/03/93-09/30/93	90 days (incl. 90 days ref)	S/D	04/04/93-09/30/93	180 days (incl. 180 days ref)
FOR	10/10/92-09/30/93	270 days	FOR	01/14/92-09/30/93	540 days

TABLE 9.92 ST. LUCIE 1

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	2	0	0	0	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	1	0	0	0	0	0	1	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		1	0	1	3	0	0	0	14	0	0	0	6
EFO/1000 HRS		0.00	0.00	0.46	1.39	0.00	0.00	0.00	0.50	0.00	0.00	0.00	0.00
CRIT. HRS		2184	2142	2155	2153	701	2184	2183	1985	2209	2089	447	2114
RAD		70	7	7	6	214	9	86	10	7	37	182	NA
CAUSE CODES:													
Admin.	Operations	0	1	1	2	0	1	1	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	1	0
	Refueling	0	0	0	0	3	0	0	0	0	0	1	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	0	1	1	0	0	1	0	0	0	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	0	1	0	2	0	1	1	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	1	0
	Refueling	0	0	0	0	1	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	0	2	1	2	0	2	2	0	0	1	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	3	0	0	0	0	0	1	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Design	Operations	0	0	0	0	0	1	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	1	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	0	0	0	0	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	09/25/91	360
Pre-Refueling	Operation	09/26/91	10/20/91	25
Refueling	Shutdown	10/21/91	12/17/91	58
Start-up	Operation	12/18/91	01/11/92	25
Operation	Operation	01/12/92	03/07/93	421
Pre-Refueling	Operation	03/08/93	04/01/93	25
Refueling	Shutdown	04/02/93	05/22/93	51
Start-up	Operation	05/23/93	05/24/93	2
Non-Refueling	Shutdown	05/25/93	05/27/93	3
Start-up	Operation	05/28/93	05/30/93	3
Non-Refueling	Shutdown	05/31/93	06/10/93	11
Start-up	Operation	06/11/93	06/30/93	20
Operation	Operation	07/01/93	09/30/93	92

Time used in calculations

Trend Calculations			Deviation Calculations		
Op	10/31/92-09/30/93	270 days (incl. 25 days s/u)	Op	02/04/92-09/30/93	540 days (incl. 25 days s/u)
S/D	04/02/93-06/10/93	65 days (incl. 51 days ref)	S/D	10/21/91-06/10/93	123 days (incl. 109 days ref)
FOR	10/15/92-09/30/93	270 days	FOR	01/19/92-09/30/93	540 days

TABLE 9.93 ST. LUCIE 2

Type	Phase	Year - Calendar Quarter 90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	1	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	0	1	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	1	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		5	0	0	0	0	0	0	6	20	87	6	2
EFO/1000 HRS		1.34	0.00	0.00	0.00	0.00	0.00	0.00	0.47	0.00	6.88	0.48	0.00
CRIT. HRS		749	2160	2183	2208	2209	2184	648	2118	1835	291	2064	2208
RAD		70	7	7	6	214	9	96	10	7	37	182	NA
CAUSE CODES:													
Admin.	Operations	0	1	2	1	0	0	0	1	0	0	1	0
	Pre-Refueling	0	0	0	0	0	0	1	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	1	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	1	0	0	0
Lic. Oper.	Operations	0	0	0	0	1	0	0	0	0	1	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
Oth. Per.	Operations	0	0	2	0	0	0	0	0	0	1	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	0	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	0	1	3	1	0	0	0	1	0	1	2	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	2	0	0	0	0
	Refueling	1	0	0	0	0	0	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	1	1	0	0
Design	Operations	0	0	1	0	1	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	1	0	0	0	0
	Refueling	0	0	0	0	0	0	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
Misc.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	1	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Pre-Refueling	Operation	10/01/90	10/02/90	2
Refueling	Shutdown	10/03/90	11/22/90	51
Start-up	Operation	11/23/90	11/24/90	2
Non-Refueling	Shutdown	11/25/90	11/28/90	4
Start-up	Operation	11/29/90	12/21/90	23
Operation	Operation	12/22/90	03/29/92	464
Pre-Refueling	Operation	03/30/92	04/21/92	23
Non-Refueling	Shutdown	04/22/92	04/23/92	2
Pre-Refueling	Operation	04/24/92	04/25/92	2
Refueling	Shutdown	04/26/92	06/20/92	56
Start-up	Operation	06/21/92	07/15/92	25
Operation	Operation	07/16/92	11/24/92	132
Non-Refueling	Shutdown	11/25/92	12/07/92	13
Operation	Operation	12/08/92	01/13/93	37
Non-Refueling	Shutdown	01/14/93	03/30/93	76
Operation	Operation	03/31/93	05/21/93	52
Non-Refueling	Shutdown	05/22/93	05/25/93	4
Operation	Operation	05/26/93	08/30/93	128

Time used in calculations

Trend Calculations			Deviation Calculations		
Op	10/03/92-09/30/93	270 days (incl. 0 days s/u)	Op	11/10/91-09/30/93	540 days (incl. 25 days s/u)
S/D	11/28/92-05/25/93	90 days (incl. 0 days ref)	S/D	10/29/90-05/25/93	180 days (incl. 81 days ref)
FOR	01/04/93-09/30/93	270 days	FOR	02/02/92-09/30/93	540 days

TABLE 9.94 SUMMER

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	0	0	0	2	0	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	1	0	0	0	0	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	1	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	0	0	0	0	0	0	0	0	0	1	0
	Pre-Refueling	0	0	0	1	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		0	0	0	0	5	0	0	0	0	7	0	0
EFO/1000 HRS		0.00	0.00	0.00	0.00	1.79	0.00	0.00	0.00	0.00	0.67	0.00	0.00
CRIT. HRS		2209	2180	2017	1970	1118	2184	1952	2208	2209	1489	1442	2208
RAD		4	3	2	63	227	7	13	4	27	144	145	NA
CAUSE CODES:													
Admin.	Operations	0	1	1	2	0	0	0	0	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	1	0	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	0	0	0	0	0	1	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	0	1	0	0	0	1	2	0	0	0	2	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	0	1	1	2	0	1	2	0	2	1	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	1	0	0	0	0	1	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Design	Operations	1	0	0	0	0	0	1	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	1	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	1	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	1	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	04/12/91	194
Non-Refueling	Shutdown	04/13/91	04/18/91	6
Operation	Operation	04/19/91	08/29/91	133
Pre-Refueling	Operation	08/30/91	09/23/91	25
Refueling	Shutdown	09/24/91	11/09/91	47
Start-up	Operation	11/10/91	11/11/91	2
Non-Refueling	Shutdown	11/12/91	11/13/91	2
Start-up	Operation	11/14/91	12/06/91	23
Operation	Operation	12/07/91	05/12/92	158
Non-Refueling	Shutdown	05/13/92	05/18/92	6
Operation	Operation	05/19/92	02/11/93	269
Pre-Refueling	Operation	02/12/93	03/08/93	25
Refueling	Shutdown	03/09/93	04/25/93	48
Start-up	Operation	04/26/93	04/27/93	2
Non-Refueling	Shutdown	04/28/93	04/30/93	3
Start-up	Operation	05/01/93	05/23/93	23
Operation	Operation	05/24/93	09/30/93	130

Time used in calculations

Trend Calculations			Deviation Calculations		
Op	11/14/92-09/30/93	270 days (incl. 25 days s/u)	Op	02/12/92-09/30/93	540 days (incl. 25 days s/u)
S/D	05/13/92-04/30/93	57 days (incl. 48 days ref)	S/D	04/13/91-04/30/93	112 days (incl. 95 days ref)
FOR	11/06/92-09/30/93	270 days	FOR	01/31/92-09/30/93	540 days

TABLE 9.95 SURRY 1

Type	Phase	Year - Calendar Quarter 90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	0	0	0	0	0	0	2	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	1	0	0	0	0	0
SSA	Operations	0	0	0	1	0	0	0	0	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	2	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	0	2	3	0	0	0	3	0	2	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	0	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
FOR (%)		0	0	0	0	0	12	1	2	0	6	0	0
EFO/1000 HRS		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.97	0.00	0.00
CRIT. HRS		463	2160	2183	2208	2209	1288	1436	2208	2209	2053	2183	1987
RAD		220	23	190	17	26	130	122	17	12	69	101	NA
CAUSE CODES:													
Admin.	Operations	0	2	2	4	1	1	0	1	0	2	2	0
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	1	0	0	0	0	0
	Refueling	3	0	0	0	0	0	2	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
Lic. Oper.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	0	1	5	2	1	0	0	0	0	2	1	2
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	1	0	0	0	0	0	1	0	0	0	0	0
	Refueling	0	0	0	0	0	2	2	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	0	2	7	7	2	1	0	2	0	4	3	0
	Pre-Refueling	1	0	0	0	0	1	0	0	0	0	0	0
	Startup	1	0	0	0	0	0	1	0	0	0	0	0
	Refueling	5	0	0	0	0	3	2	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
Design	Operations	0	0	2	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Pre-Refueling	Operation	10/01/90	10/07/90	7
Refueling	Shutdown	10/08/90	12/13/90	67
Start-up	Operation	12/14/90	01/07/91	25
Operation	Operation	01/08/91	01/02/92	360
Non-Refueling	Shutdown	01/03/92	01/07/92	5
Operation	Operation	01/08/92	02/04/92	28
Pre-Refueling	Operation	02/05/92	02/29/92	25
Refueling	Shutdown	03/01/92	04/29/92	60
Start-up	Operation	04/30/92	05/24/92	25
Operation	Operation	05/25/92	01/08/93	229
Non-Refueling	Shutdown	01/09/93	01/10/93	2
Operation	Operation	01/11/93	08/21/93	223
Non-Refueling	Shutdown	08/22/93	08/29/93	8
Operation	Operation	08/30/93	09/30/93	32

Time used in calculations

Trend Calculations				Deviation Calculations			
Op	12/25/92-09/30/93	270 days (incl.	0 days s/u)	Op	01/30/92-09/30/93	540 days (incl.	25 days s/u)
S/D	04/01/92-08/29/93	39 days (incl.	29 days ref)	S/D	10/08/90-08/29/93	142 days (incl.	127 days ref)
FOR	12/25/92-09/30/93	270 days		FOR	01/27/92-09/30/93	540 days	

TABLE 9.96 SURRY 2

Type	Phase	Year - Calendar Quarter 90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	1	1	0	0	0	0	0	1	3
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	1	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	1	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	0	0	2	0	3	1	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	3	0	0	0	0	0	0	1	0	0
	Non-Refueling	1	0	0	0	0	0	0	2	0	0	0	0
FOR (%)		29	0	87	18	15	0	0	0	0	0	3	27
EFO/1000 HRS		0.63	0.00	15.66	0.54	1.04	0.00	0.00	0.00	0.00	0.00	0.74	2.42
CRIT. HRS		1599	2136	128	1845	1927	2184	2183	1903	2206	1539	1357	1654
RAD		220	23	190	17	26	130	122	17	12	69	101	NA
CAUSE CODES:													
Admin.	Operations	2	0	0	3	0	3	0	1	0	0	0	0
	Pre-Refueling	0	2	0	0	0	0	0	0	0	1	0	0
	Startup	0	0	1	0	0	0	0	0	0	0	1	0
	Refueling	0	0	1	0	0	0	0	0	0	1	2	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	0	0	0	0	0	1	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	1	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	1	0	0	0	0
Oth. Per.	Operations	0	0	0	1	1	3	2	0	0	0	0	0
	Pre-Refueling	0	1	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	1	0
	Refueling	0	0	4	0	0	0	0	0	0	1	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	1
Maint.	Operations	3	0	0	8	2	7	3	2	1	0	1	2
	Pre-Refueling	0	3	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	0	0	2	0
	Refueling	0	0	6	0	0	0	0	0	0	1	2	0
	Non-Refueling	1	0	1	0	0	0	0	2	0	0	0	0
Design	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	0	0	0	0
	Refueling	0	0	2	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	0	0	0	0	0	0	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	1	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	10/22/90	22
Non-Refueling	Shutdown	10/23/90	11/16/90	25
Operation	Operation	11/17/90	03/05/91	109
Pre-Refueling	Operation	03/06/91	03/30/91	25
Refueling	Shutdown	03/31/91	05/29/91	60
Start-up	Operation	05/30/91	05/30/91	1
Non-Refueling	Shutdown	05/31/91	06/04/91	5
Start-up	Operation	06/05/91	06/11/91	7
Non-Refueling	Shutdown	06/12/91	07/02/91	21
Start-up	Operation	07/03/91	07/19/91	17
Operation	Operation	07/20/91	08/02/91	14
Non-Refueling	Shutdown	08/03/91	08/05/91	3
Operation	Operation	08/06/91	09/07/91	33
Non-Refueling	Shutdown	09/08/91	09/14/91	7
Operation	Operation	09/15/91	10/25/91	41
Non-Refueling	Shutdown	10/26/91	10/29/91	4
Operation	Operation	10/30/91	12/11/91	43
Non-Refueling	Shutdown	12/12/91	12/15/91	4
Operation	Operation	12/16/91	07/06/92	204
Non-Refueling	Shutdown	07/07/92	07/17/92	11

Phase	Phase type	Start	End	Length
Operation	Operation	07/18/92	02/11/93	209
Pre-Refueling	Operation	02/12/93	03/08/93	25
Refueling	Shutdown	03/09/93	04/28/93	51
Start-up	Operation	04/29/93	04/30/93	2
Non-Refueling	Shutdown	05/01/93	05/03/93	3
Start-up	Operation	05/04/93	05/26/93	23
Operation	Operation	05/27/93	08/06/93	72
Non-Refueling	Shutdown	08/07/93	08/18/93	12
Operation	Operation	08/19/93	08/27/93	9
Non-Refueling	Shutdown	08/28/93	09/01/93	5
Operation	Operation	09/02/93	09/30/93	29

Time used in calculations

Trend Calculations

Op	10/25/92-09/30/93	270 days (incl.	25 days s/u)
S/D	07/07/92-09/01/93	82 days (incl.	51 days ref)
FOR	11/03/92-09/30/93	270 days	

Deviation Calculations

Op	01/18/92-09/30/93	540 days (incl.	25 days s/u)
S/D	04/06/91-09/01/93	180 days (incl.	105 days ref)
FOR	01/25/92-09/30/93	540 days	

TABLE 9.97 SUSQUEHANNA 1

		Year - Calendar Quarter											
Type	Phase	90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	1	0	0	0	0	1	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	1	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	1
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	1	0	0	2	0	0	2	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	1	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		4	0	0	1	0	0	42	0	3	0	0	58
EFO/1000 HRS		0.96	0.00	0.00	0.48	0.00	0.00	0.00	0.00	0.46	0.00	0.00	1.07
CRIT. HRS		1037	2160	2183	2071	2209	1602	775	2208	2162	2160	2183	932
RAD		93	113	89	26	24	125	94	69	80	14	13	NA
CAUSE CODES:													
Admin.	Operations	0	1	0	1	1	0	0	3	1	0	2	0
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Startup	3	0	0	0	0	0	0	0	0	0	0	0
	Refueling	5	0	0	0	0	1	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	0	0	0	1	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	0	0	0	0	0	0	0	2	0	0	0	0
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	0	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	0	3	2	1	3	0	0	3	2	2	3	1
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	1
	Startup	2	0	0	0	0	0	0	0	0	0	0	0
	Refueling	6	0	0	0	0	2	3	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	1
Design	Operations	0	0	1	2	2	1	0	3	1	1	1	0
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	1	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	2	1	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	1

Phase	Phase type	Start	End	Length
Refueling	Shutdown	10/01/90	11/16/90	47
Start-up	Operation	11/17/90	12/02/90	16
Non-Refueling	Shutdown	12/03/90	12/05/90	3
Start-up	Operation	12/06/90	12/14/90	9
Operation	Operation	12/15/90	07/31/91	229
Non-Refueling	Shutdown	08/01/91	08/04/91	4
Operation	Operation	08/05/91	02/13/92	193
Pre-Refueling	Operation	02/14/92	03/09/92	25
Refueling	Shutdown	03/10/92	05/10/92	62
Start-up	Operation	05/11/92	06/04/92	25
Operation	Operation	06/05/92	06/05/92	1
Non-Refueling	Shutdown	06/06/92	06/09/92	4
Operation	Operation	06/10/92	06/13/92	4
Non-Refueling	Shutdown	06/14/92	06/22/92	9
Operation	Operation	06/23/92	07/12/93	385
Non-Refueling	Shutdown	07/13/93	08/27/93	46
Operation	Operation	08/28/93	09/01/93	5
Pre-Refueling	Operation	09/02/93	09/26/93	25
Refueling	Shutdown	09/27/93	09/30/93	4

Time used in calculations

Trend Calculations				Deviation Calculations			
Op	11/15/92-09/26/93	270 days (incl.	0 days s/u)	Op	12/06/91-09/26/93	540 days (incl.	25 days s/u)
S/D	04/14/92-09/30/93	90 days (incl.	31 days ref)	S/D	10/01/90-09/30/93	179 days (incl.	113 days ref)
FOR	12/28/92-09/25/93	270 days		FOR	01/22/92-09/25/93	540 days	

TABLE 9.98 SUSQUEHANNA 2

		Year - Calendar Quarter											
Type	Phase	90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	1	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	0	1	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	1	0	0	0	2	0	1	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		0	0	0	10	0	7	0	0	2	9	0	0
EFO/1000 HRS		0.00	0.00	0.00	0.49	0.00	0.48	0.00	0.00	0.00	0.49	0.00	0.00
CRIT. HRS		2187	1537	1318	2056	2209	2074	2183	1765	1234	2036	2187	2208
RAD		93	113	89	26	24	125	94	69	80	14	13	NA
CAUSE CODES:													
Admin.	Operations	5	1	2	1	3	1	0	1	0	1	1	0
	Pre-Refueling	0	1	0	0	0	0	0	1	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	1	1	0	0	0	0	0	1	0	0	0
	Non-Refueling	0	1	0	0	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	1	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	2	0	1	0	0	0	0	1	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	1	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	1	0	0	0	0	0	1	0	0	0
	Non-Refueling	0	1	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	8	0	3	2	5	2	1	1	0	2	2	2
	Pre-Refueling	0	2	0	0	0	0	0	1	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	1	0	0	0
	Refueling	0	1	2	0	0	0	0	1	2	0	0	0
	Non-Refueling	0	1	0	0	0	0	0	0	0	1	0	0
Design	Operations	1	0	2	2	2	2	0	1	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	1	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	1	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	1	1	1	0	1	0	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	1	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	01/05/91	97
Non-Refueling	Shutdown	01/06/91	01/08/91	3
Operation	Operation	01/09/91	02/14/91	37
Pre-Refueling	Operation	02/15/91	03/11/91	25
Refueling	Shutdown	03/12/91	05/03/91	53
Start-up	Operation	05/04/91	05/28/91	25
Operation	Operation	05/29/91	08/21/91	85
Non-Refueling	Shutdown	08/22/91	08/25/91	4
Operation	Operation	08/26/91	03/18/92	206
Non-Refueling	Shutdown	03/19/92	03/22/92	4
Operation	Operation	03/23/92	08/21/92	152
Pre-Refueling	Operation	08/22/92	09/15/92	25
Refueling	Shutdown	09/16/92	11/06/92	52
Start-up	Operation	11/07/92	11/09/92	3
Non-Refueling	Shutdown	11/10/92	11/11/92	2
Start-up	Operation	11/12/92	12/03/92	22
Operation	Operation	12/04/92	01/30/93	58
Non-Refueling	Shutdown	01/31/93	02/04/93	5
Operation	Operation	02/05/93	09/30/93	238

Time used in calculations

Trend Calculations				Deviation Calculations			
Op	12/30/92-09/30/93	270 days (incl.	0 days s/u)	Op	02/06/92-09/30/93	540 days (incl.	25 days s/u)
S/D	09/16/92-02/04/93	59 days (incl.	52 days ref)	S/D	01/06/91-02/04/93	123 days (incl.	105 days ref)
FOR	01/04/93-09/30/93	270 days		FOR	02/06/92-09/30/93	540 days	

TABLE 9.99 THREE MILE ISL 1

Type	Phase	Year - Calendar Quarter 90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	1	0	0	0	1	0	1	0	0
	Pre-Refueling	0	0	0	1	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	0	0	0	0	0	0	0	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	1	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		0	0	0	2	0	0	0	2	0	3	0	0
EFO/1000 HRS		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48	0.00	0.00
CRIT. HRS		2209	2160	2183	2084	1140	2184	2183	2170	2209	2084	2183	1723
RAD		5	7	7	19	164	6	8	11	8	11	12	NA
CAUSE CODES:													
Admin.	Operations	0	0	0	0	0	1	0	1	0	1	1	1
	Pre-Refueling	0	0	0	1	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	1	0	0	0	0	0	0	0
	Refueling	0	0	0	0	2	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	0	0	0	1	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	2	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	0	0	0	1	0	0	0	0	1	2	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	0	0	0	2	0	1	0	1	1	3	1	1
	Pre-Refueling	0	0	0	1	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	1	0	0	0	0	0	0	0
	Refueling	0	0	0	0	1	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
esign	Operations	0	0	0	0	0	1	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	0	0	0	0	0	0	0	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	09/04/91	339
Pre-Refueling	Operation	09/05/91	09/29/91	25
Refueling	Shutdown	09/30/91	11/12/91	44
Start-up	Operation	11/13/91	12/07/91	25
Operation	Operation	12/08/91	08/18/93	620
Pre-Refueling	Operation	08/19/93	09/12/93	25
Refueling	Shutdown	09/13/93	09/30/93	18

Time used in calculations

Trend Calculations				Deviation Calculations			
Op	12/17/92-09/12/93	270 days (incl.	0 days s/u)	Op	03/22/92-09/12/93	540 days (incl.	0 days s/u)
S/D	09/13/93-09/30/93	18 days (incl.	18 days ref)	S/D	09/30/91-09/30/93	62 days (incl.	62 days ref)
FOR	12/14/92-09/10/93	270 days		FOR	09/19/92-09/10/93	540 days	

TABLE 9.100 TURKEY POINT 3

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	1	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	1	0	0	0	0	0
SSF	Operations	1	0	0	0	0	1	1	0	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	1	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
FOR (%)		0	0	0	0	1	1	16	36	0	7	0	0
EFO/1000 HRS		0.00	0.00	0.00	0.00	0.46	0.46	0.54	0.00	0.00	0.98	0.00	0.00
CRIT. HRS		1743	0	0	61	2191	2164	1843	1292	735	2044	2183	2206
RAD		58	149	142	135	43	12	17	19	116	11	101	NA
CAUSE CODES:													
Admin.	Operations	3	0	0	0	0	3	-	2	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	-	0	0	0	0	0
	Startup	0	0	0	1	3	0	0	0	0	0	0	0
	Refueling	0	1	0	3	0	0	0	0	1	0	0	0
	Non-Refueling	0	0	0	1	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	1	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
Oth. Per.	Operations	1	0	0	0	0	1	1	0	0	2	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	2	0	0	0	0	2	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	4	0	0	0	0	4	2	2	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	3	0	0	0	0	0	0	0
	Refueling	0	1	0	2	0	0	0	0	4	0	0	0
	Non-Refueling	0	0	0	1	0	0	0	0	0	0	0	0
Design	Operations	0	0	0	0	0	0	0	0	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	1	0	0	0	1	0	0	0
	Refueling	0	0	0	1	0	0	0	0	1	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	11/19/90	50
Pre-Refueling	Operation	11/20/90	12/14/90	25
Refueling	Shutdown	12/15/90	09/19/91	279
Start-up	Operation	09/20/91	09/21/91	2
Non-Refueling	Shutdown	09/22/91	09/25/91	4
Start-up	Operation	09/26/91	10/18/91	23
Operation	Operation	10/19/91	04/27/92	192
Non-Refueling	Shutdown	04/28/92	05/10/92	13
Operation	Operation	05/11/92	07/31/92	82
Pre-Refueling	Operation	08/01/92	08/23/92	23
Non-Refueling	Shutdown	08/24/92	08/25/92	2
Pre-Refueling	Operation	08/26/92	08/27/92	2
Refueling	Shutdown	08/28/92	11/23/92	88
Start-up	Operation	11/24/92	11/25/92	2
Non-Refueling	Shutdown	11/26/92	11/29/92	4
Start-up	Operation	11/30/92	12/22/92	23
Operation	Operation	12/23/92	01/15/93	24
Non-Refueling	Shutdown	01/16/93	01/19/93	4
Operation	Operation	01/20/93	09/30/93	254

Time used in calculations

Trend Calculations

Op	12/31/92-09/30/93	270 days	(incl. 0 days s/u)
S/D	09/03/92-01/19/93	90 days	(incl. 82 days ref)
FOR	01/03/93-09/30/93	270 days	

Deviation Calculations

Op	12/20/91-09/30/93	540 days	(incl. 25 days s/u)
S/D	07/17/91-01/19/93	180 days	(incl. 153 days ref)
FOR	01/25/92-09/30/93	540 days	

TABLE 9.101 TURKEY POINT 4

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	0	0	1	0	0	0	0	1	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	0	1	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	1	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	1	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	1	0	0	0	0
SSF	Operations	1	0	0	0	0	1	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		0	0	0	0	2	8	0	41	0	0	13	1
EFO/1000 HRS		0.00	0.00	0.00	0.00	0.70	1.96	0.00	0.00	0.00	0.46	2.07	0.00
CRIT. HRS		1323	0	0	0	1426	2039	2183	1332	1673	2160	968	2104
RAD		58	149	142	135	43	12	17	19	116	11	101	NA
CAUSE CODES:													
Admin.	Operations	2	0	0	0	0	4	1	2	1	0	0	0
	Pre-Refueling	1	0	0	0	0	0	0	0	0	1	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	1	0	2	2	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	2	0	0	0	0
Lic. Oper.	Operations	0	0	0	0	0	0	0	0	0	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	1	0	0	0	0	0	0	0	0	1	1	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	1	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	1	0	0	1	0	0	0
Maint.	Operations	3	0	0	0	0	5	1	3	2	0	0	0
	Pre-Refueling	2	0	0	0	0	0	0	0	0	1	0	0
	Startup	0	0	0	0	1	0	0	0	0	0	0	0
	Refueling	0	1	0	0	1	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	1	0	1	1	0	0	0
Design	Operations	0	0	0	0	0	0	0	0	0	0	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	1	1	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	0	0	1	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	11/02/90	33
Pre-Refueling	Operation	11/03/90	11/27/90	25
Refueling	Shutdown	11/28/90	10/21/91	328
Start-up	Operation	10/22/91	10/23/91	2
Non-Refueling	Shutdown	10/24/91	10/25/91	2
Start-up	Operation	10/26/91	11/17/91	23
Operation	Operation	11/18/91	12/10/91	23
Non-Refueling	Shutdown	12/11/91	12/17/91	7
Operation	Operation	12/18/91	01/28/92	42
Non-Refueling	Shutdown	01/29/92	02/01/92	4
Operation	Operation	02/02/92	08/23/92	204
Non-Refueling	Shutdown	08/24/92	09/27/92	35
Operation	Operation	09/28/92	10/01/92	4
Non-Refueling	Shutdown	10/02/92	10/22/92	21
Operation	Operation	10/23/92	03/17/93	146
Pre-Refueling	Operation	03/18/93	04/11/93	25
Refueling	Shutdown	04/12/93	05/19/93	38
Start-up	Operation	05/20/93	06/10/93	22
Non-Refueling	Shutdown	06/11/93	06/14/93	4
Start-up	Operation	06/15/93	06/17/93	3

Phase	Phase type	Start	End	Length
Operation	Operation	06/18/93	08/12/93	56
Non-Refueling	Shutdown	08/13/93	08/14/93	2
Operation	Operation	08/15/93	09/30/93	47

Time used in calculations

Trend Calculations

Op	11/21/92-09/30/93	270 days (incl.	25 days s/u)
S/D	09/03/92-08/14/93	90 days (incl.	38 days ref)
FOR	11/09/92-09/30/93	270 days	

Deviation Calculations

Op	12/27/91-09/30/93	540 days (incl.	25 days s/u)
S/D	08/16/91-08/14/93	180 days (incl.	105 days ref)
FOR	01/21/92-09/30/93	540 days	

TABLE 9.102 VERMONT YANKEE

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	1	2	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Startup	1	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	2	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	1	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	2	1	0	0	0	1	0	0	0	2	0
	Pre-Refueling	0	0	0	0	0	2	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	1	0	0	0	0	0
	Refueling	0	0	0	0	0	1	0	0	0	0	0	1
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		2	5	13	0	0	1	0	0	0	0	11	0
EFO/1000 HRS		0.54	0.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CRIT. HRS		1853	2076	1915	2065	2209	1580	1746	2208	2209	2160	1972	1389
RAD		71	24	23	29	35	227	74	26	43	19	29	NA
CAUSE CODES:													
Admin.	Operations	1	3	4	0	1	2	0	0	3	3	3	2
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	1
	Startup	0	0	0	0	0	0	1	0	0	0	0	0
	Refueling	1	0	0	0	0	2	2	0	0	0	0	1
	Non-Refueling	0	1	0	0	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	0	1	0	0	0	0	0	0	1	1	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	2	0	0	0	0	0	1	0	0	0	0	0
	Refueling	0	0	0	0	0	4	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	1	5	3	0	2	2	0	0	3	3	3	1
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	1
	Startup	2	0	0	0	0	0	2	0	0	0	0	0
	Refueling	1	0	0	0	0	5	2	0	0	0	0	1
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Design	Operations	0	0	4	0	0	0	1	0	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	1	0	0	0	0	1	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	1	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Refueling	Shutdown	10/01/90	10/13/90	13
Start-up	Operation	10/14/90	11/07/90	25
Operation	Operation	11/08/90	03/13/91	126
Non-Refueling	Shutdown	03/14/91	03/15/91	2
Operation	Operation	03/16/91	04/23/91	39
Non-Refueling	Shutdown	04/24/91	04/29/91	6
Operation	Operation	04/30/91	06/15/91	47
Non-Refueling	Shutdown	06/16/91	06/19/91	4
Operation	Operation	06/20/91	09/08/91	81
Non-Refueling	Shutdown	09/09/91	09/13/91	5
Operation	Operation	09/14/91	02/10/92	150
Pre-Refueling	Operation	02/11/92	03/06/92	25
Refueling	Shutdown	03/07/92	04/19/92	43
Start-up	Operation	04/19/92	05/13/92	25
Operation	Operation	05/14/92	04/07/93	329
Non-Refueling	Shutdown	04/08/93	04/14/93	7
Operation	Operation	04/15/93	08/02/93	110
Pre-Refueling	Operation	08/03/93	08/27/93	25
Refueling	Shutdown	08/28/93	09/30/93	34

Time used in calculations

Trend Calculations			Deviation Calculations		
Op	11/24/92-08/27/93	270 days (incl. 0 days s/u)	Op	01/16/92-08/27/93	540 days (incl. 25 days s/u)
S/D	04/01/92-09/30/93	59 days (incl. 52 days ref)	S/D	10/01/90-09/30/93	114 days (incl. 90 days ref)
FOR	11/30/92-08/27/93	270 days	FOR	01/20/92-08/27/93	540 days

TABLE 9.103 VOGTLE 1

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	0	0	0	0	0	0	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	1	0
SSA	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	2	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	0	1	2	0	0	1	0	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		3	0	0	0	0	0	9	3	0	0	5	1
EFO/1000 HRS		0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.47	0.00	0.00	1.28	0.00
CRIT. HRS		2003	2160	2183	1825	1013	2184	2020	2150	2209	1705	1568	2192
RAD		65	6	3	59	112	65	71	4	7	40	49	NA
CAUSE CODES:													
Admin.	Operations	2	1	1	1	1	0	1	0	2	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Startup	0	0	0	0	1	0	0	0	0	0	0	0
	Refueling	0	0	0	0	3	0	0	0	0	0	2	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	1	1	0	0	0	0	1	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Startup	0	0	0	0	1	0	0	0	0	0	0	0
	Refueling	0	0	0	0	2	0	0	0	0	0	1	0
	Non-Refueling	0	0	0	0	1	0	0	0	0	0	0	0
Oth. Per.	Operations	1	2	0	1	0	0	1	0	0	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	2	0
	Refueling	0	0	0	0	1	0	0	0	0	1	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	2	4	1	1	1	0	4	1	2	0	0	2
	Pre-Refueling	0	0	0	0	0	0	0	0	0	2	0	0
	Startup	0	0	0	0	3	0	0	0	0	0	1	0
	Refueling	0	0	0	0	1	0	0	0	0	1	1	0
	Non-Refueling	0	0	0	0	1	0	0	0	0	0	0	0
Design	Operations	0	0	0	0	0	0	1	0	1	0	0	0
	Pre-Refueling	0	0	0	1	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	1	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	1	0
	Non-Refueling	1	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	1	0	1	0	0	1	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	1	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	12/08/90	68
Non-Refueling	Shutdown	12/08/90	12/14/90	6
Operation	Operation	12/15/90	12/18/90	4
Non-Refueling	Shutdown	12/19/90	12/20/90	2
Operation	Operation	12/21/90	08/22/91	245
Pre-Refueling	Operation	08/23/91	09/16/91	25
Refueling	Shutdown	09/17/91	11/10/91	55
Start-up	Operation	11/11/91	11/12/91	2
Non-Refueling	Shutdown	11/13/91	11/19/91	7
Start-up	Operation	11/20/91	12/12/91	23
Operation	Operation	12/13/91	05/14/92	154
Non-Refueling	Shutdown	05/15/92	05/19/92	5
Operation	Operation	05/20/92	02/17/93	274
Pre-Refueling	Operation	02/18/93	03/14/93	25
Refueling	Shutdown	03/15/93	04/20/93	37
Start-up	Operation	04/21/93	05/15/93	25
Operation	Operation	05/16/93	09/30/93	138

Time used in calculations

Trend Calculations			Deviation Calculations		
Op	11/28/92-09/30/93	270 days (incl. 25 days s/u)	Op	02/27/92-09/30/93	540 days (incl. 25 days s/u)
S/D	05/15/92-04/20/93	42 days (incl. 37 days ref)	S/D	12/09/90-04/20/93	112 days (incl. 92 days ref)
FOR	11/19/92-09/30/93	270 days	FOR	02/23/92-09/30/93	540 days

TABLE 9.104 VOGTLE 2

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	2	1	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	1
	Startup	0	0	0	0	0	0	1	0	0	0	0	0
SSA	Operations	0	0	0	1	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	1	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	0	1	1	1	0	0	0	0	1	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		0	4	5	0	0	2	3	0	0	0	1	0
EFO/1000 HRS		0.00	1.04	0.47	0.00	0.00	0.00	0.77	0.00	0.00	0.00	0.46	0.00
CRIT. HRS		1254	1932	2106	2208	2209	1652	1306	2208	2088	2160	2164	1674
RAD		65	6	3	59	112	65	71	4	7	40	49	NA
CAUSE CODES:													
Admin.	Operations	1	2	1	2	1	0	0	2	1	1	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	1
	Startup	0	0	0	0	0	0	1	0	0	0	0	0
	Refueling	0	0	0	0	0	0	3	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	1	0	0	0	0	0
Lic. Oper.	Operations	0	1	0	0	0	0	0	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	1	0	0	0	0	0	0
	Startup	1	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	1	2	0	1	0	0	0	1	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	1
	Startup	0	0	0	0	0	0	1	0	0	0	0	0
	Refueling	1	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	1	0	0	0	0	0	1	0	0	0	0	0
Maint.	Operations	1	5	2	3	3	1	0	2	1	2	1	1
	Pre-Refueling	3	0	0	0	0	0	0	0	0	0	0	1
	Startup	1	0	0	0	0	0	2	0	0	0	0	0
	Refueling	1	0	0	0	0	0	3	0	0	0	0	0
	Non-Refueling	1	0	0	0	0	0	1	0	0	0	0	0
Design	Operations	1	1	0	0	1	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	1	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	3	0	1	0	0	0	1	0	0	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	1	0	0	0	0	0

Phase	Phase type	Start	End	Length
Refueling	Shutdown	10/01/90	10/31/90	31
Start-up	Operation	11/01/90	11/02/90	2
Non-Refueling	Shutdown	11/03/90	11/08/90	6
Start-up	Operation	11/09/90	12/01/90	23
Operation	Operation	12/02/90	03/19/91	108
Non-Refueling	Shutdown	03/20/91	03/25/91	6
Operation	Operation	03/26/91	02/16/92	328
Pre-Refueling	Operation	02/17/92	03/12/92	25
Refueling	Shutdown	03/13/92	04/23/92	42
Start-up	Operation	04/24/92	04/25/92	2
Non-Refueling	Shutdown	04/26/92	05/05/92	10
Start-up	Operation	05/06/92	05/28/92	23
Operation	Operation	05/29/92	12/13/92	199
Non-Refueling	Shutdown	12/14/92	12/16/92	3
Operation	Operation	12/17/92	08/16/93	243
Pre-Refueling	Operation	08/17/93	09/10/93	25
Refueling	Shutdown	09/11/93	09/30/93	20

Time used in calculations

Trend Calculations				Deviation Calculations			
Op	12/12/92-09/10/93	270 days (incl.	0 days s/u)	Op	01/25/92-09/10/93	540 days (incl.	25 days s/u)
S/D	04/01/92-09/30/93	56 days (incl.	43 days ref)	S/D	10/01/90-09/30/93	118 days (incl.	93 days ref)
FOR	12/07/92-09/08/93	270 days		FOR	01/13/92-09/08/93	540 days	

TABLE 9.105 WASH. NUCLEAR 2

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	1	0	0	0	1	0	0	0	0	2	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	1	0	0	0	2	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	1	0	0	1	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	1	0	1	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	3	2	0	0	2	6	0	0	1	6	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	2	0
	Startup	0	0	0	0	0	0	0	1	0	0	0	0
	Refueling	0	0	0	0	0	0	8	1	0	0	2	0
	Non-Refueling	0	0	0	4	0	3	0	1	0	0	0	0
FOR (%)		13	0	61	100	17	25	0	24	0	19	0	10
EFO/1000 HRS		1.02	0.00	0.00	0.00	1.62	0.60	0.00	2.05	0.00	1.17	0.00	0.49
CRIT. HRS		1955	2160	299	100	1847	1669	416	1464	2209	1712	1017	2023
RAD		45	34	254	56	41	48	455	66	43	57	411	NA
CAUSE CODES:													
Admin.	Operations	5	2	0	0	3	6	0	3	6	10	0	1
	Pre-Refueling	0	0	2	0	0	0	1	0	0	0	2	0
	Startup	0	0	0	1	0	0	0	2	0	0	1	0
	Refueling	0	0	3	0	0	0	8	0	0	0	5	0
	Non-Refueling	1	0	0	6	0	4	0	2	0	2	0	0
Lic. Oper.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	1	0	0	0	0	1	0	0	2	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	2	0	0	0	1	1	0	1	2	1	0	1
	Pre-Refueling	0	1	1	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	1	0	0	0	1	0	0	0	0
	Refueling	0	0	1	0	0	0	3	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	5	3	0	0	5	6	0	3	5	8	0	1
	Pre-Refueling	0	1	3	0	0	0	1	0	0	0	0	0
	Startup	0	0	0	2	0	0	0	2	0	0	1	0
	Refueling	0	0	2	0	0	0	8	0	0	0	4	0
	Non-Refueling	1	0	0	6	0	3	0	1	0	1	0	0
Design	Operations	7	0	0	0	3	4	0	1	1	7	0	1
	Pre-Refueling	0	1	2	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	1	0	0	0	0
	Refueling	0	0	6	0	0	0	9	1	0	0	2	0
	Non-Refueling	1	0	0	2	0	0	0	1	0	1	0	0
Misc.	Operations	0	0	0	0	1	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	1	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	11/02/90	33
Non-Refueling	Shutdown	11/03/90	11/09/90	7
Operation	Operation	11/10/90	12/07/90	28
Non-Refueling	Shutdown	12/08/90	12/09/90	2
Operation	Operation	12/10/90	03/21/91	102
Pre-Refueling	Operation	03/22/91	04/15/91	25
Refueling	Shutdown	04/16/91	06/10/91	56
Start-up	Operation	06/11/91	06/12/91	2
Non-Refueling	Shutdown	06/13/91	09/25/91	105
Start-up	Operation	09/26/91	10/18/91	23
Operation	Operation	10/19/91	11/04/91	17
Non-Refueling	Shutdown	11/05/91	11/06/91	2
Operation	Operation	11/07/91	12/20/91	44
Non-Refueling	Shutdown	12/21/91	12/23/91	3
Operation	Operation	12/24/91	02/25/92	64
Non-Refueling	Shutdown	02/26/92	03/17/92	21
Operation	Operation	03/18/92	03/26/92	9
Pre-Refueling	Operation	03/27/92	04/20/92	25
Refueling	Shutdown	04/21/92	07/03/92	74
Start-up	Operation	07/04/92	07/06/92	3
Non-Refueling	Shutdown	07/07/92	07/09/92	3
Start-up	Operation	07/10/92	07/11/92	2
Non-Refueling	Shutdown	07/12/92	07/18/92	7
Start-up	Operation	07/19/92	08/07/92	20
Operation	Operation	08/08/92	08/15/92	8
Non-Refueling	Shutdown	08/16/92	08/28/92	13
Operation	Operation	08/29/92	01/21/93	146
Non-Refueling	Shutdown	01/22/93	01/27/93	6
Operation	Operation	01/28/93	02/01/93	5
Non-Refueling	Shutdown	02/02/93	02/04/93	3
Operation	Operation	02/05/93	02/10/93	6
Non-Refueling	Shutdown	02/11/93	02/14/93	4
Operation	Operation	02/15/93	04/08/93	53
Pre-Refueling	Operation	04/09/93	05/03/93	25
Refueling	Shutdown	05/04/93	06/17/93	45
Start-up	Operation	06/18/93	07/12/93	25
Operation	Operation	07/13/93	08/03/93	22
Non-Refueling	Shutdown	08/04/93	08/09/93	6
Operation	Operation	08/10/93	09/30/93	52

Time used in calculations

Trend Calculations				Deviation Calculations			
Op	11/01/92-09/30/93	270 days (incl.	25 days s/u)	Op	10/05/91-09/30/93	540 days (incl.	64 days s/u)
S/D	07/01/92-08/09/93	90 days (incl.	48 days ref)	S/D	02/28/92-08/09/93	180 days (incl.	119 days ref)
FOR	11/04/92-09/30/93	270 days		FOR	11/07/91-09/30/93	540 days	

TABLE 9.106 WATERFORD 3

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	1	1	0	0	0	0	1	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	2	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	1	1	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0		0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	1	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	1	0	0	0	0	0	0	0	0	0
FOR (%)		0	0	7	2	2	3	1	2	0	2	2	0
EFO/1000 HRS		0.00	0.00	2.34	0.46	0.46	0.52	0.46	0.53	0.00	0.47	0.46	0.00
CRIT. HRS		1988	1776	855	2180	2184	1926	2183	1896	1302	2131	2159	2208
RAD		15	106	231	5	2	18	3	56	133	5	4	NA
CAUSE CODES:													
Admin.	Operations	2	0	0	1	0	2	1	2	2	0	0	1
	Pre-Refueling	0	1	0	0	0	0	0	1	0	0	0	0
	Startup	0	0	2	0	0	0	0	0	0	0	0	0
	Refueling	0	0	1	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Lic. Oper.	Operations	0	0	1	1	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	1	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Oth. Per.	Operations	1	1	0	0	1	0	0	1	0	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	3	0	0	0	0	1	1	0	0	0
	Non-Refueling	0	0	1	0	0	0	0	0	0	0	0	0
Maint.	Operations	3	1	1	1	2	1	2	4	2	1	0	1
	Pre-Refueling	0	1	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	4	0	0	0	0	0	0	0	0	0
	Refueling	0	0	3	0	0	0	0	1	1	0	0	0
	Non-Refueling	0	0	1	0	0	0	0	0	0	0	0	0
Design	Operations	0	0	1	2	0	1	0	0	0	0	0	0
	Pre-Refueling	0	1	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	1	0	0	0
	Refueling	0	0	1	0	0	0	0	0	1	0	0	0
	Non-Refueling	1	0	1	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	1	0	0	0	1	0	0	0	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	10/06/90	6
Non-Refueling	Shutdown	10/07/90	10/14/90	8
Operation	Operation	10/15/90	02/20/91	129
Pre-Refueling	Operation	02/21/91	03/17/91	25
Refueling	Shutdown	03/18/91	05/15/91	59
Start-up	Operation	05/16/91	05/17/91	2
Non-Refueling	Shutdown	05/18/91	05/24/91	7
Start-up	Operation	05/25/91	06/16/91	23
Operation	Operation	06/17/91	02/16/92	245
Non-Refueling	Shutdown	02/17/92	02/24/92	8
Operation	Operation	02/25/92	08/27/92	185
Pre-Refueling	Operation	08/28/92	09/21/92	25
Refueling	Shutdown	09/22/92	11/03/92	43
Start-up	Operation	11/04/92	11/28/92	25
Operation	Operation	11/29/92	09/30/93	306

Time used in calculations

Trend Calculations			Deviation Calculations		
Op	01/04/93-09/30/93	270 days (incl. 0 days s/u)	Op	02/26/92-09/30/93	540 days (incl. 25 days s/u)
S/D	09/22/92-11/03/92	43 days (incl. 43 days ref)	S/D	10/07/90-11/03/92	125 days (incl. 102 days ref)
FOR	01/04/93-09/30/93	270 days	FOR	02/08/92-09/30/93	540 days

TABLE 9.107 WOLF CREEK

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	0	0	1	0	0	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SFA	Operations	2	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	1	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	1	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	1	0	0	0	0	0	1	0	0	0	0	0
	Pre-Refueling	0	0	0	2	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	1	0	0	0	0	1	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
FOR (%)		0	0	0	0	100	56	0	0	1	0	0	0
EFO/1000 HRS		0.00	0.00	0.00	0.00	0.00	0.96	0.00	0.00	0.00	0.00	0.00	0.00
CRIT. HRS		2209	2160	2183	1952	0	1038	2183	2208	2183	1515	1128	2208
RAD		3	3	4	39	262	57	4	3	5	101	74	NA
CAUSE CODES:													
Admin.	Operations	3	3	5	1	0	0	2	1	0	0	0	0
	Pre-Refueling	0	0	0	1	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	1	0
	Refueling	0	0	0	0	3	0	0	0	0	0	1	0
	Non-Refueling	0	0	0	0	0	3	0	0	0	0	0	0
Lic. Oper.	Operations	0	0	2	0	0	1	1	0	1	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	1	0	0	0	0	0	0
	Refueling	0	0	0	0	2	0	0	0	0	2	2	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	1	0
Oth. Per.	Operations	1	0	0	1	0	0	1	0	0	0	0	1
	Pre-Refueling	0	0	0	1	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	1	0	0	0	0	1	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Maint.	Operations	3	3	5	1	0	1	2	1	1	0	0	1
	Pre-Refueling	0	0	0	2	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	1	0	0	0	0	1	0
	Refueling	0	0	0	0	6	0	0	0	0	1	2	0
	Non-Refueling	0	0	0	0	0	3	0	0	0	0	0	0
Design	Operations	0	1	0	1	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	1	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	1	0	0	0	0	2	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
Misc.	Operations	0	0	1	0	0	1	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	08/28/91	332
Pre-Refueling	Operation	08/29/91	09/22/91	25
Refueling	Shutdown	09/23/91	01/02/92	102
Start-up	Operation	01/03/92	01/04/92	2
Non-Refueling	Shutdown	01/05/92	01/11/92	7
Start-up	Operation	01/12/92	02/03/92	23
Operation	Operation	02/04/92	02/19/92	16
Non-Refueling	Shutdown	02/20/92	03/25/92	35
Operation	Operation	03/26/92	02/10/93	322
Pre-Refueling	Operation	02/11/93	03/07/93	25
Refueling	Shutdown	03/08/93	05/04/93	58
Start-up	Operation	05/05/93	05/06/93	2
Non-Refueling	Shutdown	05/07/93	05/13/93	7
Start-up	Operation	05/14/93	06/05/93	23
Operation	Operation	06/06/93	09/30/93	117

Time used in calculations

Trend Calculations			Deviation Calculations		
Op	10/31/92-09/30/93	270 days (incl. 25 days s/u)	Op	09/13/91-09/30/93	540 days (incl. 50 days s/u)
S/D	03/08/93-05/13/93	65 days (incl. 58 days ref)	S/D	10/22/91-05/13/93	180 days (incl. 131 days ref)
FOR	10/22/92-09/30/93	270 days	FOR	01/26/92-09/30/93	540 days

TABLE 9.108 ZION 1

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	0	0	0	0	1	0	0	0	0	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	0	0	0	1	0	0	0	3	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	1	0	0	0	0
	Non-Refueling	0	0	1	0	1	0	0	0	0	0	0	0
SE	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	1	0	0	0	1	0	0	0	0	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	1	1	0	0	0	0
	Non-Refueling	0	0	1	0	0	0	0	1	0	0	0	0
FOR (%)		36	100	50	0	41	2	0	28	2	0	0	3
EFO/1000 HRS		1.40	0.00	0.89	0.00	1.51	0.00	0.00	0.94	0.00	0.00	0.00	0.46
CRIT. HRS		1430	0	1123	2208	1322	1364	0	1067	2175	2160	2183	2162
RAD		18	41	20	6	20	109	277	30	104	59	13	NA
CAUSE CODES:													
Admin.	Operations	0	0	2	2	1	1	0	1	6	1	1	1
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	1	0	0	0	0
	Refueling	0	0	0	0	0	1	2	2	0	0	0	0
	Non-Refueling	0	5	2	0	2	0	0	1	0	0	0	0
Lic. Oper.	Operations	0	0	0	0	0	0	0	0	2	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	1	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	1	0	0	0	0
Oth. Per.	Operations	0	0	1	3	0	0	0	1	4	0	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	2	1	0	0	0	0
	Non-Refueling	1	2	1	0	2	0	0	0	0	0	0	0
Maint.	Operations	1	0	2	3	2	0	0	1	8	3	1	2
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	1	0	0	0	0
	Refueling	0	0	0	0	0	1	6	3	0	0	0	0
	Non-Refueling	1	5	4	0	1	0	0	0	0	0	0	0
Design	Operations	0	0	1	0	0	0	0	0	2	1	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	1	0	0	0	0
	Refueling	0	0	0	0	0	0	1	1	0	0	0	0
	Non-Refueling	0	1	1	0	0	0	0	1	0	0	0	0
Misc.	Operations	0	0	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Operation	Operation	10/01/90	11/06/90	37
Non-Refueling	Shutdown	11/07/90	11/10/90	4
Operation	Operation	11/11/90	12/04/90	24
Non-Refueling	Shutdown	12/05/90	05/13/91	160
Operation	Operation	05/14/91	11/07/91	178
Non-Refueling	Shutdown	11/08/91	11/19/91	12
Operation	Operation	11/20/91	12/07/91	18
Non-Refueling	Shutdown	12/08/91	12/31/91	24
Operation	Operation	01/01/92	02/04/92	35
Pre-Refueling	Operation	02/05/92	02/29/92	25
Refueling	Shutdown	03/01/92	07/24/92	146
Start-up	Operation	07/25/92	07/26/92	2
Non-Refueling	Shutdown	07/27/92	08/02/92	7
Start-up	Operation	08/03/92	08/25/92	23
Operation	Operation	08/26/92	09/17/92	23
Non-Refueling	Shutdown	09/18/92	10/01/92	14
Operation	Operation	10/02/92	09/30/93	364

Time used in calculations

Trend Calculations				Deviation Calculations			
Op	01/04/93-09/30/93	270 days (incl.	0 days s/u)	Op	09/19/91-09/30/93	540 days (incl.	25 days s/u)
S/D	05/17/92-10/01/92	90 days (incl.	69 days ref)	S/D	12/19/91-10/01/92	180 days (incl.	146 days ref)
FOR	01/04/93-09/30/93	270 days		FOR	10/22/91-09/30/93	540 days	

TABLE 9.109 ZION 2

Type	Phase	Year - Calendar Quarter											
		90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
SCRAM	Operations	1	1	1	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
SSA	Operations	0	1	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SE	Operations	0	1	0	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
SSF	Operations	0	1	0	0	0	0	0	4	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	1	0	0
	Non-Refueling	0	0	1	0	0	0	2	0	0	0	0	0
FOR (%)		39	19	81	2	0	0	84	0	0	0	0	0
EFO/1000 HRS		1.46	1.13	2.17	0.48	0.00	0.00	2.81	0.00	0.00	0.00	0.00	0.00
CRIT. HRS		1374	1765	460	2073	1246	2184	356	2208	1010	892	2183	2208
RAD		18	41	20	6	20	109	277	30	104	59	13	NA
CAUSE CODES:													
Admin.	Operations	1	5	1	3	1	1	0	3	0	0	0	1
	Pre-Refueling	0	0	0	0	0	0	0	0	1	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	2	1	0	0	3	0	0	0	0	0
Lic. Oper.	Operations	0	0	1	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	1	0	0	0	0	0
Oth. Per.	Operations	0	2	0	3	0	1	0	0	0	0	1	0
	Pre-Refueling	0	0	0	0	0	0	0	0	1	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	1	0	0	0
	Non-Refueling	1	0	1	0	0	0	1	0	0	0	0	0
Maint.	Operations	3	6	1	4	0	1	0	2	0	1	1	1
	Pre-Refueling	0	0	0	0	0	0	0	0	1	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	1	0	0	0
	Non-Refueling	1	0	1	0	0	0	4	0	0	0	0	0
Design	Operations	1	1	0	0	0	0	0	4	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	1	1	0	0
	Non-Refueling	0	0	1	0	0	0	1	0	0	0	0	0
Misc.	Operations	0	0	1	0	0	0	0	0	0	0	0	0
	Pre-Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Startup	0	0	0	0	0	0	0	0	0	0	0	0
	Refueling	0	0	0	0	0	0	0	0	0	0	0	0
	Non-Refueling	0	0	0	0	0	0	0	0	0	0	0	0

Phase	Phase type	Start	End	Length
Non-Refueling	Shutdown	10/01/90	11/01/90	32
Start-up	Operation	11/02/90	11/05/90	4
Operation	Operation	11/06/90	01/04/91	60
Non-Refueling	Shutdown	01/05/91	01/09/91	5
Operation	Operation	01/10/91	03/21/91	71
Non-Refueling	Shutdown	03/22/91	06/09/91	80
Operation	Operation	06/10/91	09/27/91	110
Non-Refueling	Shutdown	09/28/91	11/08/91	42
Operation	Operation	11/09/91	04/04/92	148
Non-Refueling	Shutdown	04/05/92	06/18/92	75
Operation	Operation	06/19/92	10/20/92	124
Pre-Refueling	Operation	10/21/92	11/14/92	25
Refueling	Shutdown	11/15/92	02/18/93	96
Start-up	Operation	02/19/93	03/15/93	25
Operation	Operation	03/16/93	09/30/93	199

Time used in calculations

Trend Calculations				Deviation Calculations			
Op	10/01/92-09/30/93	269 days (incl.	25 days s/u)	Op	09/08/91-09/30/93	540 days (incl.	25 days s/u)
S/D	11/21/92-02/18/93	90 days (incl.	90 days ref)	S/D	10/31/91-02/18/93	180 days (incl.	96 days ref)
FOR	10/01/92-09/30/93	262 days		FOR	12/28/91-09/30/93	540 days	

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10. PEER GROUP SUMMARY

PERFORMANCE INDICATORS

CRITICAL HOURS

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TABLE 10.1 PEER GROUP SUMMARY

Actual Values = Indicated Values x 10E-2

PI	Phase Type	BW Median	CN Median	CY Median	GO Median	GN Median	WS Median	W3 Median	W4 Median	WN Median	NP Median	2nd % Trends	98th % Trends	2nd % Dev.	98th % Dev.
Scram	Start/Ops	0.37	0.37	0.37	0.56	0.37	0.19	0.37	0.56	0.37	2.96	-11.67	20.00	-0.74	0.37
SSA	Start/Ops	0.19	0.09	0.00	0.19	0.19	0.00	0.09	0.00	0.00	0.74	-6.67	10.00	-0.74	0.19
	Shutdown	0.00	0.00	0.63	0.00	0.66	0.00	0.56	0.56	0.56	0.47	-20.00	40.00	-1.67	0.66
SE	Start/Ops	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-5.00	5.95	-0.37	0.00
	Shutdown	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-1.67	3.33	-0.87	0.00
SSF	Start/Ops	0.56	0.74	0.37	1.11	1.02	0.37	0.46	0.74	0.56	0.74	-20.00	16.67	-1.69	0.93
	Shutdown	1.67	1.11	0.56	1.11	0.56	0.93	1.39	1.11	0.85	0.94	-30.00	20.00	-3.[illegible]	1.39
Cause Codes															
Admin	Start/Ops	0.93	1.30	1.11	1.48	1.76	1.11	1.39	1.30	1.30	3.70	-39.29	15.48	-3.52	1.02
	Shutdown	2.99	1.39	1.32	3.33	4.77	3.54	2.78	1.67	2.70	3.77	-30.00	40.00	-5.00	2.61
Lic. Per.	Start/Ops	0.19	0.28	0.19	0.37	0.19	0.19	0.19	0.28	0.37	1.48	-10.00	10.00	-0.56	0.37
	Shutdown	0.00	0.28	0.58	0.56	0.56	0.00	0.56	0.00	0.71	0.94	-11.67	22.86	-2.62	0.71
Oth. Per.	Start/Ops	1.11	0.56	0.37	0.93	0.93	0.56	0.65	0.93	0.74	3.33	-13.33	15.48	-1.23	0.74
	Shutdown	0.87	0.68	1.16	1.11	1.67	0.93	1.71	1.11	1.11	2.83	-30.00	14.29	-3.32	1.11
Maint.	Start/Ops	1.30	2.13	1.48	3.52	2.87	1.67	2.13	3.15	2.41	8.52	-40.00	14.29	-3.15	1.85
	Shutdown	3.89	2.22	3.89	5.56	6.69	4.92	4.17	3.89	3.89	6.60	-40.00	40.00	-5.00	3.89
Design	Start/Ops	2.22	0.74	0.56	1.48	0.93	0.37	0.19	0.93	0.74	2.22	-20.00	20.00	-2.22	1.85
	Shutdown	2.63	0.68	1.67	1.72	0.96	0.93	0.99	1.67	0.89	0.94	-30.00	20.00	-4.39	1.89
Misc.	Start/Ops	0.19	0.00	0.00	0.19	0.19	0.00	0.09	0.00	0.19	0.74	-6.67	20.00	-0.56	0.19
	Shutdown	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.94	-1.67	3.33	-1.11	0.00
Shutdowns															
EFO		0.56	0.83	0.56	0.74	0.74	0.37	0.37	1.11	0.56	NA	-15.00	30.00	-1.11	0.74
FOR		247.22	743.95	377.24	879.01	516.75	36.73	404.44	1895.0	256.40	NA	-430.6	1073.1	-3096	832.94

Scram = Reactor Scram
SSA = Safety System Actuation
SE = Significant Event
SSF = Safety System Failure
Admin = Administrative error
Lic. Per. = Licensed personnel error
Oth. Per. = Other personnel error
Maint. = Maintenance error
Design = Design/Installation/Fabricatio.: error
Misc. = Miscellaneous

BW = Babcock & Wilcox
CN = Combustion Engineering without CPC
CY = Combustion Engineering with CPC
GO = General Electric pre-TMI
GN = General Electric post-TMI
WS = Small Westinghouse
W3 = Older Westinghouse 3-loop
W4 = Westinghouse 4-loop
WN = New Westinghouse 3-loop and 4-loop
NP = New Plants

TABLE 10.2 AUTOMATIC SCRAMS WHILE CRITICAL

Plant Name	Year - Calendar Quarter											
	90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
ARKANSAS 1	0	1	1	0	0	0	0	0	0	1	0	0
ARKANSAS 2	0	1	0	0	0	0	0	0	0	0	0	0
BEAVER VALLEY 1	0	0	0	2	0	0	0	0	1	0	0	0
BEAVER VALLEY 2	0	0	0	0	1	0	0	0	0	1	0	0
BIG ROCK POINT	0	0	0	0	0	0	2	0	0	0	0	0
BRAIDWOOD 1	2	0	0	0	1	0	0	0	0	1	0	0
BRAIDWOOD 2	0	0	0	1	1	2	0	1	1	0	0	0
BROWNS FERRY 1	0	0	0	0	0	0	0	0	0	0	0	0
BROWNS FERRY 2	0	0	0	1	1	0	1	1	0	0	0	0
BROWNS FERRY 3	0	0	0	0	0	0	0	0	0	0	0	0
BRUNSWICK 1	0	1	0	1	0	2	0	0	0	0	0	0
BRUNSWICK 2	1	1	0	0	1	1	0	0	0	0	0	0
BYRON 1	1	0	0	0	0	1	0	0	0	0	0	0
BYRON 2	0	0	0	0	1	0	0	0	0	0	1	0
CALLAWAY	2	0	0	0	1	1	1	1	0	0	0	0
CALVERT CLI 1	0	0	0	0	1	0	0	0	1	0	1	0
CALVERT CI & 2	0	0	1	0	0	0	0	1	0	0	1	0
CATAWBA 1	0	0	1	2	1	0	0	0	0	0	1	1
CATAWBA 2	1	0	1	0	0	1	0	0	1	0	0	1
CLINTON 1	0	0	0	0	0	2	0	0	0	0	0	0
COMANCHE PEAK 1	0	3	0	1	0	1	1	0	0	2	0	0
COMANCHE PEAK 2	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	1	0
COOK 1	0	0	1	0	0	0	0	0	1	0	0	0
COOK 2	2	1	0	1	1	0	0	1	0	0	0	2
COOPER STATION	1	0	0	0	0	0	0	0	0	0	0	0
CRYSTAL RIVER 3	0	0	0	0	3	1	0	0	1	0	0	1
DAVIS-BESSE	1	0	0	0	0	1	0	0	0	0	1	0
DIABLO CANYON 1	2	1	2	0	0	1	1	0	0	0	0	0
DIABLO CANYON 2	0	0	0	0	0	0	0	0	0	1	0	0
DRESDEN 2	0	1	1	1	1	0	0	0	0	0	0	0
DRESDEN 3	0	0	0	1	0	0	0	0	2	1	0	1
DUANE ARNOLD	1	1	1	0	0	0	0	1	1	0	0	0
FARLEY 1	0	0	2	2	0	0	0	0	1	0	0	0
FARLEY 2	0	0	2	1	0	1	3	0	0	0	0	0
FERMI 2	1	0	1	0	0	0	0	0	0	1	1	1
FITZPATRICK	2	0	0	0	0	0	0	0	0	0	2	1
FORT CALHOUN	0	0	0	0	0	0	1	2	0	0	1	0
GINNA	3	0	0	0	0	2	0	0	0	0	0	0
GRAND GULF	2	0	3	2	1	0	2	1	0	0	0	1
HADDAM NECK	0	0	0	0	0	1	0	0	0	0	0	1
HARRIS	0	0	1	0	0	0	0	2	0	0	0	0
HATCH 1	1	3	0	2	0	1	1	1	0	0	2	0
HATCH 2	0	2	0	0	0	0	1	0	1	0	0	0
HOPE CREEK	2	1	1	0	0	0	0	0	0	0	1	0
INDIAN POINT 2	0	1	0	1	0	1	1	1	0	0	0	0
INDIAN POINT 3	0	2	0	0	0	0	0	2	0	0	0	0
KEWAUNEE	0	0	0	0	1	0	0	1	0	2	0	0
LASALLE 1	0	0	1	0	0	1	0	0	0	0	0	1
LASALLE 2	0	0	0	1	1	0	0	1	1	0	0	0
LIMERICK 1	0	0	1	0	0	0	0	0	0	0	0	1
LIMERICK 2	0	0	0	0	0	0	0	0	0	2	0	0
MAINE YANKEE	0	0	2	0	2	0	0	0	0	0	0	0
MCGUIRE 1	2	2	0	0	0	0	1	1	0	0	0	0
MCGUIRE 2	0	0	0	0	1	1	2	2	0	0	0	0
MILLSTONE 1	0	0	0	0	0	0	0	0	1	0	0	0
MILLSTONE 2	0	1	0	0	0	0	0	0	0	2	2	1
MILLSTONE 3	0	0	1	0	0	0	0	0	2	1	0	0
MONTICELLO	1	1	2	1	0	0	0	0	0	1	0	1
NINE MILE PT. 1	2	1	0	2	1	1	2	1	0	1	1	0

TABLE 10.2 AUTOMATIC SCRAMS WHILE CRITICAL (CONTINUED)

Plant Name	Year - Calendar Quarter											
	90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
NINE MILE PT. 2	0	0	0	1	2	0	0	1	1	0	0	0
NORTH ANNA 1	0	0	0	1	0	0	0	0	0	0	0	0
NORTH ANNA 2	1	0	0	1	0	1	0	1	0	0	1	0
OCONEE 1	0	0	1	0	1	0	2	0	1	0	0	1
OCONEE 2	0	0	0	0	0	0	0	0	1	0	0	1
OCONEE 3	0	0	1	1	1	2	1	1	0	1	0	0
OYSTER CREEK	0	0	0	1	0	0	2	2	0	0	0	0
PALISADES	0	0	0	2	1	0	0	4	1	0	0	0
PALO VERDE 1	0	0	0	1	1	0	0	1	1	0	0	0
PALO VERDE 2	0	0	0	1	0	2	0	0	1	0	0	0
PALO VERDE 3	1	0	0	0	2	1	0	0	0	1	0	0
PEACH BOTTOM 2	0	0	0	1	0	0	1	2	0	1	0	0
PEACH BOTTOM 3	0	1	0	1	0	0	1	1	1	1	0	0
PERRY	0	0	0	0	0	0	0	1	0	0	0	0
PILGRIM	0	0	0	0	0	0	0	0	2	1	1	1
POINT BEACH 1	0	0	2	0	0	0	0	0	1	0	0	0
POINT BEACH 2	0	0	0	0	1	0	0	0	0	1	0	0
PRAIRIE ISLAND 1	1	0	0	1	0	0	0	0	0	1	0	0
PRAIRIE ISLAND 2	2	0	0	0	0	0	0	0	0	0	0	0
QUAD CITIES 1	0	0	0	0	1	1	0	0	0	0	0	0
QUAD CITIES 2	2	0	0	0	0	0	0	0	0	2	1	0
RIVER BEND	1	0	0	0	0	2	0	0	1	0	0	1
ROBINSON 2	0	0	0	1	0	0	0	1	0	0	0	0
SALEM 1	0	0	1	0	0	0	0	0	0	1	1	1
SALEM 2	0	0	0	0	1	0	2	1	0	1	0	0
SAN ONOFRE 1	0	0	0	0	1	0	0	0	0	NA	NA	NA
SAN ONOFRE 2	1	1	0	0	0	0	1	1	0	0	0	0
SAN ONOFRE 3	0	1	0	0	0	0	1	0	0	1	0	1
SEABROOK	1	1	2	1	0	0	0	1	1	1	0	2
SEQUOYAH 1	0	0	0	0	0	0	1	0	2	1	0	0
SEQUOYAH 2	1	0	0	0	1	1	1	1	1	0	0	0
SOUTH TEXAS 1	1	0	1	0	2	1	0	0	0	0	0	0
SOUTH TEXAS 2	0	2	1	0	1	1	0	0	0	2	0	0
ST. LUCIE 1	0	0	0	2	0	0	0	1	0	0	0	0
ST. LUCIE 2	0	0	0	0	0	0	0	1	0	0	0	0
SUMMER	0	0	0	0	0	0	2	0	0	1	0	0
SURRY 1	0	0	0	0	0	0	1	0	0	2	0	0
SURRY 2	0	0	0	1	1	0	0	0	0	0	1	3
SUSQUEHANNA 1	0	0	0	1	0	0	0	0	1	0	0	1
SUSQUEHANNA 2	0	0	0	1	0	0	0	0	0	0	0	0
THREE MILE ISL 1	0	0	0	2	0	0	0	1	0	1	0	0
TROJAN	0	1	0	0	0	0	1	2	0	NA	NA	NA
TURKEY POINT 3	0	0	0	0	0	0	0	0	0	0	0	0
TURKEY POINT 4	0	0	0	0	0	1	0	0	0	0	1	1
VERMONT YANKEE	1	1	2	0	0	1	0	0	0	0	0	0
VOGTLE 1	0	0	0	0	0	0	0	0	0	0	1	1
VOGTLE 2	0	2	1	0	0	1	1	0	0	0	0	1
WASH. NUCLEAR 2	1	0	0	0	1	0	0	0	0	2	0	1
WATERFORD 3	0	0	2	1	1	0	0	0	0	1	1	0
WOLF CREEK	0	0	0	0	0	1	0	0	1	0	0	0
YANKEE-ROWE	1	0	1	1	0	0	NA	NA	NA	NA	NA	NA
ZION 1	0	0	0	0	1	0	0	0	0	0	0	1
ZION 2	1	1	1	0	0	0	0	0	0	0	0	0
TOTAL	46	36	42	46	41	39	38	45	32	40	24	31

NA - The plant is not yet critical.
- The plant is permanently shutdown.

TABLE 10.3 AUTOMATIC SCRAMS > 15% POWER/1000 CRITICAL HOURS

Plant Name	Year - Calendar Quarter											
	90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
ARKANSAS 1	0.00	0.53	0.54	0.00	0.00	0.00	0.00	0.00	0.00	0.47	0.00	0.00
ARKANSAS 2	0.00	0.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BEAVER VALLEY 1	0.00	0.00	0.00	1.24	0.00	0.00	0.00	0.00	0.61	0.00	0.00	0.00
BEAVER VALLEY 2	0.00	0.00	0.00	0.00	0.46	0.00	0.00	0.00	0.00	0.47	0.00	0.00
BIG ROCK POINT	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
BRAIDWOOD 1	1.24	0.00	0.00	0.00	0.48	0.00	0.00	0.00	0.00	0.50	0.00	0.00
BRAIDWOOD 2	0.00	0.00	0.00	0.58	1.17	0.97	0.00	0.46	0.46	0.00	0.00	0.00
BROWNS FERRY 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BROWNS FERRY 2	0.00	0.00	0.00	0.48	0.48	0.00	0.46	0.47	0.00	0.00	0.00	0.00
BROWNS FERRY 3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BRUNSWICK 1	0.00	1.34	0.00	0.53	0.00	0.99	0.00	0.00	0.00	0.00	0.00	0.00
BRUNSWICK 2	0.48	0.51	0.00	0.00	0.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00
BYRON 1	0.46	0.00	0.00	0.00	0.00	0.47	0.00	0.00	0.00	0.00	0.00	0.00
BYRON 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47	0.00
CALLAWAY	1.76	0.00	0.00	0.00	0.46	0.53	0.99	0.46	0.00	0.00	0.00	0.00
CALVERT CLIFFS 1	0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.00	0.46	0.00	0.49	0.00
CALVERT CLIFFS 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.51	0.00	0.00	0.00	0.00
CATAWBA 1	0.00	0.00	2.59	0.94	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.46
CATAWBA 2	0.46	0.00	0.50	0.00	0.00	0.46	0.00	0.00	0.56	0.00	0.00	0.46
CLINTON 1	0.00	0.00	0.00	0.00	0.00	1.80	0.00	0.00	0.00	0.00	0.00	0.00
COMANCHE PEAK 1	0.00	1.66	0.00	0.46	0.00	0.46	0.47	0.00	0.00	0.94	0.00	0.00
COMANCHE PEAK 2	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.00	0.96	0.00
COOK 1	0.00	0.00	0.56	0.00	0.00	0.00	0.00	0.00	0.63	0.00	0.00	0.00
COOK 2	1.71	0.47	0.00	0.60	0.48	0.00	0.00	0.00	0.00	0.00	0.00	1.03
COOPER STATION	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CRYSTAL RIVER 3	0.00	0.00	0.00	0.00	2.86	0.48	0.00	0.00	0.46	0.00	0.00	0.46
DAVIS-BESSE	0.46	0.00	0.00	0.00	0.00	0.46	0.00	0.00	0.00	0.00	0.67	0.00
DIABLO CANYON 1	0.97	1.33	0.99	0.00	0.00	0.47	0.47	0.00	0.00	0.00	0.00	0.00
DIABLO CANYON 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68	0.00	0.00
DRESDEN 2	0.00	1.30	0.50	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DRESDEN 3	0.00	0.00	0.00	0.63	0.00	0.00	0.00	0.00	1.03	0.79	0.00	0.48
DUANE ARNOLD	0.49	0.53	0.51	0.00	0.00	0.00	0.00	0.48	0.47	0.00	0.00	0.00
FARLEY 1	0.00	0.00	2.00	0.92	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
FARLEY 2	0.00	0.00	1.01	0.46	0.00	0.00	1.67	0.00	0.00	0.00	0.00	0.00
FERMI 2	0.00	0.00	2.18	0.00	0.00	0.00	0.00	0.00	0.00	0.48	0.00	0.48
FITZPATRICK	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.54	0.46
FORT CALHOUN	0.00	0.00	0.00	0.00	0.00	0.00	0.71	1.41	0.00	0.00	0.51	0.00
GINNA	1.00	0.00	0.00	0.00	0.00	0.99	0.00	0.00	0.00	0.00	0.00	0.00
GRAND GULF	3.41	0.00	1.54	1.00	0.47	0.00	1.04	0.46	0.00	0.00	0.00	0.50
HADDAM NECK	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HARRIS	0.00	0.00	1.06	0.00	0.00	0.00	0.00	1.28	0.00	0.00	0.00	0.00
HATCH 1	0.48	1.59	0.00	1.10	0.00	0.47	0.48	0.47	0.00	0.00	0.89	0.00
HATCH 2	0.00	0.62	0.00	0.00	0.00	0.00	0.47	0.00	1.07	0.00	0.00	0.00
HOPE CREEK	1.12	1.16	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48	0.00
INDIAN POINT 2	0.00	1.37	0.00	0.53	0.00	0.47	0.46	0.47	0.00	0.00	0.00	0.00
INDIAN POINT 3	0.00	1.03	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.00	0.00
KEWAUNEE	0.00	0.00	0.00	0.00	0.46	0.00	0.00	0.46	0.00	0.67	0.00	0.00
LASALLE 1	0.00	0.00	0.78	0.00	0.00	0.47	0.00	0.00	0.00	0.00	0.00	0.55
LASALLE 2	0.00	0.00	0.00	0.52	0.46	0.00	0.00	0.53	0.46	0.00	0.00	0.00
LIMERICK 1	0.00	0.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48
LIMERICK 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.49	0.00	0.00
MAINE YANKEE	0.00	0.00	0.69	0.00	0.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MCGUIRE 1	1.38	0.96	0.00	0.00	0.00	0.00	0.90	0.46	0.00	0.00	0.00	0.00
MCGUIRE 2	0.00	0.00	0.00	0.00	0.48	1.72	1.52	0.95	0.00	0.00	0.00	0.00
MILLSTONE 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46	0.00	0.00	0.00
MILLSTONE 2	0.00	0.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53	0.93	0.00
MILLSTONE 3	0.00	0.00	0.57	0.00	0.00	0.00	0.00	0.00	1.52	0.47	0.00	0.00
MONTICELLO	0.47	0.00	1.41	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46
NINE MILE PT. 1	0.48	0.96	0.00	0.53	0.53	0.90	4.03	0.72	0.00	0.86	0.00	0.00

TABLE 10.3 AUTOMATIC SCRAMS > 15%/1000 HOURS (CONTINUED)

Plant Name	Year - Calendar Quarter											
	90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
NINE MILE PT. 2	0.00	0.00	0.00	0.78	0.97	0.00	0.00	0.53	0.47	0.00	0.00	0.00
NORTH ANNA 1	0.00	0.00	0.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NORTH ANNA 2	0.00	0.00	0.00	0.48	0.00	0.74	0.00	0.46	0.00	0.00	0.51	0.00
OCONEE 1	0.00	0.00	0.46	0.00	0.46	0.00	0.57	0.00	0.00	0.00	0.00	0.47
OCONEE 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.00	0.00	0.46
OCONEE 3	0.00	0.00	0.46	0.46	0.78	0.99	0.46	1.67	0.00	0.47	0.00	0.00
OYSTER CREEK	0.00	0.00	0.00	0.52	0.00	0.00	0.55	0.47	0.00	0.00	0.00	0.00
PALISADES	0.00	0.00	0.00	0.96	0.48	0.00	0.00	2.06	0.50	0.00	0.00	0.00
PALO VERDE 1	0.00	0.00	0.00	0.50	0.47	0.00	0.00	0.46	0.46	0.00	0.00	0.00
PALO VERDE 2	0.00	0.00	0.00	0.50	0.00	1.04	0.00	0.00	0.46	0.00	0.00	0.00
PALO VERDE 3	0.46	0.00	0.00	0.00	1.08	0.46	0.00	0.00	0.00	0.48	0.00	0.00
PEACH BOTTOM 2	0.00	0.00	0.00	0.46	0.00	0.00	0.54	1.20	0.00	0.63	0.00	0.00
PEACH BOTTOM 3	0.00	0.49	0.00	0.60	0.00	0.00	0.00	0.53	0.62	0.49	0.00	0.00
PERRY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46	0.00	0.00	0.00	0.00
PILGRIM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.54	0.48	1.24	0.49
POINT BEACH 1	0.00	0.00	1.78	0.00	0.00	0.00	0.00	0.00	0.46	0.00	0.00	0.00
POINT BEACH 2	0.00	0.00	0.00	0.00	0.86	0.00	0.00	0.00	0.00	0.47	0.00	0.00
PRAIRIE ISLAND 1	0.46	0.00	0.00	0.47	0.00	0.00	0.00	0.00	0.00	0.52	0.00	0.00
PRAIRIE ISLAND 2	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
QUAD CITIES 1	0.00	0.00	0.00	0.00	0.49	0.52	0.00	0.00	0.00	0.00	0.00	0.00
QUAD CITIES 2	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.44	2.57	0.00
RIVER BEND	1.51	0.00	0.00	0.00	0.00	1.91	0.00	0.00	0.52	0.00	0.00	0.78
ROBINSON 2	0.00	0.00	0.00	0.47	0.00	0.00	0.00	0.73	0.00	0.00	0.00	0.00
SALEM 1	0.00	0.00	0.67	0.00	0.00	0.00	0.00	0.00	0.00	0.53	0.52	0.48
SALEM 2	0.00	0.00	0.00	0.00	1.05	0.00	0.00	0.56	0.00	0.58	0.00	0.00
SAN ONOFRE 1	0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.00	0.00	NA	NA	NA
SAN ONOFRE 2	0.50	0.48	0.00	0.00	0.00	0.00	0.47	0.46	0.00	0.00	0.00	0.00
SAN ONOFRE 3	0.00	0.48	0.00	0.00	0.00	0.00	0.62	0.00	0.00	0.48	0.00	0.46
SEABROOK	0.54	0.48	0.99	1.89	0.00	0.00	0.00	0.00	0.88	0.50	0.00	1.02
SEQUOYAH 1	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.97	0.78	0.00	0.00
SEQUOYAH 2	0.00	0.00	0.00	0.00	0.50	0.58	0.90	0.46	0.45	0.00	0.00	0.00
SOUTH TEXAS 1	0.90	0.00	0.48	0.00	1.01	0.47	0.00	0.00	0.00	0.00	0.00	0.00
SOUTH TEXAS 2	0.00	0.97	0.47	0.00	2.23	0.49	0.00	0.00	0.00	2.70	0.00	0.00
ST. LUCIE 1	0.00	0.00	0.00	0.93	0.00	0.00	0.00	0.50	0.00	0.00	0.00	0.00
ST. LUCIE 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47	0.00	0.00	0.00	0.00
SUMMER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67	0.00	0.00
SURRY 1	0.00	0.00	0.00	0.00	0.00	0.00	0.70	0.00	0.00	0.97	0.00	0.00
SURRY 2	0.00	0.00	0.00	0.54	0.52	0.00	0.00	0.00	0.00	0.00	0.74	1.81
SUSQUEHANNA 1	0.00	0.00	0.00	0.48	0.00	0.00	0.00	0.00	0.46	0.00	0.00	1.07
SUSQUEHANNA 2	0.00	0.00	0.00	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
THREE MILE ISL 1	0.00	0.00	0.00	0.48	0.00	0.00	0.00	0.46	0.00	0.48	0.00	0.00
TROJAN	0.00	0.71	0.00	0.00	0.00	0.00	1.11	0.96	0.00	NA	NA	NA
TURKEY POINT 3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TURKEY POINT 4	0.00	0.00	0.00	0.00	0.00	0.49	0.00	0.00	0.00	0.00	1.03	0.48
VERMONT YANKEE	0.54	0.48	1.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
VOGTLE 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64	0.46
VOGTLE 2	0.00	1.04	0.47	0.00	0.00	0.61	0.77	0.00	0.00	0.00	0.00	0.60
WASH. NUCLEAR 2	0.51	0.00	0.00	0.00	0.54	0.00	0.00	0.00	0.00	1.17	0.00	0.49
WATERFORD 3	0.00	0.00	1.17	0.46	0.46	0.00	0.00	0.00	0.00	0.47	0.46	0.00
WOLF CREEK	0.00	0.00	0.00	0.00	0.00	0.96	0.00	0.00	0.46	0.00	0.00	0.00
YANKEE-ROWE	0.81	0.00	0.51	0.46	0.00	0.00	NA	NA	NA	NA	NA	NA
ZION 1	0.00	0.00	0.00	0.00	0.76	0.00	0.00	0.00	0.00	0.00	0.00	0.46
ZION 2	0.73	0.57	2.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AVERAGE	0.23	0.20	0.26	0.22	0.21	0.20	0.20	0.21	0.17	0.22	0.13	0.14

NA - The plant is not yet critical.
- The plant is permanently shutdown.

TABLE 10.4 AUTOMATIC SCRAMS <= 15% POWER

Plant Name	Year - Calendar Quarter											
	90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
ARKANSAS 1	0	0	0	0	0	0	0	0	0	0	0	0
ARKANSAS 2	0	0	0	0	0	0	0	0	0	0	0	0
BEAVER VALLEY 1	0	0	0	0	0	0	0	0	0	0	0	0
BEAVER VALLEY 2	0	0	0	0	0	0	0	0	0	0	0	0
BIG ROCK POINT	0	0	0	0	0	0	1	0	0	0	0	0
BRAIDWOOD 1	0	0	0	0	0	0	0	0	0	0	0	0
BRAIDWOOD 2	0	0	0	0	0	0	0	0	0	0	0	0
BROWNS FERRY 1	0	0	0	0	0	0	0	0	0	0	0	0
BROWNS FERRY 2	0	0	0	0	0	0	0	0	0	0	0	0
BROWNS FERRY 3	0	0	0	0	0	0	0	0	0	0	0	0
BRUNSWICK 1	0	0	0	0	0	0	0	0	0	0	0	0
BRUNSWICK 2	0	0	0	0	1	0	0	0	0	0	0	0
BYRON 1	0	0	0	0	0	0	0	0	0	0	0	0
BYRON 2	0	0	0	0	1	0	0	0	0	0	0	0
CALLAWAY	0	0	0	0	0	0	0	0	0	0	0	0
CALVERT CLIFFS 1	0	0	0	0	0	0	0	0	0	0	0	0
CALVERT CLIFFS 2	0	0	1	0	0	0	0	0	0	0	1	0
CATAWBA 1	0	0	0	0	0	0	0	0	0	0	1	0
CATAWBA 2	0	0	0	0	0	0	0	0	0	0	0	0
CLINTON 1	0	0	0	0	0	0	0	0	0	0	0	0
COMANCHE PEAK 1	0	0	0	0	0	0	0	0	0	0	0	0
COMANCHE PEAK 2	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0
COOK 1	0	0	0	0	0	0	0	0	0	0	0	0
COOK 2	0	0	0	0	0	0	0	1	0	0	0	0
COOPER STATION	0	0	0	0	0	0	0	0	0	0	0	0
CRYSTAL RIVER 3	0	0	0	0	1	0	0	0	0	0	0	0
DAVIS-BESSE	0	0	0	0	0	0	0	0	0	0	0	0
DIABLO CANYON 1	0	0	0	0	0	0	0	0	0	0	0	0
DIABLO CANYON 2	0	0	0	0	0	0	0	0	0	0	0	0
DRESDEN 2	0	0	0	0	1	0	0	0	0	0	0	0
DRESDEN 3	0	0	0	0	0	0	0	0	0	0	0	0
DUANE ARNOLD	0	0	0	0	0	0	0	0	0	0	0	0
FARLEY 1	0	0	0	0	0	0	0	0	0	0	0	0
FARLEY 2	0	0	0	0	0	1	1	0	0	0	0	0
FERMI 2	1	0	0	0	0	0	0	0	0	0	1	0
FITZPATRICK	1	0	0	0	0	0	0	0	0	0	1	0
FORT CALHOUN	0	0	0	0	0	0	0	0	0	0	0	0
GINNA	1	0	0	0	0	0	0	0	0	0	0	0
GRAND GULF	0	0	0	0	0	0	1	0	0	0	0	0
HADDAM NECK	0	0	0	0	0	1	0	0	0	0	0	1
HARRIS	0	0	0	0	0	0	0	0	0	0	0	0
HATCH 1	0	0	0	0	0	0	0	0	0	0	1	0
HATCH 2	0	1	0	0	0	0	0	0	0	0	0	0
HOPE CREEK	0	0	0	0	0	0	0	0	0	0	0	0
INDIAN POINT 2	0	0	0	0	0	0	0	0	0	0	0	0
INDIAN POINT 3	0	0	0	0	0	0	0	1	0	0	0	0
KEWAUNEE	0	0	0	0	0	0	0	0	0	1	0	0
LASALLE 1	0	0	0	0	0	0	0	0	0	0	0	0
LASALLE 2	0	0	0	0	0	0	0	0	0	0	0	0
LIMERICK 1	0	0	0	0	0	0	0	0	0	0	0	0
LIMERICK 2	0	0	0	0	0	0	0	0	0	0	0	0
MAINE YANKEE	0	0	1	0	0	0	0	0	0	0	0	0
MCGUIRE 1	0	0	0	0	0	0	0	0	0	0	0	0
MCGUIRE 2	0	0	0	0	0	0	0	0	0	0	0	0
MILLSTONE 1	0	0	0	0	0	0	0	0	0	0	0	0
MILLSTONE 2	0	0	0	0	0	0	0	0	0	1	0	1
MILLSTONE 3	0	0	0	0	0	0	0	0	0	0	0	0
MONTICELLO	0	1	1	0	0	0	0	0	0	1	0	0
NINE MILE PT. 1	1	0	0	1	0	0	0	0	0	0	1	0

TABLE 10.4 AUTOMATIC SCRAMS <= 15% POWER (CONTINUED)

Plant Name	Year - Calendar Quarter											
	90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
NINE MILE PT. 2	0	0	0	0	0	0	0	0	0	0	0	0
NORTH ANNA 1	0	0	0	0	0	0	0	0	0	0	0	0
NORTH ANNA 2	1	0	0	0	0	0	0	0	0	0	0	0
OCONEE 1	0	0	0	0	0	0	1	0	1	0	0	0
OCONEE 2	0	0	0	0	0	0	0	0	0	0	0	0
OCONEE 3	0	0	0	0	0	0	0	0	0	0	0	0
OYSTER CREEK	0	0	0	0	0	0	1	1	0	0	0	0
PALISADES	0	0	0	0	0	0	0	0	0	0	0	0
PALO VERDE 1	0	0	0	0	0	0	0	0	0	0	0	0
PALO VERDE 2	0	0	0	0	0	0	[illegible]	0	0	0	0	0
PALO VERDE 3	0	0	0	0	0	0	[illegible]	0	0	0	0	0
PEACH BOTTOM 2	0	0	0	0	0	0	0	0	0	0	0	0
PEACH BOTTOM 3	0	0	0	0	0	0	1	0	0	0	0	0
PERRY	0	0	0	0	0	0	[illegible]	0	0	0	0	0
PILGRIM	0	0	0	0	0	0	[illegible]	0	0	0	0	0
POINT BEACH 1	0	0	0	0	0	0	0	0	0	0	0	0
POINT BEACH 2	0	0	0	0	0	0	0	0	0	0	0	0
PRAIRIE ISLAND 1	0	0	0	0	0	0	0	0	0	0	0	0
PRAIRIE ISLAND 2	1	0	0	0	0	0	0	0	0	0	0	0
QUAD CITIES 1	0	0	0	0	0	0	0	0	0	0	0	0
QUAD CITIES 2	1	0	0	0	0	0	0	0	0	0	0	0
RIVER BEND	0	0	0	0	0	0	0	0	0	0	0	0
ROBINSON 2	0	0	0	0	0	0	0	0	0	0	0	0
SALEM 1	0	0	0	0	0	0	0	0	0	0	0	0
SALEM 2	0	0	0	0	0	0	2	0	0	0	0	0
SAN ONOFRE 1	0	0	0	0	0	0	0	0	0	NA	NA	NA
SAN ONOFRE 2	0	0	0	0	0	0	0	0	0	0	0	0
SAN ONOFRE 3	0	0	0	0	0	0	0	0	0	0	0	0
SEABROOK	0	0	0	0	0	0	0	1	0	0	0	0
SEQUOYAH 1	0	0	0	0	0	0	0	0	0	0	0	0
SEQUOYAH 2	1	0	0	0	0	0	0	0	0	0	0	0
SOUTH TEXAS 1	0	0	0	0	0	0	0	0	0	0	0	0
SOUTH TEXAS 2	0	0	0	0	0	0	0	0	0	0	0	0
ST. LUCIE 1	0	0	0	0	0	0	0	0	0	0	0	0
ST. LUCIE 2	0	0	0	0	0	0	0	0	0	0	0	0
SUMMER	0	0	0	0	0	0	2	0	0	0	0	0
SURRY 1	0	0	0	0	0	0	0	0	0	0	0	0
SURRY 2	0	0	0	0	0	0	0	0	0	0	0	0
SUSQUEHANNA 1	0	0	0	0	0	0	0	0	0	0	0	0
SUSQUEHANNA 2	0	0	0	0	0	0	0	0	0	0	0	0
THREE MILE ISL 1	0	0	0	1	0	0	0	0	0	0	0	0
TROJAN	0	0	0	0	0	0	0	0	0	NA	NA	NA
TURKEY POINT 3	0	0	0	0	0	0	0	0	0	0	0	0
TURKEY POINT 4	0	0	0	0	0	0	0	0	0	0	0	0
VERMONT YANKEE	0	0	0	0	0	1	0	0	0	0	0	0
VOGTLE 1	0	0	0	0	0	0	0	0	0	0	0	0
VOGTLE 2	0	0	0	0	0	0	0	0	0	0	0	0
WASH. NUCLEAR 2	0	0	0	0	0	0	0	0	0	0	0	0
WATERFORD 3	0	0	1	0	0	0	0	0	0	0	0	0
WOLF CREEK	0	0	0	0	0	0	0	0	0	0	0	0
YANKEE-ROWE	0	0	0	0	0	0	NA	NA	NA	NA	NA	NA
ZION 1	0	0	0	0	0	0	0	0	0	0	0	0
ZION 2	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	8	2	4	2	4	3	10	4	1	3	6	2

NA - The plant is not yet critical.
- The plant is permanently shutdown.

TABLE 10.5 SAFETY SYSTEM ACTUATIONS

Plant Name	Year - Calendar Quarter											
	90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
ARKANSAS 1	1	0	0	0	0	0	0	0	0	1	0	0
ARKANSAS 2	0	0	0	0	0	0	0	1	0	0	0	0
BEAVER VALLEY 1	0	0	0	0	0	0	0	0	0	0	0	0
BEAVER VALLEY 2	1	0	0	0	0	0	1	0	0	1	0	0
BIG ROCK POINT	0	0	1	0	0	0	0	0	1	0	0	1
BRAIDWOOD 1	0	0	0	0	0	0	0	0	1	0	0	0
BRAIDWOOD 2	0	0	0	0	0	0	0	0	0	0	1	0
BROWNS FERRY 1	0	0	1	0	0	0	0	0	0	1	1	0
BROWNS FERRY 2	0	0	0	0	0	0	0	0	0	1	1	0
BROWNS FERRY 3	0	0	0	0	0	0	0	0	0	0	1	0
BRUNSWICK 1	0	0	0	1	0	2	0	0	0	1	0	0
BRUNSWICK 2	1	1	1	0	3	1	0	0	0	1	0	0
BYRON 1	0	0	0	0	1	0	0	0	0	0	0	0
BYRON 2	0	0	0	0	0	0	0	0	0	0	0	1
CALLAWAY	1	0	0	0	0	0	0	0	0	0	0	0
CALVERT CLIFFS 1	0	0	0	0	0	0	0	0	0	0	1	0
CALVERT CLIFFS 2	0	1	0	0	0	0	0	0	0	0	1	0
CATAWBA 1	0	0	0	4	0	0	0	0	0	0	0	0
CATAWBA 2	0	0	0	0	0	0	0	0	0	0	0	0
CLINTON 1	0	0	0	0	0	0	0	0	0	0	0	0
COMANCHE PEAK 1	0	7	1	2	0	0	0	0	0	0	0	0
COMANCHE PEAK 2	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0
COOK 1	0	0	1	0	0	0	0	0	0	0	0	0
COOK 2	0	0	0	0	0	0	0	0	0	0	0	0
COOPER STATION	2	0	1	0	2	0	0	0	0	0	0	0
CRYSTAL RIVER 3	0	0	1	0	2	1	0	0	0	1	1	0
DAVIS-BESSE	0	0	0	0	0	0	0	0	0	0	0	0
DIABLO CANYON 1	1	2	1	0	0	0	0	0	0	0	0	0
DIABLO CANYON 2	0	0	0	0	1	0	0	0	0	0	0	0
DRESDEN 2	2	0	0	0	0	0	0	0	0	0	0	0
DRESDEN 3	0	0	0	0	0	0	0	0	0	0	0	0
DUANE ARNOLD	0	0	0	1	0	0	1	1	0	3	0	0
FARLEY 1	0	0	0	1	0	0	0	0	2	0	0	0
FARLEY 2	1	0	0	0	0	0	1	0	0	1	0	0
FERMI 2	0	0	1	0	0	1	0	0	2	0	0	1
FITZPATRICK	0	0	0	0	0	0	0	0	0	0	1	0
FORT CALHOUN	0	0	1	0	0	0	0	1	0	0	2	0
GINNA	0	2	0	0	0	0	0	0	1	0	0	0
GRAND GULF	1	0	2	2	0	0	0	0	0	0	0	1
HADDAM NECK	0	0	0	0	0	0	0	0	0	0	2	0
HARRIS	0	0	0	0	0	0	0	0	0	0	1	0
HATCH 1	0	2	0	1	0	0	0	2	0	0	0	0
HATCH 2	0	0	1	0	0	0	1	0	1	0	0	0
HOPE CREEK	2	0	2	1	0	1	0	0	0	0	1	0
INDIAN POINT 2	1	2	1	0	0	1	0	0	0	3	0	0
INDIAN POINT 3	0	0	0	0	0	0	0	0	0	0	0	0
KEWAUNEE	0	0	0	0	0	0	0	0	0	0	0	0
LASALLE 1	0	0	0	0	0	0	0	0	1	1	0	2
LASALLE 2	0	0	0	0	0	3	0	0	0	0	1	0
LIMERICK 1	1	0	1	0	0	0	0	0	0	0	0	1
LIMERICK 2	0	1	0	0	0	0	0	0	0	3	0	1
MAINE YANKEE	0	0	0	0	0	1	0	0	0	0	0	0
MCGUIRE 1	0	2	0	0	0	0	0	0	0	0	0	0
MCGUIRE 2	0	0	1	0	0	0	0	0	0	1	0	0
MILLSTONE 1	0	0	0	0	0	0	0	0	0	0	0	0
MILLSTONE 2	0	0	0	0	0	0	0	1	0	0	0	0
MILLSTONE 3	0	0	0	0	0	0	0	0	0	0	0	0
MONTICELLO	0	0	1	2	0	0	0	0	0	0	0	0
NINE MILE PT. 1	1	0	0	0	0	0	0	0	0	0	0	1

TABLE 10.5 SAFETY SYSTEM ACTUATIONS (CONTINUED)

Plant Name	Year - Calendar Quarter											
	90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
NINE MILE PT. 2	1	0	1	0	1	3	0	2	1	1	0	1
NORTH ANNA 1	0	0	2	1	0	0	0	0	0	1	0	0
NORTH ANNA 2	1	0	1	1	0	0	1	1	0	0	0	0
OCONEE 1	0	0	1	0	0	0	0	0	0	0	0	0
OCONEE 2	0	0	0	0	0	0	0	0	2	0	0	0
OCONEE 3	1	0	0	1	0	2	0	0	0	0	0	0
OYSTER CREEK	0	0	0	2	0	0	2	1	0	0	0	0
PALISADES	1	1	0	0	1	1	3	0	0	0	0	1
PALO VERDE 1	0	1	0	0	1	0	1	0	0	1	0	0
PALO VERDE 2	0	0	0	0	0	1	1	0	1	1	0	0
PALO VERDE 3	0	0	1	1	3	1	1	0	0	1	0	0
PEACH BOTTOM 2	0	0	0	0	0	0	0	0	0	1	0	0
PEACH BOTTOM 3	1	0	0	0	0	0	0	1	1	0	0	1
PERRY	0	0	0	0	0	0	0	1	0	0	1	0
PILGRIM	0	0	0	0	2	0	1	1	1	2	1	2
POINT BEACH 1	0	0	1	0	0	0	1	0	0	0	0	1
POINT BEACH 2	0	0	0	0	0	0	0	0	1	0	0	0
PRAIRIE ISLAND 1	0	0	0	0	0	0	0	0	0	0	0	0
PRAIRIE ISLAND 2	0	0	0	0	0	0	0	0	0	0	0	0
QUAD CITIES 1	0	0	0	0	0	0	0	0	0	0	0	0
QUAD CITIES 2	0	0	0	0	0	2	1	0	0	0	0	0
RIVER BEND	1	0	0	0	0	0	0	0	0	0	0	1
ROBINSON 2	0	0	0	0	0	0	0	2	0	0	0	0
SALEM 1	0	0	0	2	0	0	1	0	0	0	1	0
SALEM 2	0	0	0	0	0	1	0	0	0	0	1	0
SAN ONOFRE 1	0	0	0	0	0	0	0	0	0	NA	NA	NA
SAN ONOFRE 2	1	0	0	0	0	0	0	0	0	0	0	0
SAN ONOFRE 3	0	0	0	0	0	1	0	0	0	0	0	0
SEABROOK	0	0	1	1	0	0	0	0	0	0	0	0
SEQUOYAH 1	0	0	0	0	0	0	1	0	1	0	1	0
SEQUOYAH 2	0	0	0	0	0	0	0	1	1	0	1	0
SOUTH TEXAS 1	1	5	1	0	0	0	0	0	0	0	0	0
SOUTH TEXAS 2	0	1	0	0	1	0	0	0	0	0	0	0
ST. LUCIE 1	0	0	0	0	0	0	0	0	0	0	0	0
ST. LUCIE 2	1	0	0	0	0	0	0	0	0	1	0	0
SUMMER	0	0	0	1	1	0	0	0	1	0	0	0
SURRY 1	2	0	0	1	0	0	0	0	0	2	0	0
SURRY 2	0	0	0	1	0	0	0	0	0	0	0	0
SUSQUEHANNA 1	1	0	0	1	0	0	0	0	0	0	0	1
SUSQUEHANNA 2	0	0	0	0	0	1	0	0	0	0	0	0
THREE MILE ISL 1	0	0	0	0	0	0	0	0	0	0	0	0
TROJAN	0	0	0	1	0	1	0	0	0	NA	NA	NA
TURKEY POINT 3	0	0	0	0	0	0	0	1	0	0	0	0
TURKEY POINT 4	0	1	0	0	0	1	0	1	0	0	0	0
VERMONT YANKEE	0	0	2	0	0	0	1	0	0	0	0	0
VOGTLE 1	0	0	0	0	0	0	0	0	0	0	2	0
VOGTLE 2	0	0	0	1	0	0	1	0	0	0	0	0
WASH. NUCLEAR 2	1	0	0	0	2	0	0	1	0	0	1	0
WATERFORD 3	0	0	0	1	1	0	0	0	1	0	0	0
WOLF CREEK	2	0	0	0	0	0	0	0	0	0	1	0
YANKEE-ROWE	0	0	2	0	0	0	NA	NA	NA	NA	NA	NA
ZION 1	0	0	1	0	2	0	0	1	3	0	0	0
ZION 2	0	1	0	0	0	0	0	0	0	0	0	0
TOTAL	31	25	33	31	24	26	20	20	23	30	25	17

NA - The plant is not yet licensed.
- The plant is permanently shutdown.

TABLE 10.6 SIGNIFICANT EVENTS

Plant Name	Year - Calendar Quarter											
	90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
ARKANSAS 1	0	0	0	0	0	0	0	0	0	0	0	0
ARKANSAS 2	0	0	0	0	0	0	0	0	0	0	0	0
BEAVER VALLEY 1	1	0	0	0	0	0	0	0	0	0	0	0
BEAVER VALLEY 2	0	0	0	0	0	0	0	0	0	0	0	0
BIG ROCK POINT	0	0	1	0	0	0	0	0	0	0	0	0
BRAIDWOOD 1	1	0	0	0	0	0	0	0	0	0	0	0
BRAIDWOOD 2	0	0	0	0	0	0	0	0	0	0	0	0
BROWNS FERRY 1	0	0	0	0	0	0	0	0	0	0	0	0
BROWNS FERRY 2	0	0	0	0	0	0	0	0	0	0	0	0
BROWNS FERRY 3	0	0	0	0	0	0	0	0	0	0	0	0
BRUNSWICK 1	0	0	0	0	0	0	1	0	0	0	0	0
BRUNSWICK 2	0	0	0	0	0	0	1	0	0	0	0	0
BYRON 1	0	0	0	0	0	0	0	0	0	0	0	0
BYRON 2	0	0	0	0	0	0	0	0	0	0	0	0
CALLAWAY	0	0	0	0	0	0	0	0	1	0	0	0
CALVERT CLIFFS 1	0	0	0	0	0	0	0	0	0	0	0	0
CALVERT CLIFFS 2	0	0	0	0	0	0	0	0	0	0	0	0
CATAWBA 1	0	0	0	0	0	0	0	0	0	1	0	0
CATAWBA 2	0	0	0	0	0	0	0	0	0	1	0	0
CLINTON 1	0	0	0	0	0	0	0	0	0	0	0	0
COMANCHE PEAK 1	0	0	0	0	0	0	0	0	0	0	0	0
COMANCHE PEAK 2	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0
COOK 1	0	0	0	0	0	0	0	0	0	0	0	0
COOK 2	0	0	0	0	0	0	0	0	0	0	0	0
COOPER STATION	0	0	0	0	0	0	0	0	0	0	0	0
CRYSTAL RIVER 3	0	0	0	0	1	0	0	0	0	1	0	0
DAVIS-BESSE	0	0	0	0	0	0	0	0	0	0	0	0
DIABLO CANYON 1	0	1	0	0	0	0	0	0	0	0	0	0
DIABLO CANYON 2	0	0	0	0	0	0	0	0	0	0	0	0
DRESDEN 2	1	0	0	1	0	0	1	1	0	0	0	0
DRESDEN 3	0	0	0	1	0	0	1	0	0	0	0	0
DUANE ARNOLD	1	0	0	0	0	0	0	0	0	0	0	0
FARLEY 1	0	0	0	0	0	0	0	0	0	0	0	0
FARLEY 2	0	0	0	0	0	0	0	0	0	0	0	0
FERMI 2	0	0	0	0	0	0	0	0	0	0	0	0
FITZPATRICK	0	1	2	0	0	0	0	0	0	0	0	0
FORT CALHOUN	0	0	1	0	0	0	0	1	0	0	0	0
GINNA	1	0	0	0	0	0	0	0	0	0	0	0
GRAND GULF	0	0	0	0	0	0	0	0	0	0	0	0
HADDAM NECK	0	0	0	0	0	0	0	0	0	0	1	0
HARRIS	0	0	2	0	0	0	0	0	0	0	0	0
HATCH 1	0	1	0	0	0	0	1	0	0	0	0	0
HATCH 2	0	0	0	0	0	0	1	0	0	0	0	0
HOPE CREEK	0	0	0	0	0	0	0	0	0	0	0	0
INDIAN POINT 2	0	0	0	0	0	0	1	0	0	0	0	0
INDIAN POINT 3	1	0	0	0	0	0	0	0	0	1	0	0
KEWAUNEE	0	0	0	0	0	0	0	0	0	0	0	0
LASALLE 1	0	0	0	0	0	0	0	0	0	0	0	0
LASALLE 2	0	0	0	0	0	0	0	1	0	0	0	0
LIMERICK 1	0	0	0	0	0	0	0	0	0	0	0	0
LIMERICK 2	0	0	0	0	0	0	0	0	0	0	0	0
MAINE YANKEE	0	0	0	0	0	0	0	0	0	0	0	0
MCGUIRE 1	0	1	0	0	0	0	0	0	0	0	0	0
MCGUIRE 2	0	0	0	0	0	0	0	0	0	0	0	0
MILLSTONE 1	1	0	0	0	0	0	0	0	0	0	0	0
MILLSTONE 2	0	0	0	0	0	0	0	1	0	0	0	1
MILLSTONE 3	1	0	0	1	0	0	0	0	0	0	0	0
MONTICELLO	0	0	0	1	0	0	0	0	0	0	0	0
NINE MILE PT. 1	1	0	0	0	0	1	0	0	0	0	0	0

TABLE 10.6 SIGNIFICANT EVENTS (CONTINUED)

Plant Name	Year - Calendar Quarter											
	90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
NINE MILE PT. 2	0	0	0	1	0	1	0	0	0	0	0	0
NORTH ANNA 1	0	0	0	0	0	0	0	0	0	0	0	0
NORTH ANNA 2	0	0	0	0	0	0	0	0	0	0	0	0
OCONEE 1	0	0	0	1	0	0	0	0	0	0	0	0
OCONEE 2	0	0	0	0	0	0	0	0	1	0	0	0
OCONEE 3	0	1	0	0	0	0	0	0	0	0	0	0
OYSTER CREEK	0	1	0	0	0	0	0	0	0	1	0	0
PALISADES	0	0	0	0	0	1	0	0	0	0	1	0
PALO VERDE 1	0	0	0	0	0	0	0	0	0	0	0	0
PALO VERDE 2	0	0	0	0	0	0	0	0	0	1	0	0
PALO VERDE 3	0	0	0	0	0	0	0	0	0	0	0	0
PEACH BOTTOM 2	0	0	0	0	0	0	0	0	0	0	0	0
PEACH BOTTOM 3	0	0	0	1	0	0	0	0	0	0	0	0
PERRY	0	1	0	0	0	1	0	0	0	0	1	0
PILGRIM	0	0	0	0	0	0	0	0	0	0	0	0
POINT BEACH 1	0	0	0	0	0	0	0	0	0	0	0	0
POINT BEACH 2	0	0	0	0	0	0	0	0	0	0	0	0
PRAIRIE ISLAND 1	0	0	0	0	0	0	0	0	0	0	0	0
PRAIRIE ISLAND 2	0	0	0	0	0	1	0	0	0	0	0	0
QUAD CITIES 1	0	0	0	0	0	0	0	0	0	0	0	0
QUAD CITIES 2	0	0	0	0	0	0	0	0	0	0	0	0
RIVER BEND	0	0	0	0	0	0	0	0	1	0	0	0
ROBINSON 2	0	1	0	0	0	0	0	2	0	0	0	0
SALEM 1	0	0	0	0	0	0	0	0	0	0	0	0
SALEM 2	0	0	0	0	1	0	0	0	0	0	1	0
SAN ONOFRE 1	0	0	0	0	0	0	0	0	0	NA	NA	NA
SAN ONOFRE 2	1	0	0	0	0	0	0	0	0	1	0	0
SAN ONOFRE 3	1	0	0	0	0	0	0	0	0	1	0	0
SEABROOK	0	0	0	0	0	0	0	0	0	0	0	0
SEQUOYAH 1	1	0	0	0	0	0	0	1	1	0	0	0
SEQUOYAH 2	0	0	0	0	0	0	0	1	2	0	0	0
SOUTH TEXAS 1	0	0	0	0	0	0	0	0	0	1	1	0
SOUTH TEXAS 2	0	0	0	0	0	0	0	0	0	1	1	0
ST. LUCIE 1	0	0	0	0	0	0	0	0	0	0	0	0
ST. LUCIE 2	0	0	0	0	0	0	0	0	0	0	0	0
SUMMER	0	0	0	0	0	0	0	0	0	0	0	0
SURRY 1	1	0	0	0	0	0	0	0	0	0	0	0
SURRY 2	1	0	0	0	0	0	0	0	0	0	0	0
SUSQUEHANNA 1	0	0	0	0	0	0	0	0	0	0	0	0
SUSQUEHANNA 2	0	0	0	0	0	0	0	0	0	0	0	0
THREE MILE ISL 1	0	0	0	0	0	0	0	0	0	1	0	0
TROJAN	0	1	1	0	0	0	0	0	0	NA	NA	NA
TURKEY POINT 3	0	0	0	0	0	0	0	1	0	0	0	0
TURKEY POINT 4	0	0	0	0	0	0	0	1	0	0	0	0
VERMONT YANKEE	0	0	1	0	0	0	0	0	0	0	0	0
VOGTLE 1	0	0	0	0	0	0	0	0	1	0	0	0
VOGTLE 2	0	1	0	0	0	0	0	0	0	0	0	0
WASH. NUCLEAR 2	0	0	0	0	0	1	0	1	0	0	0	0
WATERFORD 3	0	0	0	0	0	0	0	0	0	0	0	0
WOLF CREEK	1	0	0	0	0	0	0	0	0	0	0	0
YANKEE-ROWE	0	1	1	0	0	0	NA	NA	NA	NA	NA	NA
ZION 1	0	0	0	0	0	0	0	0	0	0	0	0
ZION 2	0	1	0	0	0	0	0	0	0	0	0	0
TOTAL	15	12	9	7	2	6	7	11	7	11	6	1

NA - The plant is not yet licensed.
- The plant is permanently shutdown.

TABLE 10.7 SAFETY SYSTEM FAILURES

Plant Name	Year - Calendar Quarter											
	90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
ARKANSAS 1	2	0	1	1	2	0	1	0	0	0	0	0
ARKANSAS 2	0	1	3	2	3	0	0	1	0	0	0	0
BEAVER VALLEY 1	0	0	3	0	3	1	0	0	1	1	0	0
BEAVER VALLEY 2	3	0	1	0	0	0	1	0	0	2	0	0
BIG ROCK POINT	0	0	0	0	0	2	0	0	0	0	1	1
BRAIDWOOD 1	0	1	0	1	0	2	0	1	0	1	0	0
BRAIDWOOD 2	0	0	0	1	0	1	0	1	0	1	0	0
BROWNS FERRY 1	1	0	2	0	0	0	0	0	1	0	0	0
BROWNS FERRY 2	1	0	3	1	0	0	1	0	2	1	0	0
BROWNS FERRY 3	1	0	2	0	0	0	0	0	1	0	0	0
BRUNSWICK 1	1	2	2	2	0	0	2	2	0	0	1	0
BRUNSWICK 2	3	1	2	1	2	0	2	3	0	0	2	0
BYRON 1	0	0	0	1	1	0	0	1	0	1	0	0
BYRON 2	0	0	0	1	0	0	0	1	0	1	0	0
CALLAWAY	0	0	1	0	0	0	0	0	0	0	0	1
CALVERT CLIFFS 1	2	1	0	0	2	1	0	0	0	1	1	0
CALVERT CLIFFS 2	1	1	1	0	0	2	0	1	0	2	0	0
CATAWBA 1	2	3	1	3	2	2	0	0	1	2	0	0
CATAWBA 2	2	3	1	2	2	2	0	0	1	2	0	0
CLINTON 1	2	0	0	1	0	0	0	0	0	0	0	0
COMANCHE PEAK 1	1	1	0	0	2	0	2	0	0	0	0	0
COMANCHE PEAK 2	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0
COOK 1	0	0	0	2	0	0	0	2	0	0	0	0
COOK 2	0	0	0	1	0	0	0	2	1	0	0	0
COOPER STATION	0	0	0	1	1	3	3	3	1	3	3	1
CRYSTAL RIVER 3	0	0	1	0	2	0	2	1	0	0	1	0
DAVIS-BESSE	0	0	0	0	0	1	0	0	0	0	0	0
DIABLO CANYON 1	0	1	0	0	2	0	1	3	1	2	0	0
DIABLO CANYON 2	0	0	0	2	2	1	0	3	0	4	0	0
DRESDEN 2	0	0	2	4	3	1	1	1	1	1	0	4
DRESDEN 3	0	0	2	1	3	1	2	1	5	2	0	3
DUANE ARNOLD	0	0	0	3	0	2	1	1	2	0	0	1
FARLEY 1	0	0	0	0	0	0	0	0	0	0	0	0
FARLEY 2	0	0	1	0	0	0	0	0	0	0	0	0
FERMI 2	1	2	1	1	1	1	2	0	0	2	1	0
FITZPATRICK	1	0	4	4	7	7	4	0	2	2	2	2
FORT CALHOUN	0	2	3	3	0	2	1	0	0	1	1	0
GINNA	1	0	0	0	0	0	0	0	0	1	0	0
GRAND GULF	3	0	0	0	0	0	3	0	1	1	0	2
HADDAM NECK	4	5	0	1	2	3	3	0	0	0	2	3
HARRIS	0	2	1	1	0	0	0	0	0	2	1	0
HATCH 1	0	1	0	1	2	1	2	0	0	0	1	0
HATCH 2	1	0	0	1	0	1	1	0	0	0	1	2
HOPE CREEK	3	0	3	2	0	1	2	0	1	0	0	2
INDIAN POINT 2	0	0	1	1	0	0	1	0	0	1	0	3
INDIAN POINT 3	2	0	0	1	1	0	1	0	2	0	3	2
KEWAUNEE	0	2	0	0	1	0	0	0	1	2	0	0
LASALLE 1	1	0	0	1	3	1	2	0	0	3	1	3
LASALLE 2	0	1	1	0	1	0	2	2	0	2	0	3
LIMERICK 1	0	1	3	0	1	1	1	1	0	1	0	0
LIMERICK 2	0	0	1	1	1	5	3	0	0	0	0	1
MAINE YANKEE	1	2	0	0	1	2	1	0	1	0	1	1
MCGUIRE 1	4	3	3	2	2	0	1	0	0	0	2	0
MCGUIRE 2	4	2	2	2	2	0	2	0	0	0	1	0
MILLSTONE 1	3	0	2	4	1	5	1	1	1	1	1	2
MILLSTONE 2	4	1	0	1	1	1	1	2	0	2	1	3
MILLSTONE 3	0	1	3	0	2	3	0	3	0	1	2	1
MONTICELLO	1	0	3	1	0	0	0	0	2	3	0	0
NINE MILE PT. 1	1	1	0	1	1	2	0	0	0	0	0	0

TABLE 10.7 SAFETY SYSTEM FAILURES (CONTINUED)

Plant Name	Year - Calendar Quarter											
	90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
NINE MILE PT. 2	1	0	0	1	0	1	0	0	1	0	0	1
NORTH ANNA 1	2	1	0	0	0	0	0	1	0	3	0	0
NORTH ANNA 2	2	0	0	0	0	0	1	1	0	0	1	1
OCONEE 1	1	1	2	2	0	1	0	4	5	1	3	0
OCONEE 2	1	1	3	2	0	3	0	4	5	1	3	1
OCONEE 3	1	1	2	2	0	1	0	3	5	2	3	0
OYSTER CREEK	2	0	1	0	0	0	1	0	0	1	0	0
PALISADES	1	0	0	1	0	8	0	0	0	2	0	1
PALO VERDE 1	0	1	0	0	0	0	1	0	0	0	1	0
PALO VERDE 2	1	1	0	0	0	0	1	0	0	0	1	0
PALO VERDE 3	1	1	0	0	0	0	1	1	0	0	1	0
PEACH BOTTOM 2	2	0	2	0	2	2	1	0	0	3	0	0
PEACH BOTTOM 3	0	1	2	3	1	1	1	0	1	1	0	2
PERRY	1	2	0	0	4	2	1	1	1	0	3	0
PILGRIM	1	4	0	2	2	*	1	1	1	5	2	3
POINT BEACH 1	1	0	1	0	1	0	1	1	2	3	0	0
POINT BEACH 2	0	0	0	1	1	0	0	0	2	3	0	0
PRAIRIE ISLAND 1	0	0	0	0	0	3	0	0	0	1	0	0
PRAIRIE ISLAND 2	0	0	0	0	0	3	0	0	0	0	0	0
QUAD CITIES 1	3	2	3	2	3	1	5	5	4	2	2	3
QUAD CITIES 2	3	3	1	1	1	1	5	5	2	2	3	4
RIVER BEND	2	1	2	0	0	2	0	0	4	2	1	1
ROBINSON 2	0	1	0	1	0	0	5	2	0	0	0	1
SALEM 1	1	2	2	1	0	0	1	1	1	0	1	1
SALEM 2	2	1	1	0	1	0	1	0	0	0	1	1
SAN ONOFRE 1	0	0	0	1	0	0	0	0	0	NA	NA	NA
SAN ONOFRE 2	0	2	0	0	1	2	0	0	0	0	0	1
SAN ONOFRE 3	1	1	0	0	0	1	0	0	0	0	1	1
SEABROOK	0	0	1	0	0	1	1	0	0	1	1	1
SEQUOYAH 1	1	0	3	0	0	1	0	3	1	0	2	1
SEQUOYAH 2	0	0	2	0	0	1	1	3	3	0	2	1
SOUTH TEXAS 1	0	2	0	0	2	0	0	0	0	3	1	1
SOUTH TEXAS 2	0	1	0	0	1	0	1	0	0	2	2	0
ST. LUCIE 1	0	0	0	0	1	0	0	0	0	0	1	0
ST. LUCIE 2	1	0	1	0	0	0	0	0	0	0	0	0
SUMMER	0	0	0	1	0	0	0	0	0	0	1	0
SURRY 1	1	0	2	3	0	1	1	3	0	2	0	0
SURRY 2	1	0	3	2	0	3	1	3	0	1	0	0
SUSQUEHANNA 1	2	1	0	0	2	0	0	2	0	0	0	0
SUSQUEHANNA 2	1	0	0	0	2	0	1	1	0	0	0	0
THREE MILE ISL 1	0	0	0	0	1	0	0	0	0	1	0	0
TROJAN	0	3	1	2	1	0	1	2	0	NA	NA	NA
TURKEY POINT 3	1	0	0	0	0	1	1	0	1	2	0	0
TURKEY POINT 4	1	0	0	0	0	1	0	0	0	1	0	0
VERMONT YANKEE	0	2	1	0	0	3	2	0	0	0	2	1
VOGTLE 1	0	0	1	2	0	0	1	0	1	1	0	0
VOGTLE 2	0	0	1	1	1	0	1	0	0	1	0	1
WASH. NUCLEAR 2	3	2	0	4	2	9	8	3	1	6	4	0
WATERFORD 3	1	0	1	0	0	0	0	0	0	0	0	0
WOLF CREEK	1	0	0	2	1	0	1	0	0	1	0	0
YANKEE-ROWE	0	1	0	0	1	0	NA	NA	NA	NA	NA	NA
ZION 1	1	0	1	0	1	0	1	2	0	1	0	0
ZION 2	0	1	1	0	0	0	2	4	0	1	0	0
TOTAL	102	81	101	97	95	112	104	93	70	108	73	69

NA - The plant is not yet licensed.
* - The plant is permanently shutdown.

TABLE 10.8 FORCED OUTAGE RATE(%)

Plant Name	Year - Calendar Quarter											
	90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
ARKANSAS 1	0	13	1	1	0	0	0	0	0	3	0	0
ARKANSAS 2	0	2	1	0	7	24	35	0	0	0	0	2
BEAVER VALLEY 1	8	17	0	11	41	0	0	0	26	0	15	0
BEAVER VALLEY 2	0	0	0	0	2	0	1	0	0	2	0	0
BIG ROCK POINT	1	0	23	2	0	0	11	12	14	0	0	0
BRAIDWOOD 1	28	100	0	1	11	4	0	0	0	8	3	0
BRAIDWOOD 2	0	0	10	5	4	6	3	1	1	0	0	0
BROWNS FERRY 1	0	0	0	0	0	0	0	0	0	0	0	0
BROWNS FERRY 2	0	0	0	3	2	0	2	6	0	0	0	0
BROWNS FERRY 3	0	0	0	0	0	0	0	0	0	0	0	0
BRUNSWICK 1	0	20	40	17	7	9	65	0	0	0	0	0
BRUNSWICK 2	9	10	42	0	0	14	30	0	0	0	0	0
BYRON 1	2	0	0	0	6	3	0	0	0	0	5	0
BYRON 2	4	0	0	0	12	0	6	0	0	0	3	0
CALLAWAY	14	0	0	0	2	2	6	1	0	0	0	0
CALVERT CLIFFS 1	0	19	0	12	11	1	0	11	3	0	7	0
CALVERT CLIFFS 2	0	0	33	0	0	16	11	12	3	0	11	0
CATAWBA 1	4	5	13	5	1	0	0	27	21	0	14	2
CATAWBA 2	2	0	9	11	5	2	0	0	5	0	0	2
CLINTON 1	0	28	0	0	9	24	0	0	3	0	0	0
COMANCHE PEAK 1	2	7	41	1	5	2	4	4	7	3	2	0
COMANCHE PEAK 2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	22
COOK 1	0	0	7	4	0	0	0	0	1	0	0	0
COOK 2	13	3	0	25	6	0	0	93	86	0	0	14
COOPER STATION	14	0	0	0	0	6	0	0	0	0	0	0
CRYSTAL RIVER 3	8	0	3	2	38	5	13	1	3	0	0	3
DAVIS-BESSE	3	0	0	0	11	2	0	0	0	0	2	0
DIABLO CANYON 1	7	5	6	0	0	4	2	0	1	0	0	0
DIABLO CANYON 2	0	0	0	0	0	6	0	0	0	5	0	0
DRESDEN 2	0	47	9	12	77	43	0	8	11	0	7	0
DRESDEN 3	3	0	0	7	0	0	17	0	15	42	30	7
DUANE ARNOLD	3	8	4	0	0	0	0	5	3	0	0	0
FARLEY 1	0	0	5	4	1	0	0	0	5	11	0	0
FARLEY 2	0	0	10	1	0	2	10	0	2	12	0	0
FERMI 2	0	2	11	0	0	2	4	0	5	5	2	3
FITZPATRICK	7	19	74	54	37	100	0	0	0	31	21	3
FORT CALHOUN	26	9	0	20	8	0	4	38	0	0	4	0
GINNA	11	0	1	1	0	4	5	0	0	0	0	0
GRAND GULF	49	0	15	12	6	10	7	3	0	0	0	14
HADDAM NECK	21	14	0	0	7	10	0	0	0	2	0	5
HARRIS	11	0	6	0	0	6	0	12	0	0	0	0
HATCH 1	5	15	0	8	0	4	3	4	1	0	4	0
HATCH 2	0	17	0	0	0	1	3	0	12	31	8	0
HOPE CREEK	16	21	4	0	0	0	6	0	4	0	5	0
INDIAN POINT 2	0	5	0	7	8	6	1	6	0	0	13	0
INDIAN POINT 3	13	12	11	0	18	6	0	32	13	38	100	100
KEWAUNEE	0	0	0	0	1	0	0	3	2	3	0	0
LASALLE 1	0	0	5	0	4	4	0	0	0	25	2	18
LASALLE 2	6	0	0	13	5	0	6	16	3	0	0	0
LIMERICK 1	34	0	18	0	14	0	100	4	0	0	0	6
LIMERICK 2	4	2	0	0	0	0	0	0	10	20	0	0
MAINE YANKEE	31	17	35	0	7	7	12	9	5	5	0	3
MCGUIRE 1	35	4	21	0	14	37	50	2	0	0	28	43
MCGUIRE 2	47	0	0	3	6	9	5	5	0	2	0	13
MILLSTONE 1	16	7	0	33	100	79	6	46	1	0	5	0
MILLSTONE 2	5	12	62	43	61	19	0	0	0	4	3	28
MILLSTONE 3	0	25	8	73	100	40	9	2	43	1	10	0
MONTICELLO	4	5	10	2	0	4	0	0	0	7	0	1
NINE MILE PT. 1	8	17	0	5	16	49	79	42	0	4	0	0

TABLE 10.8 FORCED OUTAGE RATE(%) (CONTINUED)

Plant Name	Year - Calendar Quarter											
	90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
NINE MILE PT. 2	0	3	13	49	8	8	96	24	5	0	0	0
NORTH ANNA 1	0	0	15	15	0	0	0	0	0	0	0	0
NORTH ANNA 2	1	0	0	8	2	2	0	2	0	0	11	0
OCONEE 1	0	0	2	14	2	3	20	0	6	5	0	3
OCONEE 2	14	0	0	0	0	0	2	0	11	0	0	1
OCONEE 3	1	0	2	1	43	8	1	4	14	1	0	0
OYSTER CREEK	0	0	0	14	5	0	9	4	0	0	0	0
PALISADES	0	10	0	7	6	1	0	24	10	0	27	0
PALO VERDE 1	0	0	0	6	5	25	0	2	4	2	2	0
PALO VERDE 2	0	0	0	11	0	10	0	0	2	6	0	0
PALO VERDE 3	2	0	30	4	18	2	9	0	0	4	2	0
PEACH BOTTOM 2	6	0	38	3	21	5	17	19	6	8	4	0
PEACH BOTTOM 3	0	7	29	9	0	1	0	19	28	6	0	2
PERRY	0	0	18	1	15	5	26	4	8	19	69	20
PILGRIM	0	0	14	0	25	6	14	0	15	4	9	6
POINT BEACH 1	0	0	2	0	4	0	3	0	1	0	0	0
POINT BEACH 2	0	0	0	0	4	0	0	0	0	1	0	0
PRAIRIE ISLAND 1	1	0	0	5	0	0	0	6	30	1	0	0
PRAIRIE ISLAND 2	1	0	0	0	0	0	0	0	0	0	0	0
QUAD CITIES 1	0	0	56	0	9	13	7	5	0	4	12	24
QUAD CITIES 2	5	4	18	16	8	0	0	0	0	13	58	39
RIVER BEND	16	9	1	0	35	43	0	20	13	0	65	48
ROBINSON 2	0	0	0	4	0	0	0	38	0	0	0	0
SALEM 1	0	0	12	4	0	6	40	52	14	16	13	10
SALEM 2	0	0	0	0	59	100	26	23	3	7	100	2
SAN ONOFRE 1	0	26	3	0	6	0	0	0	0	NA	NA	NA
SAN ONOFRE 2	10	3	34	0	0	20	4	2	0	0	0	0
SAN ONOFRE 3	0	3	27	0	0	0	19	0	0	4	0	1
SEABROOK	20	3	10	18	0	0	0	0	8	8	3	13
SEQUOYAH 1	15	7	0	0	0	14	26	0	8	43	100	0
SEQUOYAH 2	6	2	0	0	11	3	3	6	0	46	100	100
SOUTH TEXAS 1	51	100	5	3	12	4	0	0	98	69	100	100
SOUTH TEXAS 2	0	7	4	0		9	0	0	2	49	100	100
ST. LUCIE 1	1	0	1	3	0	0	0	14	0	0	0	6
ST. LUCIE 2	5	0	0	0	0	0	0	6	20	87	6	2
SUMMER	0	0	0	0	5	0	0	0	0	7	0	0
SURRY 1	0	0	0	0	0	12	1	2	0	6	0	0
SURRY 2	29	0	87	18	15	0	0	0	0	0	3	27
SUSQUEHANNA 1	4	0	0	1	0	0	42	0	3	0	0	58
SUSQUEHANNA 2	0	0	0	10	0	7	0	0	2	9	0	0
THREE MILE ISL 1	0	0	0	2	0	0	0	2	0	3	0	0
TROJAN	6	31	0	0	0	0	8	6	57	NA	NA	NA
TURKEY POINT 3	0	0	0	0	1	1	16	36	0	7	0	0
TURKEY POINT 4	0	0	0	0	2	8	0	41	0	0	13	1
VERMONT YANKEE	2	5	13	0	0	1	0	0	0	0	11	0
VOGTLE 1	3	0	0	0	0	0	9	3	0	0	5	1
VOGTLE 2	0	4	5	0	0	2	3	0	0	0	1	0
WASH. NUCLEAR 2	13	0	61	100	17	25	0	24	0	19	0	10
WATERFORD 3	0	0	7	2	2	3	1	2	0	2	2	0
WOLF CREEK	0	0	0	0	100	56	0	0	1	0	0	0
YANKEE-ROWE	5	1	10	2	0	0	NA	NA	NA	NA	NA	NA
ZION 1	36	100	50	0	41	2	0	28	2	0	0	3
ZION 2	39	19	81	2	0	0	84	0	0	0	0	0
AVERAGE	7	7	11	7	11	9	9	7	6	7	10	8

NA - The plant is not yet commercial.
- The plant is permanently shutdown.

TABLE 10.9 EQUIPMENT FORCED OUTAGES/1000 COMM. CRIT. HOURS

Plant Name	Year - Calendar Quarter											
	90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
ARKANSAS 1	0.00	1.60	0.00	0.45	0.00	0.00	0.77	0.00	0.00	0.47	0.00	0.00
ARKANSAS 2	0.00	0.80	0.55	0.00	0.97	0.61	0.00	0.00	0.00	0.00	0.00	0.45
BEAVER VALLEY 1	0.97	1.10	0.00	1.24	0.00	0.00	0.00	0.00	0.61	0.00	0.00	0.00
BEAVER VALLEY 2	0.00	0.00	0.00	0.00	0.46	0.00	0.80	0.00	0.00	0.47	0.00	0.00
BIG ROCK POINT	1.23	0.00	0.00	0.00	0.00	0.00	1.00	1.61	1.04	0.00	0.00	0.00
BRAIDWOOD 1	1.86	0.00	0.00	0.45	0.97	0.47	0.00	0.00	0.00	0.50	0.48	0.00
BRAIDWOOD 2	0.00	0.00	1.51	0.58	1.17	0.48	0.51	0.00	0.46	0.00	0.00	0.00
BROWNS FERRY 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BROWNS FERRY 2	0.00	0.00	0.00	0.95	0.48	0.00	0.46	0.47	0.00	0.00	0.00	0.00
BROWNS FERRY 3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BRUNSWICK 1	0.00	1.34	0.00	1.05	0.00	0.99	2.01	0.00	0.00	0.00	0.00	0.00
BRUNSWICK 2	0.48	0.51	0.00	0.00	0.00	0.53	2.03	0.00	0.00	0.00	0.00	0.00
BYRON 1	0.00	0.00	0.00	0.00	0.78	0.47	0.00	0.00	0.00	0.00	0.53	0.00
BYRON 2	1.02	0.00	0.00	0.00	0.51	0.00	1.38	0.00	0.00	0.00	0.47	0.00
CALLAWAY	2.64	0.00	0.00	0.00	0.46	0.00	0.99	0.46	0.00	0.00	0.00	0.00
CALVERT CLIFFS 1	0.00	0.00	0.00	0.56	1.01	0.00	0.00	1.00	0.46	0.00	0.49	0.00
CALVERT CLIFFS 2	0.00	0.00	2.75	0.00	0.00	0.54	1.53	2.04	0.00	0.00	0.00	0.00
CATAWBA 1	0.47	0.60	5.17	1.41	0.46	0.00	0.00	4.20	0.56	0.00	0.53	0.91
CATAWBA 2	0.46	0.00	2.48	0.51	1.55	0.93	0.00	0.00	0.00	0.00	0.00	0.46
CLINTON 1	0.00	1.52	0.00	0.00	0.49	1.80	0.00	0.00	0.46	0.00	0.00	0.00
COMANCHE PEAK 1	0.52	1.11	1.18	0.46	3.09	0.00	0.47	0.47	2.94	0.47	0.46	0.00
COMANCHE PEAK 2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.00
COOK 1	0.00	0.00	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
COOK 2	1.71	0.00	0.00	0.60	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00
COOPER STATION	0.00	0.00	0.00	0.00	0.00	0.48	0.00	0.00	0.00	0.00	0.00	0.00
CRYSTAL RIVER 3	0.00	0.00	0.00	0.00	1.43	0.48	0.00	0.54	0.46	0.00	0.00	0.46
DAVIS-BESSE	0.46	0.00	0.00	0.00	1.61	0.00	0.00	0.00	0.00	0.00	0.67	0.00
DIABLO CANYON 1	0.97	1.33	1.48	0.00	0.00	0.47	0.00	0.00	0.79	0.00	0.00	0.00
DIABLO CANYON 2	0.00	0.00	0.00	0.00	0.00	0.48	0.00	0.00	0.00	0.00	0.00	0.00
DRESDEN 2	0.00	3.91	0.50	2.01	1.97	0.00	0.00	0.48	0.50	0.00	0.00	0.00
DRESDEN 3	0.46	0.00	0.00	0.63	0.00	0.00	1.30	0.00	1.55	1.58	0.00	0.48
DUANE ARNOLD	0.00	0.53	0.51	0.00	0.00	0.00	0.00	0.48	0.47	0.00	0.00	0.00
FARLEY 1	0.00	0.00	1.00	0.00	0.46	0.00	0.00	0.00	1.32	0.51	0.00	0.00
FARLEY 2	0.00	0.00	1.01	0.00	0.00	0.64	0.84	0.00	0.00	0.48	0.00	0.00
FERMI 2	0.00	0.48	2.18	0.00	0.00	0.00	0.47	0.00	0.00	0.00	0.00	0.00
FITZPATRICK	0.00	0.61	1.69	0.00	0.00	0.00	0.00	0.00	0.00	0.63	1.62	0.46
FORT CALHOUN	0.60	0.00	0.00	1.13	0.96	0.00	0.71	1.41	0.00	0.00	0.00	0.00
GINNA	1.00	0.00	0.81	0.00	0.00	0.50	0.83	0.00	0.00	0.00	0.00	0.00
GRAND GULF	3.41	0.00	1.02	0.50	0.47	0.00	0.00	0.46	0.00	0.00	0.00	1.51
HADDAM NECK	0.00	0.00	0.00	0.00	2.36	2.27	0.00	0.00	0.00	0.47	0.00	0.56
HARRIS	0.64	0.00	0.00	0.00	0.00	0.00	0.00	1.92	0.00	0.00	0.00	0.00
HATCH 1	0.48	1.06	0.00	0.55	0.00	0.00	0.48	0.47	0.00	0.00	0.00	0.00
HATCH 2	0.00	0.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64	0.00	0.00
HOPE CREEK	1.12	2.33	0.00	0.00	0.00	0.00	0.96	0.00	0.00	0.00	0.48	0.00
INDIAN POINT 2	0.00	0.00	0.00	1.05	0.94	1.88	0.00	0.94	0.00	0.00	0.00	0.00
INDIAN POINT 3	3.72	1.55	0.00	0.45	0.00	0.48	0.00	0.98	0.00	0.00	0.00	0.00
KEWAUNEE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46	0.46	0.67	0.00	0.00
LASALLE 1	0.00	0.00	0.78	0.00	0.47	0.47	0.00	0.00	0.00	3.71	0.46	0.55
LASALLE 2	0.47	0.00	0.00	1.03	0.92	0.00	1.55	0.53	0.00	0.00	0.00	0.00
LIMERICK 1	4.06	0.46	1.06	0.00	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.48
LIMERICK 2	0.91	1.55	0.00	0.00	0.00	0.00	0.00	0.00	0.48	3.74	0.46	0.00
MAINE YANKEE	2.42	1.10	0.69	0.00	0.95	0.00	0.60	0.50	0.45	0.48	0.00	1.43
MCGUIRE 1	3.44	0.96	1.15	0.00	1.78	0.73	0.00	0.46	0.00	0.00	2.32	1.60
MCGUIRE 2	8.53	0.00	0.00	0.93	0.96	3.44	1.52	0.95	0.00	1.42	0.00	2.77
MILLSTONE 1	0.00	0.00	0.00	0.00	0.00	2.06	0.00	0.00	0.00	0.00	0.00	0.00
MILLSTONE 2	0.77	1.02	1.18	1.47	1.02	0.56	0.00	0.00	0.00	0.00	0.00	0.61
MILLSTONE 3	0.45	0.00	0.57	1.68	0.00	0.00	0.00	0.46	1.52	0.47	0.00	0.00
MONTICELLO	0.00	0.00	0.00	0.46	0.00	0.47	0.00	0.00	0.00	1.22	0.00	0.46
NINE MILE PT. 1	0.48	0.96	0.00	0.53	0.53	0.90	4.03	2.16	0.00	0.00	0.00	0.00

TABLE 10.9 EQUIPMENT FORCED OUTAGES/1000 HOURS (CONTINUED)

Plant Name	Year - Calendar Quarter											
	90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
NINE MILE PT. 2	0.00	0.61	0.00	0.78	0.48	0.69	5.44	0.53	0.47	0.00	0.00	0.00
NORTH ANNA 1	0.00	0.00	0.51	0.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NORTH ANNA 2	0.00	0.00	0.00	0.96	0.46	0.74	0.00	0.46	0.00	0.00	0.51	0.00
OCONEE 1	0.00	0.00	0.46	2.57	0.46	0.47	1.14	0.00	0.00	2.12	0.00	0.00
OCONEE 2	0.72	0.00	0.00	0.00	0.00	0.00	0.93	0.00	0.49	0.00	0.00	0.00
OCONEE 3	0.45	0.00	0.93	0.46	3.13	0.49	0.46	3.34	0.50	0.47	0.00	0.00
OYSTER CREEK	0.00	0.00	0.00	1.04	0.00	0.00	1.10	0.93	0.00	0.00	0.00	0.00
PALISADES	0.00	2.05	0.00	0.96	0.48	1.13	0.00	2.06	0.50	0.00	0.00	0.00
PALO VERDE 1	0.00	0.00	0.00	0.50	0.00	1.22	0.00	0.00	0.46	0.47 *	0.46	0.00
PALO VERDE 2	0.00	0.00	0.00	1.01	0.00	1.04	0.00	0.00	0.00	0.58	0.00	0.00
PALO VERDE 3	0.46	0.00	1.56	0.47	0.00	0.46	0.00	0.00	0.00	0.48	0.46	0.00
PEACH BOTTOM 2	0.00	0.00	0.78	0.46	1.09	0.48	1.63	1.20	1.78	0.63	0.47	0.00
PEACH BOTTOM 3	0.00	0.49	0.00	0.60	0.00	0.93	0.00	1.07	1.24	0.49	0.00	0.00
PERRY	0.00	0.00	0.55	0.45	1.04	0.00	1.89	0.46	0.49	1.48	0.00	0.55
PILGRIM	0.00	0.00	0.00	0.00	0.00	0.49	0.00	0.00	0.77	0.48	1.24	0.49
POINT BEACH 1	0.00	0.00	1.78	0.00	0.00	0.00	1.10	0.00	0.46	0.00	0.00	0.00
POINT BEACH 2	0.00	0.00	0.00	0.00	1.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PRAIRIE ISLAND 1	0.46	0.00	0.00	0.47	0.00	0.00	0.00	0.48	0.00	0.00	0.00	0.00
PRAIRIE ISLAND 2	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
QUAD CITIES 1	0.00	0.00	0.00	0.00	0.49	0.52	0.00	0.54	0.00	0.47	0.00	0.00
QUAD CITIES 2	0.48	0.48	0.00	0.54	0.00	0.00	0.00	0.00	0.00	1.44	2.57	0.00
RIVER BEND	0.00	0.00	0.46	0.00	1.35	0.96	0.00	1.94	0.52	0.00	1.41	0.78
ROBINSON 2	0.00	0.00	0.00	0.47	0.00	0.00	0.00	1.45	0.00	0.00	0.00	0.00
SALEM 1	0.00	0.00	0.67	0.50	0.00	0.46	0.00	0.00	1.42	0.53	0.52	0.00
SALEM 2	0.00	0.00	0.00	0.00	2.11	0.00	0.00	0.56	0.45	1.17	19.08	0.00
SAN ONOFRE 1	0.00	0.00	0.75	0.00	0.50	0.00	0.00	0.00	0.00	NA	NA	NA
SAN ONOFRE 2	1.00	0.48	0.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SAN ONOFRE 3	0.00	0.48	0.57	0.00	0.00	0.00	1.24	0.00	0.00	0.00	0.00	0.46
SEABROOK	1.61	0.48	0.50	3.77	0.00	0.00	0.00	0.00	0.88	1.00	0.47	1.02
SEQUOYAH 1	0.53	0.49	0.00	0.00	0.00	0.00	1.21	0.00	0.97	1.56	0.00	0.00
SEQUOYAH 2	0.00	0.46	0.00	0.00	0.50	0.58	0.90	0.46	0.45	0.77	0.00	0.00
SOUTH TEXAS 1	0.90	0.00	0.48	0.47	0.00	0.00	0.00	0.00	0.00	1.39	0.00	0.00
SOUTH TEXAS 2	0.00	0.97	0.00	0.00	2.23	0.98	0.00	0.00	0.46	2.70	0.00	0.00
ST. LUCIE 1	0.00	0.00	0.46	1.39	0.00	0.00	0.00	0.50	0.00	0.00	0.00	0.00
ST. LUCIE 2	1.34	0.00	0.00	0.00	0.00	0.00	0.00	0.47	0.00	6.88	0.48	0.00
SUMMER	0.00	0.00	0.00	0.00	1.79	0.00	0.00	0.00	0.00	0.67	0.00	0.00
SURRY 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.97	0.00	0.00
SURRY 2	0.63	0.00	15.66	0.54	1.04	0.00	0.00	0.00	0.00	0.00	0.74	2.42
SUSQUEHANNA 1	0.96	0.00	0.00	0.48	0.00	0.00	0.00	0.00	0.46	0.00	0.00	1.07
SUSQUEHANNA 2	0.00	0.00	0.00	0.49	0.00	0.48	0.00	0.00	0.00	0.49	0.00	0.00
THREE MILE ISL 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48	0.00	0.00
TROJAN	0.00	0.71	0.00	0.00	0.00	0.00	0.00	0.96	1.06	NA	NA	NA
TURKEY POINT 3	0.00	0.00	0.00	0.00	0.46	0.46	0.54	0.00	0.00	0.98	0.00	0.00
TURKEY POINT 4	0.00	0.00	0.00	0.00	0.70	1.96	0.00	0.00	0.00	0.46	2.07	0.00
VERMONT YANKEE	0.54	0.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
VOGTLE 1	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.47	0.00	0.00	1.28	0.00
VOGTLE 2	0.00	1.04	0.47	0.00	0.00	0.00	0.77	0.00	0.00	0.00	0.46	0.00
WASH. NUCLEAR 2	1.02	0.00	0.00	0.00	1.62	0.60	0.00	2.05	0.00	1.17	0.00	0.49
WATERFORD 3	0.00	0.00	2.34	0.46	0.46	0.52	0.46	0.53	0.00	0.47	0.46	0.00
WOLF CREEK	0.00	0.00	0.00	0.00	0.00	0.96	0.00	0.00	0.00	0.00	0.00	0.00
YANKEE-ROWE	0.81	0.00	0.51	0.46	0.00	0.00	NA	NA	NA	NA	NA	NA
ZION 1	1.40	0.00	0.89	0.00	1.51	0.00	0.00	0.94	0.00	0.00	0.00	0.46
ZION 2	1.46	1.13	2.17	0.48	0.00	0.00	2.81	0.00	0.00	0.00	0.00	0.00
AVERAGE	0.55	0.34	0.57	0.38	0.49	0.36	0.43	0.41	0.26	0.45	0.39	0.19

NA - The plant is not yet commercial.
* - The plant is permanently shutdown.

TABLE 10.10 CRITICAL HOURS

Plant Name	Year - Calendar Quarter											
	90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
ARKANSAS 1	33	1875	1858	2208	2209	1417	1304	2208	2209	2119	2183	1645
ARKANSAS 2	2209	1249	1817	2208	2067	1652	1426	1586	1791	2160	1813	2208
BEAVER VALLEY 1	2063	1820	285	1612	1313	2184	2183	2208	1652	2042	355	2208
BEAVER VALLEY 2	997	2160	2183	2208	2182	1751	1253	2208	2209	2128	2183	1895
BIG ROCK POINT	810	2160	1695	2164	1441	0	1002	1859	1930	2046	2067	637
BRAIDWOOD 1	1615	0	1073	2208	2072	2119	2183	1587	1348	2000	2088	2208
BRAIDWOOD 2	2209	2160	1987	1724	857	2070	1960	2184	2182	1515	1478	2208
BROWNS FERRY 1	0	0	0	0	0	0	0	0	0	0	0	0
BROWNS FERRY 2	0	0	456	2102	2089	2028	2151	2108	2209	681	756	2208
BROWNS FERRY 3	0	0	0	0	0	0	0	0	0	0	0	0
BRUNSWICK 1	0	747	1338	1898	2078	2021	497	0	0	0	0	0
BRUNSWICK 2	2076	1963	1323	1752	198	1885	494	0	0	0	1498	2208
BYRON 1	2177	2160	2183	1610	1290	2131	2183	2208	2209	842	1893	2208
BYRON 2	982	2160	2183	2208	1951	1395	1453	2045	2209	2160	2145	1539
CALLAWAY	1135	2160	2183	2208	2183	1879	1013	2189	2209	2160	2183	2208
CALVERT CLIFFS 1	1683	1772	1132	1797	1986	1882	0	996	2172	2160	2042	2208
CALVERT CLIFFS 2	0	0	1091	2208	1353	1854	1965	1960	2145	1204	452	2208
CATAWBA 1	2140	1665	387	2129	2192	2184	2183	238	1791	2160	1897	2192
CATAWBA 2	2175	2069	2014	1970	647	2161	2183	2208	1796	725	2183	2177
CLINTON 1	325	659	2183	2208	2030	1112	663	2086	2164	2160	2183	2089
COMANCHE PEAK 1	1920	1808	844	2189	647	2163	2110	2149	681	2120	2157	2208
COMANCHE PEAK 2	NA	NA	NA	NA	NA	NA	NA	NA	NA	171	1045	1802
COOK 1	457	1634	1790	2121	2209	2184	1972	0	1596	2160	2183	2208
COOK 2	1170	2108	2183	1666	2096	1253	358	801	757	2160	2183	1940
COOPER STATION	1911	2060	2152	2208	478	2065	2068	2125	2209	1526	0	1552
CRYSTAL RIVER 3	1649	2160	2121	2208	698	2077	608	1843	2157	1494	1579	2164
DAVIS-BESSE	2160	2160	2183	1466	1246	2159	2183	2208	2209	1420	1493	2208
DIABLO CANYON 1	2065	753	2027	2208	2209	2107	2150	1775	1266	2160	2183	2208
DIABLO CANYON 2	2209	2160	2183	1478	1665	2073	2183	2208	2209	1474	1494	2208
DRESDEN 2	0	768	2015	1990	507	1304	2183	2072	1994	390	883	2208
DRESDEN 3	2172	1592	2183	1581	0	0	1542	2208	1940	1265	1564	2079
DUANE ARNOLD	2041	1886	1975	2208	2209	1379	1610	2076	2128	2035	2183	685
FARLEY 1	2209	1608	1001	2185	2193	2184	2183	2087	756	1943	2183	2208
FARLEY 2	294	2094	1989	2188	2209	1565	1196	2208	2188	2101	2183	2063
FERMI 2	1144	2087	458	2208	1992	2148	2113	1754	1124	2065	1929	2094
FITZPATRICK	2081	1630	591	1054	1401	0	0	0	0	1578	1848	2163
FORT CALHOUN	1663	1980	2183	1775	2093	751	1417	1414	2209	2160	1974	2071
GINNA	1992	1933	1241	2208	2209	2013	1204	2208	2209	1695	1596	2208
GRAND GULF	586	2160	1953	2009	2109	2011	963	2166	2209	2160	2183	1990
HADDAM NECK	1769	1879	2183	2208	423	440	2183	2208	2209	2130	1069	1786
HARRIS	1565	1779	946	2208	2209	2058	2183	1566	775	2160	2156	2208
HATCH 1	2078	1881	2183	1812	914	2122	2098	2150	2196	1784	1120	2208
HATCH 2	2209	1621	741	2208	2209	2081	2135	1851	939	1560	2050	2208
HOPE CREEK	1784	860	2103	2208	2209	1963	2087	1755	1290	2160	2102	2208
INDIAN POINT 2	2209	730	0	1904	2129	2130	2158	2128	2209	697	1517	2208
INDIAN POINT 3	269	1933	1699	2208	1828	2064	409	1025	1898	1304	0	0
KEWAUNEE	2209	1612	1289	2208	2197	1584	1812	2151	2179	1499	1692	2208
LASALLE 1	2209	1109	1290	2208	2140	2123	2183	2208	55	1347	2155	1812
LASALLE 2	2113	2160	2183	1934	2169	84	1933	1879	2182	2160	1997	1563
LIMERICK 1	493	2160	1885	2208	1925	1910	0	2121	2209	2160	2183	2098
LIMERICK 2	2209	1932	680	2208	2209	2184	2183	2208	2078	802	2183	2208
MAINE YANKEE	1654	1826	1450	2208	2102	1059	1667	2015	2209	2097	2183	698
MCGUIRE 1	1453	2084	1733	1951	561	1377	1111	2166	2209	1687	431	1253
MCGUIRE 2	117	2160	2183	2140	2078	581	1315	2110	2209	2119	2183	361
MILLSTONE 1	1879	2016	150	932	2	486	2072	1232	2194	2160	2086	2208
MILLSTONE 2	1305	1954	846	1360	981	1788	1416	0	0	1895	2141	1652
MILLSTONE 3	2202	609	1757	596	0	1356	1632	2190	1313	2137	2029	726
MONTICELLO	2132	1982	710	2175	2209	2115	2034	2208	2209	823	2183	2185
NINE MILE PT. 1	2063	1045	2183	1874	1886	1113	496	1388	2209	1169	1856	2208

TABLE 10.10 CRITICAL HOURS (CONTINUED)

Plant Name	Year - Calendar Quarter											
	90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
NINE MILE PT. 2	0	1649	1967	1287	2069	1440	184	1883	2142	2160	2183	2208
NORTH ANNA 1	2209	843	1960	1880	2015	642	2183	2208	2209	84	1974	2208
NORTH ANNA 2	1442	2160	2183	2092	2167	1347	1567	218:	2209	2160	1952	1633
OCONEE 1	2209	2160	2153	778	2196	2134	1758	2208	1487	1416	2183	2144
OCONEE 2	1386	2160	2183	2208	2209	816	2150	2208	2056	2160	886	2188
OCONEE 3	2204	1113	2155	2196	1277	2030	2173	600	2001	2146	2183	2208
OYSTER CREEK	2209	1111	124	1930	2133	2184	1825	2140	1396	1091	2183	2208
PALISADES	0	489	2183	2080	2093	887	1864	1942	1993	2160	1143	0
PALO VERDE 1	2208	1318	2184	1983	2115	822	983	2158	2154	2130	2184	1560
PALO VERDE 2	2208	2160	2184	1990	385	1917	2184	2208	2170	1733	0	815
PALO VERDE 3	2180	1777	640	2147	1855	2152	2002	1921	935	2089	2184	2208
PEACH BOTTOM 2	2124	264	1289	2170	1831	2068	1839	1661	562	1594	2125	2010
PEACH BOTTOM 3	1584	2041	1644	1675	0	2158	2054	1876	1609	2060	2183	1571
PERRY	107	2122	1805	2208	1919	1874	530	2167	2058	677	708	1820
PILGRIM	2209	2160	690	1213	1697	2055	1935	2208	1300	2082	808	2060
POINT BEACH 1	2209	2160	1126	2208	2129	2184	905	2208	2196	2046	1373	2208
POINT BEACH 2	1188	2160	2183	2138	1164	2184	2183	2094	1085	2148	2183	2070
PRAIRIE ISLAND 1	2189	2160	1497	2123	2209	2184	2183	2075	409	1908	2183	2208
PRAIRIE ISLAND 2	2027	2160	2183	2208	2209	1596	2183	2208	551	1920	2183	2208
QUAD CITIES 1	1012	0	779	2208	2043	1911	2060	1867	411	2105	1924	1720
QUAD CITIES 2	2083	2086	1802	1867	2041	0	1275	2208	2209	1392	388	1441
RIVER BEND	662	1989	2183	1992	1479	1045	0	516	1927	2160	711	1285
ROBINSON 2	0	593	2183	2146	2209	2089	194	1375	2209	2160	2183	1730
SALEM 1	2209	950	1490	1988	2209	2184	72	1217	2109	1904	1924	2098
SALEM 2	2209	2160	1944	2208	948	0	1162	1779	2209	1717	52	2208
SAN ONOFRE 1	0	225	1341	2208	2017	2184	2183	2208	1447	NA	NA	NA
SAN ONOFRE 2	2004	2103	1449	1130	1051	1744	2122	2167	2209	2160	1560	1352
SAN ONOFRE 3	2209	2094	1759	2208	2209	722	1613	2158	2209	2104	2183	2185
SEABROOK	1861	2100	2020	530	1996	2184	2183	1633	1138	2007	2142	1967
SEQUOYAH 1	1900	2029	2183	2208	462	1874	1656	2207	2056	1281	0	0
SEQUOYAH 2	966	2160	2183	2208	1986	1718	1106	2174	2207	1292	0	0
SOUTH TEXAS 1	1110	9	2096	2150	1984	2109	2003	1923	86	720	0	0
SOUTH TEXAS 2	607	2066	2125	1802	449	2036	2183	2208	2167	740	0	0
ST. LUCIE 1	2184	2142	2155	2153	701	2184	2183	1985	2209	2089	447	2114
ST. LUCIE 2	749	2160	2183	2208	2209	2184	648	2118	1835	291	2064	2208
SUMMER	2209	2160	2017	1970	1118	2184	1952	2208	2209	1499	1442	2208
SURRY 1	463	2160	2183	2208	2209	1288	1436	2208	2209	2053	2183	1987
SURRY 2	1599	2136	128	1845	1927	2184	2183	1903	2209	1539	1357	1654
SUSQUEHANNA 1	1037	2160	2183	2071	2209	1602	775	2208	2162	2160	2183	932
SUSQUEHANNA 2	2187	1537	1318	2056	2209	2074	2183	1765	1234	2036	2183	2208
THREE MILE ISL 1	2209	2160	2183	2084	1140	2184	2183	2170	2209	2094	2183	1723
TROJAN	2087	1409	0	0	0	858	901	2093	945	NA	NA	NA
TURKEY POINT 3	1743	0	0	61	2191	2164	1843	1292	735	2044	2183	2206
TURKEY POINT 4	1323	0	0	0	1426	2039	2183	1332	1673	2160	968	2104
VERMONT YANKEE	1853	2076	1915	2065	2209	1580	1746	2208	2209	2160	1972	1389
VOGTLE 1	2003	2160	2183	1825	1013	2184	2020	2150	2209	1705	1568	2192
VOGTLE 2	1254	1932	2106	2208	2209	1652	1306	2208	2088	2160	2164	1774
WASH. NUCLEAR 2	1955	2160	299	100	1847	1669	416	1464	2209	1712	1017	2023
WATERFORD 3	1988	1776	855	2180	2184	1926	2183	1896	1302	2131	2159	2208
WOLF CREEK	2209	2160	2183	1952	0	1038	2183	2208	2183	1515	1128	2208
YANKEE-ROWE	1231	2160	1976	2173	23	0	NA	NA	NA	NA	NA	NA
ZION 1	1430	0	1123	2208	1322	1364	0	1067	2175	2160	2183	2162
ZION 2	1374	1765	460	2073	1246	2184	356	2208	1010	892	2183	2208
TOTAL	168084	179636	171957	206937	176835	180795	168423	198228	186966	182095	174993	193456

NA - The plant is not yet critical.
- The plant is permanently shutdown.

TABLE 10.11 COLLECTIVE RADIATION EXPOSURE

Plant Name	Year - Calendar Quarter											
	90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
ARKANSAS 1	336	108	45	10	12	342	189	5	9	7	4	NA
ARKANSAS 2	336	108	45	10	12	25	68	147	91	7	21	NA
BEAVER VALLEY 1	54	20	201	13	15	6	4	5	17	17	368	NA
BEAVER VALLEY 2	54	20	201	13	15	113	120	2	2	1	4	NA
BIG ROCK POINT	142	12	28	12	139	181	53	12	20	25	10	NA
BRAIDWOOD 1	4	69	38	42	126	6	5	54	49	80	45	NA
BRAIDWOOD 2	4	69	38	42	126	6	5	54	49	80	45	NA
BROWNS FERRY 1	72	43	26	24	24	40	44	51	37	140	83	NA
BROWNS FERRY 2	72	43	26	24	24	40	44	51	37	140	83	NA
BROWNS FERRY 3	72	43	26	24	24	40	44	51	37	140	83	NA
BRUNSWICK 1	500	117	33	61	177	27	49	230	121	125	113	NA
BRUNSWICK 2	500	117	33	61	177	27	49	230	121	125	113	NA
BYRON 1	36	3	2	53	76	70	24	2	4	109	11	NA
BYRON 2	36	3	2	53	76	70	24	2	4	109	11	NA
CALLAWAY	317	9	5	5	4	73	255	4	5	5	4	NA
CALVERT CLIFFS 1	40	25	19	7	15	10	127	31	7	79	104	NA
CALVERT CLIFFS 2	40	25	19	7	15	10	127	31	7	79	104	NA
CATAWBA 1	9	12	130	7	82	7	5	166	20	75	0	NA
CATAWBA 2	9	12	130	7	82	7	5	166	20	75	0	NA
CLINTON 1	389	170	13	12	22	190	183	19	12	13	25	NA
COMANCHE PEAK 1	NA	2	11	1	119	9	6	6	153	7	2	NA
COMANCHE PEAK 2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
COOK 1	158	12	5	8	10	47	55	132	12	7	4	NA
COOK 2	158	12	5	8	10	47	55	132	12	7	4	NA
COOPER STATION	21	17	12	14	362	18	21	20	14	155	190	NA
CRYSTAL RIVER 3	19	11	6	3	84	9	393	15	5	38	13	NA
DAVIS-BESSE	10	3	4	110	99	2	5	7	9	231	124	NA
DIABLO CANYON 1	5	146	5	97	25	4	4	102	105	91	33	NA
DIABLO CANYON 2	5	146	5	97	25	4	4	102	105	91	33	NA
DRESDEN 2	410	100	66	117	220	136	46	43	76	462	273	NA
DRESDEN 3	410	100	66	117	220	136	46	43	76	462	273	NA
DUANE ARNOLD	47	55	76	45	21	269	170	30	21	30	25	NA
FARLEY 1	205	149	167	6	2	92	126	15	169	9	3	NA
FARLEY 2	205	149	167	6	2	92	126	15	169	9	3	NA
FERMI 2	10	14	161	18	17	11	13	81	124	10	9	NA
FITZPATRICK	56	87	85	73	48	244	187	144	99	56	39	NA
FORT CALHOUN	25	16	13	14	9	175	53	17	10	6	5	NA
GINNA	14	241	73	9	6	35	210	10	5	95	75	NA
GRAND GULF	414	23	42	15	24	35	422	14	13	16	10	NA
HADDAM NECK	46	27	11	26	532	170	10	10	12	10	366	NA
HARRIS	34	69	139	8	10	14	12	49	139	7	8	NA
HATCH 1	39	86	209	58	227	31	43	57	143	94	170	NA
HATCH 2	39	86	209	58	227	31	43	57	143	94	170	NA
HOPE CREEK	106	298	22	19	30	27	20	140	248	24	21	NA
INDIAN POINT 2	25	618	775	32	43	25	21	17	18	559	89	NA
INDIAN POINT 3	177	6	21	4	4	5	156	21	12	9	16	NA
KEWAUNEE	3	69	138	3	3	80	32	2	1	74	28	NA
LASALLE 1	55	202	100	43	59	294	36	42	211	57	38	NA
LASALLE 2	55	202	100	43	59	294	36	42	211	57	38	NA
LIMERICK 1	93	11	26	7	7	49	215	14	15	9	9	NA
LIMERICK 2	NA	11	26	7	7	9	5	14	15	152	8	NA
MAINE YANKEE	62	41	17	18	20	400	40	11	14	6	5	NA
MCGUIRE 1	86	6	13	30	132	140	45	4	4	25	0	NA
MCGUIRE 2	86	6	13	30	132	140	45	4	4	25	0	NA
MILLSTONE 1	30	28	290	42	18	39	17	26	15	18	22	NA
MILLSTONE 2	275	29	118	16	13	35	141	507	585	17	13	NA
MILLSTONE 3	2	134	3	8	8	4	9	2	2	3	6	NA
MONTICELLO	24	39	385	20	22	43	26	17	28	448	22	NA
NINE MILE PT. 1	183	61	22	31	19	39	133	88	29	303	61	NA

TABLE 10.11 COLLECTIVE RADIATION EXPOSURE (CONTINUED)

Plant Name	Year - Calendar Quarter											
	90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
NINE MILE PT. 2	183	61	22	31	19	87	204	16	18	18	25	NA
NORTH ANNA 1	131	259	28	16	12	218	58	8	5	288	12	NA
NORTH ANNA 2	131	259	28	16	12	218	58	8	5	288	12	NA
OCONEE 1	42	81	10	66	28	75	11	101	29	23	0	NA
OCONEE 2	42	81	10	66	28	75	11	101	29	23	0	NA
OCONEE 3	42	81	10	66	28	75	11	101	29	23	0	NA
OYSTER CREEK	61	398	661	45	80	63	66	62	465	313	35	NA
PALISADES	505	163	5	8	5	264	14	6	8	6	156	NA
PALO VERDE 1	8	37	62	12	91	59	51	17	54	21	68	NA
PALO VERDE 2	8	37	62	12	91	59	51	17	54	21	68	NA
PALO VERDE 3	8	37	62	12	91	59	51	17	54	21	68	NA
PEACH BOTTOM 2	61	210	34	55	219	29	37	63	137	33	31	NA
PEACH BOTTOM 3	61	210	34	55	219	29	37	63	137	33	31	NA
PERRY	391	33	60	18	26	81	459	10	21	152	36	NA
PILGRIM	47	43	336	166	59	53	40	36	152	56	313	NA
POINT BEACH 1	83	9	59	6	58	5	58	4	61	3	40	NA
POINT BEACH 2	83	9	59	6	58	5	58	4	61	3	40	NA
PRAIRIE ISLAND 1	2	1	44	3	2	32	1	3	69	4	1	NA
PRAIRIE ISLAND 2	2	1	44	3	2	32	1	3	69	4	1	NA
QUAD CITIES 1	124	143	33	33	45	249	37	59	233	132	153	NA
QUAD CITIES 2	124	143	33	33	45	249	37	59	233	132	153	NA
RIVER BEND	368	43	26	27	31	63	393	221	33	20	66	NA
ROBINSON 2	345	154	15	13	12	21	298	22	10	17	35	NA
SALEM 1	4	152	14	9	50	8	254	21	3	10	6	NA
SALEM 2	4	152	14	9	50	122	17	4	2	26	74	NA
SAN ONOFRE 1	45	44	35	38	21	79	12	5	12	NA	NA	NA
SAN ONOFRE 2	45	44	35	38	21	79	12	5	12	18	87	NA
SAN ONOFRE 3	45	44	35	38	21	79	12	5	12	18	87	NA
SEABROOK	NA	2	1	74	4	2	1	91	135	2	1	NA
SEQUOYAH 1	171	9	5	7	336	15	18	5	6	28	200	NA
SEQUOYAH 2	171	9	5	7	336	154	254	5	6	2	13	NA
SOUTH TEXAS 1	67	43	46	10	72	2	5	19	111	20	6	NA
SOUTH TEXAS 2	67	43	46	10	72	2	5	1	3	67	60	NA
ST. LUCIE 1	70	7	7	6	214	9	96	10	7	37	182	NA
ST. LUCIE 2	70	7	7	6	214	9	96	10	7	37	182	NA
SUMMER	4	3	2	63	227	7	13	4	27	144	145	NA
SURRY 1	220	23	190	17	26	130	122	17	12	69	101	NA
SURRY 2	220	23	190	17	26	130	122	17	12	69	101	NA
SUSQUEHANNA 1	93	113	89	26	24	125	94	69	80	14	13	NA
SUSQUEHANNA 2	93	113	89	26	24	125	94	69	80	14	13	NA
THREE MILE ISL 1	5	7	7	19	164	6	8	11	8	11	12	NA
TROJAN	4	22	322	95	145	17	11	2	54	NA	NA	NA
TURKEY POINT 3	59	149	142	135	43	12	17	19	116	11	101	NA
TURKEY POINT 4	59	149	142	135	43	12	17	19	116	11	101	NA
VERMONT YANKEE	71	24	23	29	35	227	74	26	43	19	29	NA
VOGTLE 1	65	6	3	59	112	65	71	4	7	40	49	NA
VOGTLE 2	65	6	3	59	112	65	71	4	7	40	49	NA
WASH. NUCLEAR 2	45	34	254	56	41	48	455	66	43	57	411	NA
WATERFORD 3	15	106	231	5	2	18	3	56	133	5	4	NA
WOLF CREEK	3	3	4	39	262	57	4	3	5	101	74	NA
YANKEE-ROWE	24	4	7	6	23	73	NA	NA	NA	NA	NA	NA
ZION 1	18	41	20	6	20	109	277	30	104	59	13	NA
ZION 2	18	41	20	6	20	109	277	30	104	59	13	NA
TOTAL	11306	8256	8391	3566	8139	8519	9005	4993	6928	7826	6910	NA

NA - The plant has not yet been commercial for one calendar year
- The latest quarter data are not available.
- The plant is permanently shutdown.

TABLE 10.12 CAUSE CODES

ADMINISTRATIVE CONTROL PROBLEMS

Plant Name	Year - Calendar Quarter											
	90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
ARKANSAS 1	6	0	3	1	3	0	2	0	1	1	0	0
ARKANSAS 2	3	2	6	2	3	1	1	1	2	0	1	0
BEAVER VALLEY 1	1	2	4	3	2	2	1	1	1	1	3	1
BEAVER VALLEY 2	2	0	1	0	0	1	2	1	0	1	1	1
BIG ROCK POINT	3	0	0	0	0	2	4	2	2	0	1	3
BRAIDWOOD 1	2	1	0	2	1	2	0	1	2	0	0	1
BRAIDWOOD 2	0	0	0	2	1	1	1	1	2	1	2	2
BROWNS FERRY 1	4	3	3	1	0	0	0	0	2	2	1	0
BROWNS FERRY 2	4	1	6	1	0	0	0	1	3	1	3	0
BROWNS FERRY 3	5	1	2	1	1	0	0	0	3	1	1	0
BRUNSWICK 1	3	6	1	2	0	2	4	4	2	1	2	0
BRUNSWICK 2	1	3	0	3	2	1	2	4	2	3	3	0
BYRON 1	2	1	0	1	2	1	0	3	0	0	0	0
BYRON 2	2	1	0	1	1	1	0	4	0	0	0	1
CALLAWAY	3	0	1	1	3	3	0	1	0	0	0	1
CALVERT CLIFFS 1	0	0	0	1	0	1	1	1	1	2	1	0
CALVERT CLIFFS 2	1	0	1	0	1	2	0	2	0	3	2	0
CATAWBA 1	5	3	2	3	2	1	1	2	0	4	0	0
CATAWBA 2	4	2	1	3	5	1	1	0	0	4	0	0
CLINTON 1	1	2	0	0	3	3	1	1	1	0	0	0
COMANCHE PEAK 1	6	5	2	0	6	3	5	1	4	1	2	0
COMANCHE PEAK 2	NA	NA	NA	NA	NA	NA	NA	NA	NA	2	2	0
COOK 1	1	1	2	1	1	0	1	1	0	1	0	0
COOK 2	1	2	0	2	2	1	1	2	1	0	1	1
COOPER STATION	1	3	0	2	4	3	4	1	2	3	9	3
CRYSTAL RIVER 3	1	0	2	1	5	1	3	3	2	1	1	0
DAVIS-BESSE	1	1	0	1	2	1	0	2	0	0	0	0
DIABLO CANYON 1	0	2	0	5	2	1	3	3	7	2	0	0
DIABLO CANYON 2	0	0	0	4	2	2	1	2	3	3	0	0
DRESDEN 2	6	1	4	11	2	6	7	2	7	3	1	0
DRESDEN 3	1	2	4	3	2	7	5	1	5	3	0	1
DUANE ARNOLD	3	0	1	2	1	2	1	1	2	0	1	2
FARLEY 1	0	1	2	0	2	2	0	2	0	1	0	1
FARLEY 2	0	0	1	0	2	4	5	0	0	1	0	1
FERMI 2	2	1	2	1	3	1	2	1	0	3	1	3
FITZPATRICK	4	2	2	3	4	8	8	2	8	2	3	3
FORT CALHOUN	1	4	2	2	6	5	5	3	2	4	4	0
GINNA	3	1	0	0	0	0	1	0	0	0	0	1
GRAND GULF	7	0	2	3	1	0	5	1	1	2	2	1
HADDAM NECK	4	7	1	0	3	6	1	1	1	1	1	3
HARRIS	2	4	5	2	1	2	2	3	0	1	2	0
HATCH 1	5	1	2	0	4	4	3	4	0	0	5	1
HATCH 2	5	2	5	0	2	3	3	4	5	0	2	1
HOPE CREEK	4	2	3	1	0	1	1	4	0	2	0	0
INDIAN POINT 2	0	0	0	0	1	1	1	0	0	0	0	0
INDIAN POINT 3	1	0	0	1	1	2	1	2	4	2	9	4
KEWAUNEE	2	0	2	1	2	0	1	0	2	0	0	0
LASALLE 1	2	4	2	0	3	2	1	0	6	2	1	1
LASALLE 2	3	3	1	1	0	3	2	0	3	0	1	2
LIMERICK 1	6	5	5	1	2	1	6	0	2	2	2	2
LIMERICK 2	3	6	7	2	0	1	7	0	0	4	1	4
MAINE YANKEE	1	1	1	0	0	1	2	0	3	3	4	2
MCGUIRE 1	2	3	2	5	3	4	3	1	0	1	1	2
MCGUIRE 2	1	2	2	6	3	2	1	0	0	1	0	1
MILLSTONE 1	1	2	6	2	2	3	2	1	1	1	2	0
MILLSTONE 2	1	4	0	0	0	4	2	1	2	3	1	4
MILLSTONE 3	4	4	4	2	2	6	5	5	6	2	2	3
MONTICELLO	3	3	3	2	0	3	0	3	1	1	0	0
NINE MILE PT. 1	4	2	1	2	0	3	0	1	0	5	0	0

TABLE 10.12 CAUSE CODES (CONTINUED)

ADMINISTRATIVE CONTROL PROBLEMS

Plant Name	Year - Calendar Quarter											
	90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
NINE MILE PT. 2	6	4	4	3	1	4	3	4	0	1	1	3
NORTH ANNA 1	1	3	2	3	0	3	2	2	3	4	3	0
NORTH ANNA 2	3	2	3	4	1	2	2	2	3	2	4	0
OCONEE 1	1	0	1	1	0	1	4	3	2	1	1	2
OCONEE 2	1	0	1	1	0	3	1	1	1	0	1	2
OCONEE 3	1	4	0	1	2	3	1	1	1	2	1	0
OYSTER CREEK	2	2	0	1	1	0	3	0	0	2	1	0
PALISADES	2	5	3	1	3	10	3	2	0	0	0	1
PALO VERDE 1	2	2	0	1	0	1	2	0	0	0	2	0
PALO VERDE 2	0	2	0	1	2	1	2	0	1	1	2	0
PALO VERDE 3	0	2	0	2	1	1	2	2	0	0	2	0
PEACH BOTTOM 2	6	6	6	6	1	2	0	2	4	2	2	0
PEACH BOTTOM 3	4	3	6	4	3	3	0	0	4	1	1	1
PERRY	9	4	1	1	2	1	6	0	4	4	1	1
PILGRIM	2	2	3	3	2	3	2	4	2	1	2	3
POINT BEACH 1	0	0	0	1	1	1	3	0	1	3	3	0
POINT BEACH 2	1	0	0	0	2	0	1	1	2	4	2	0
PRAIRIE ISLAND 1	4	1	2	1	0	3	0	3	1	4	1	3
PRAIRIE ISLAND 2	4	1	1	2	0	2	0	3	1	3	2	2
QUAD CITIES 1	4	6	3	1	2	3	4	2	1	3	1	6
QUAD CITIES 2	3	3	2	1	1	7	3	1	0	4	0	9
RIVER BEND	9	3	2	1	5	2	2	4	3	2	8	5
ROBINSON 2	1	1	1	3	0	2	3	1	2	0	0	1
SALEM 1	2	6	5	2	1	2	0	3	0	1	1	0
SALEM 2	4	3	1	1	5	2	2	1	0	0	1	0
SAN ONOFRE 1	2	6	1	2	4	0	0	1	0	NA	NA	NA
SAN ONOFRE 2	2	3	0	0	2	1	1	1	1	2	0	2
SAN ONOFRE 3	1	2	1	2	2	1	2	0	1	1	1	1
SEABROOK	0	1	1	0	0	3	2	8	2	2	4	2
SEQUOYAH 1	3	2	6	5	2	3	0	0	8	3	4	5
SEQUOYAH 2	5	5	5	6	3	3	1	2	8	3	2	3
SOUTH TEXAS 1	0	5	3	1	1	2	2	4	5	10	3	1
SOUTH TEXAS 2	1	3	0	0	0	2	1	2	3	7	4	3
ST. LUCIE 1	0	1	1	2	3	1	1	0	0	0	2	0
ST. LUCIE 2	0	1	2	1	0	0	1	2	1	0	1	0
SUMMER	0	1	2	2	0	0	0	0	1	0	0	0
SURRY 1	3	2	2	4	1	3	3	1	0	2	2	0
SURRY 2	2	2	2	3	0	3	0	1	0	2	3	0
SUSQUEHANNA 1	8	1	0	1	1	2	0	3	1	0	2	0
SUSQUEHANNA 2	5	4	3	1	3	1	0	2	1	1	1	0
THREE MILE ISL 1	0	0	0	1	3	1	0	1	0	1	1	1
TROJAN	5	6	7	6	4	6	5	7	4	NA	NA	NA
TURKEY POINT 3	3	1	0	5	3	3	2	2	1	1	0	0
TURKEY POINT 4	3	1	0	2	2	4	1	4	1	1	0	0
VERMONT YANKEE	2	4	4	0	1	5	3	0	3	3	3	4
VOGTLE 1	2	1	1	1	5	0	1	0	2	1	2	1
VOGTLE 2	1	2	1	2	1	0	5	2	1	1	1	1
WASH. NUCLEAR 2	6	2	5	7	3	10	10	7	6	12	8	1
WATERFORD 3	2	1	3	1	0	2	1	3	2	0	0	1
WOLF CREEK	3	3	5	2	3	3	2	1	0	0	2	0
YANKEE-ROWE	1	1	0	0	1	2	NA	NA	NA	NA	NA	NA
ZION 1	0	5	4	2	3	2	2	5	6	1	1	1
ZION 2	1	5	3	4	1	1	3	3	1	0	0	1
TOTAL	277	245	218	206	194	250	222	192	199	187	172	124

NA - The plant is not yet licensed.
- The plant is permanently shutdown.

TABLE 10.13 CAUSE CODES

LICENSED OPERATOR ERRORS

Plant Name	Year - Calendar Quarter											
	90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
ARKANSAS 1	1	0	0	0	0	0	0	0	0	0	0	0
ARKANSAS 2	0	1	0	0	0	0	1	0	0	0	0	0
BEAVER VALLEY 1	0	0	0	1	1	0	0	1	0	0	1	0
BEAVER VALLEY 2	2	0	0	0	0	1	1	0	0	1	0	0
BIG ROCK POINT	0	0	1	0	0	0	1	0	0	0	0	0
BRAIDWOOD 1	0	0	0	0	0	0	1	0	0	1	0	0
BRAIDWOOD 2	0	0	0	0	0	1	0	0	0	0	1	0
BROWNS FERRY 1	0	0	0	0	0	0	0	0	0	0	0	0
BROWNS FERRY 2	0	0	0	0	1	0	0	0	0	0	2	0
BROWNS FERRY 3	0	0	0	0	0	0	0	0	0	0	0	0
BRUNSWICK 1	0	0	0	0	0	0	1	1	1	0	0	0
BRUNSWICK 2	0	0	0	1	0	0	0	0	0	1	0	0
BYRON 1	2	0	0	0	2	0	0	0	0	0	0	0
BYRON 2	2	0	0	0	1	0	0	0	0	1	0	1
CALLAWAY	2	0	0	0	0	1	1	0	0	0	0	0
CALVERT CLIFFS 1	1	0	0	1	0	0	0	0	0	0	0	0
CALVERT CLIFFS 2	1	1	0	0	1	0	0	0	0	0	1	0
CATAWBA 1	0	2	0	0	0	2	0	1	0	0	0	0
CATAWBA 2	0	1	1	0	0	2	0	0	2	0	0	0
CLINTON 1	1	1	0	0	0	0	1	0	0	0	0	0
COMANCHE PEAK 1	2	1	0	1	3	2	0	0	0	2	0	0
COMANCHE PEAK 2	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	1
COOK 1	1	1	0	0	0	0	0	0	0	0	0	1
COOK 2	0	1	0	0	0	0	0	1	0	0	0	0
COOPER STATION	0	0	0	0	2	0	0	0	0	0	0	0
CRYSTAL RIVER 3	0	0	0	0	2	0	0	1	2	0	0	0
DAVIS-BESSE	0	0	0	0	0	0	0	0	0	0	2	0
DIABLO CANYON 1	0	1	0	2	0	0	0	0	1	0	0	0
DIABLO CANYON 2	0	0	0	1	1	0	0	0	0	0	0	0
DRESDEN 2	0	0	0	2	0	0	0	0	1	0	1	1
DRESDEN 3	0	0	0	1	0	0	0	0	0	0	1	1
DUANE ARNOLD	0	1	0	0	1	0	0	0	0	0	0	0
FARLEY 1	0	0	0	1	0	1	0	1	0	0	0	0
FARLEY 2	0	0	0	0	0	2	2	0	1	1	0	0
FERMI 2	0	0	0	0	2	0	1	0	0	0	0	1
FITZPATRICK	0	0	0	0	1	0	0	2	0	0	0	0
FORT CALHOUN	0	0	1	0	1	1	2	1	0	0	0	0
GINNA	0	0	0	0	0	1	0	0	0	0	0	0
GRAND GULF	1	1	0	1	0	0	1	0	0	0	0	0
HADDAM NECK	1	2	0	0	1	0	0	0	0	0	0	1
HARRIS	1	0	0	0	0	0	0	2	0	0	2	0
HATCH 1	0	0	0	0	1	2	1	0	1	0	2	0
HATCH 2	0	1	0	0	1	1	1	2	2	0	2	0
HOPE CREEK	1	1	0	0	0	0	0	0	0	0	0	0
INDIAN POINT 2	1	0	0	0	0	0	2	0	0	0	0	0
INDIAN POINT 3	0	0	0	0	0	0	0	2	0	1	1	0
KEWAUNEE	0	0	1	0	1	1	0	1	0	0	2	0
LASALLE 1	0	0	0	0	0	0	0	0	3	0	0	0
LASALLE 2	0	0	0	0	0	0	0	0	1	0	0	0
LIMERICK 1	1	1	0	0	2	0	0	0	0	0	0	0
LIMERICK 2	0	0	1	0	0	0	1	0	0	0	0	0
MAINE YANKEE	0	0	1	0	0	0	0	0	0	0	0	0
MCGUIRE 1	0	0	0	1	0	0	1	0	0	0	0	1
MCGUIRE 2	0	0	1	0	0	1	0	0	0	0	0	2
MILLSTONE 1	0	0	1	0	0	0	0	1	1	1	0	0
MILLSTONE 2	0	0	1	0	0	0	0	1	0	3	0	1
MILLSTONE 3	0	0	0	1	0	0	0	2	2	0	0	0
MONTICELLO	1	1	1	0	0	1	0	0	0	0	0	0
NINE MILE PT. 1	0	0	0	0	0	0	0	2	1	2	0	0

TABLE 10.13 CAUSE CODES (CONTINUED)

LICENSED OPERATOR ERRORS

Plant Name	Year - Calendar Quarter											
	90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
NINE MILE PT. 2	0	0	1	0	1	1	0	0	1	0	0	0
NORTH ANNA 1	0	1	1	0	1	0	0	0	0	0	1	0
NORTH ANNA 2	1	1	2	0	0	0	2	1	1	0	1	0
OCONEE 1	0	0	1	0	1	2	0	0	0	1	0	0
OCONEE 2	0	0	1	0	0	3	0	0	0	0	0	0
OCONEE 3	0	1	0	1	1	2	0	0	0	1	0	0
OYSTER CREEK	1	0	0	1	0	0	2	0	0	0	0	0
PALISADES	0	0	0	0	0	0	1	0	0	0	0	0
PALO VERDE 1	0	0	0	0	1	3	0	0	0	0	0	0
PALO VERDE 2	1	0	0	2	1	1	0	0	0	0	0	0
PALO VERDE 3	0	0	0	0	1	1	0	0	2	0	0	0
PEACH BOTTOM 2	0	0	4	1	0	0	0	4	0	0	1	0
PEACH BOTTOM 3	1	2	1	0	0	0	0	0	1	0	0	0
PERRY	1	3	0	0	0	0	1	0	1	0	0	0
PILGRIM	0	0	1	0	1	0	1	0	0	1	1	0
POINT BEACH 1	0	0	1	1	0	1	1	0	0	1	0	0
POINT BEACH 2	0	0	0	1	0	0	0	0	0	2	0	0
PRAIRIE ISLAND 1	0	0	0	0	0	0	0	0	0	0	0	1
PRAIRIE ISLAND 2	0	0	0	0	0	1	0	0	0	0	0	1
QUAD CITIES 1	1	1	0	1	0	1	0	1	0	0	2	3
QUAD CITIES 2	2	0	0	2	0	0	0	0	0	1	2	1
RIVER BEND	1	0	0	0	1	0	0	1	1	0	1	0
ROBINSON 2	0	1	1	1	0	0	0	0	1	0	0	0
SALEM 1	0	0	1	0	0	0	1	0	0	1	0	1
SALEM 2	1	0	0	0	0	0	0	0	0	0	0	0
SAN ONOFRE 1	0	0	0	0	0	0	0	0	0	NA	NA	NA
SAN ONOFRE 2	0	0	0	0	0	1	0	0	0	0	0	1
SAN ONOFRE 3	1	0	1	0	0	2	0	0	0	0	0	0
SEABROOK	0	0	1	0	0	0	0	0	1	1	0	0
SEQUOYAH 1	0	0	0	0	0	1	0	0	1	1	2	0
SEQUOYAH 2	1	0	0	0	0	0	2	0	2	0	1	0
SOUTH TEXAS 1	1	3	0	0	1	0	0	1	1	0	1	0
SOUTH TEXAS 2	0	1	0	0	2	0	0	0	1	1	0	0
ST. LUCIE 1	0	1	1	0	0	1	0	0	0	0	0	1
ST. LUCIE 2	0	0	0	0	1	0	0	0	0	2	0	1
SUMMER	0	0	0	0	0	1	0	0	0	0	0	0
SURRY 1	0	0	0	0	0	0	0	0	0	0	0	0
SURRY 2	0	0	0	1	0	1	0	1	0	0	0	0
SUSQUEHANNA 1	1	0	0	1	0	0	0	0	0	0	0	0
SUSQUEHANNA 2	0	1	0	0	0	0	0	0	0	0	0	0
THREE MILE ISL 1	0	0	0	1	2	0	0	0	0	0	0	0
TROJAN	0	0	0	0	0	0	0	0	1	NA	NA	NA
TURKEY POINT 3	0	0	0	1	0	0	0	0	0	1	0	0
TURKEY POINT 4	0	0	0	0	0	0	0	0	0	0	0	1
VERMONT YANKEE	0	0	0	0	0	1	0	0	0	0	0	0
VOGTLE 1	1	1	0	0	4	0	1	0	0	1	1	0
VOGTLE 2	1	1	0	0	0	1	1	1	0	0	0	0
WASH. NUCLEAR 2	0	0	1	0	0	0	0	1	0	0	2	0
WATERFORD 3	0	0	1	1	0	0	0	1	0	0	0	0
WOLF CREEK	0	0	2	0	2	2	1	0	1	2	3	0
YANKEE-ROWE	0	0	0	0	0	0	NA	NA	NA	NA	NA	NA
ZION 1	0	0	0	0	0	0	1	1	2	1	0	0
ZION 2	0	0	1	0	0	0	1	0	0	0	0	0
TOTAL	38	36	33	30	46	47	35	35	37	32	37	22

NA - The plant is not yet licensed.
- The plant is permanently shutdown.

TABLE 10.14 CAUSE CODES

OTHER PERSONNEL ERRORS

Plant Name	Year - Calendar Quarter											
	90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
ARKANSAS 1	2	2	1	0	0	0	0	0	0	0	0	0
ARKANSAS 2	2	3	2	0	0	1	1	1	2	0	0	0
BEAVER VALLEY 1	1	4	1	1	1	0	1	0	0	1	2	1
BEAVER VALLEY 2	0	0	1	2	0	0	0	0	1	0	0	0
BIG ROCK POINT	0	0	1	1	2	2	1	0	0	1	0	1
BRAIDWOOD 1	0	2	1	0	1	3	0	0	0	1	0	0
BRAIDWOOD 2	0	0	0	2	1	1	0	1	0	1	0	1
BROWNS FERRY 1	2	2	2	0	0	0	2	0	0	2	1	0
BROWNS FERRY 2	1	0	3	0	0	0	3	1	0	0	1	1
BROWNS FERRY 3	2	0	2	0	1	0	2	0	1	1	1	0
BRUNSWICK 1	4	3	1	2	1	2	1	1	1	0	1	0
BRUNSWICK 2	1	2	0	1	1	2	1	4	2	1	0	0
BYRON 1	1	0	0	0	0	0	2	0	0	2	0	0
BYRON 2	1	0	0	0	0	0	2	0	0	1	0	0
CALLAWAY	3	0	1	0	0	1	0	0	0	0	0	0
CALVERT CLIFFS 1	0	0	1	0	2	0	0	0	1	0	0	0
CALVERT CLIFFS 2	1	0	3	0	0	1	0	2	0	0	0	0
CATAWBA 1	0	2	2	3	6	1	1	1	0	0	0	0
CATAWBA 2	0	2	2	1	2	0	0	1	0	1	0	0
CLINTON 1	1	1	0	0	1	1	0	0	0	0	0	0
COMANCHE PEAK 1	2	3	1	1	0	1	2	1	1	0	0	0
COMANCHE PEAK 2	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	0
COOK 1	2	1	1	1	0	1	0	0	3	0	0	0
COOK 2	2	2	0	0	1	1	0	0	2	2	0	0
COOPER STATION	0	3	0	0	5	1	0	0	0	3	2	0
CRYSTAL RIVER 3	3	1	0	0	3	1	2	2	0	0	1	0
DAVIS-BESSE	0	0	0	1	1	2	1	1	0	1	1	0
DIABLO CANYON 1	5	4	2	2	0	0	1	2	2	0	0	0
DIABLO CANYON 2	0	0	0	2	2	0	2	1	2	3	0	0
DRESDEN 2	1	1	1	4	2	2	1	0	1	1	1	1
DRESDEN 3	0	0	1	3	0	2	2	1	1	0	1	0
DUANE ARNOLD	1	0	0	1	0	0	0	1	1	0	1	0
FARLEY 1	0	0	2	0	0	0	0	1	1	0	0	0
FARLEY 2	2	0	2	0	0	0	1	1	0	0	0	0
FERMI 2	0	0	4	2	1	0	0	1	2	1	2	3
FITZPATRICK	2	2	1	3	1	2	4	4	3	0	3	1
FORT CALHOUN	1	1	3	0	2	0	3	1	2	0	4	0
GINNA	0	1	0	0	0	0	0	0	0	0	0	0
GRAND GULF	2	0	0	0	0	1	4	0	1	0	0	1
HADDAM NECK	3	1	1	2	1	1	2	1	0	2	1	0
HARRIS	0	4	3	1	0	0	1	4	0	1	1	0
HATCH 1	2	4	1	2	3	1	0	0	0	0	2	0
HATCH 2	4	2	1	2	2	3	1	2	2	0	0	0
HOPE CREEK	2	2	1	0	0	1	1	1	1	0	0	0
INDIAN POINT 2	2	3	0	1	0	0	3	0	0	2	0	0
INDIAN POINT 3	2	0	0	1	0	0	2	2	3	2	10	2
KEWAUNEE	1	1	0	0	1	0	1	0	1	0	2	0
LASALLE 1	0	2	1	0	2	0	1	0	2	3	1	0
LASALLE 2	2	1	2	2	1	0	1	0	1	0	1	0
LIMERICK 1	3	3	2	2	1	1	3	1	1	0	1	1
LIMERICK 2	1	2	4	1	2	2	4	1	2	2	0	1
MAINE YANKEE	0	1	0	0	0	2	0	0	0	0	1	0
MCGUIRE 1	2	1	2	2	1	1	2	1	1	0	0	0
MCGUIRE 2	2	1	4	3	0	2	2	0	1	1	0	2
MILLSTONE 1	1	0	0	0	0	1	1	0	0	0	1	0
MILLSTONE 2	4	2	0	0	0	1	0	1	0	0	1	0
MILLSTONE 3	1	2	2	2	0	2	0	1	2	0	0	0
MONTICELLO	0	1	1	1	0	1	0	0	1	0	0	0
NINE MILE PT. 1	1	0	1	1	0	0	0	0	0	2	0	0

TABLE 10.14 CAUSE CODES (CONTINUED)

OTHER PERSONNEL ERRORS

Plant Name	Year - Calendar Quarter											
	90-4	91-1	9.	2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
NINE MILE PT. 2	4	1	3	1	0	4	2	1	1	1	0	0
NORTH ANNA 1	1	0	2	2	1	1	0	0	0	2	3	0
NORTH ANNA 2	1	0	0	2	1	0	2	0	0	1	1	0
OCONEE 1	0	0	2	0	0	1	1	1	3	0	0	2
OCONEE 2	0	0	1	0	1	1	0	1	3	0	0	2
OCONEE 3	0	1	0	1	1	3	0	1	3	2	0	0
OYSTER CREEK	0	0	0	0	0	0	1	0	1	0	0	0
PALISADES	2	0	2	2	0	5	2	1	0	1	0	1
PALO VERDE 1	1	1	0	0	0	2	1	1	0	2	0	0
PALO VERDE 2	1	0	2	0	1	0	0	0	1	0	0	0
PALO VERDE 3	1	0	0	1	2	1	0	0	0	0	0	0
PEACH BOTTOM 2	4	1	3	3	2	1	2	2	2	1	2	0
PEACH BOTTOM 3	5	0	4	0	1	2	2	1	1	1	0	0
PERRY	4	0	0	4	5	0	0	2	2	3	1	0
PILGRIM	1	0	3	2	1	0	0	2	2	2	3	0
POINT BEACH 1	0	0	2	1	1	1	2	0	0	0	1	1
POINT BEACH 2	1	0	2	0	3	1	0	1	2	0	0	1
PRAIRIE ISLAND 1	0	0	4	0	0	1	0	1	2	2	0	2
PRAIRIE ISLAND 2	3	0	3	0	0	1	0	0	1	0	1	0
QUAD CITIES 1	3	1	0	0	1	1	3	3	2	0	0	3
QUAD CITIES 2	3	0	0	0	2	3	1	2	1	1	2	4
RIVER BEND	7	0	2	2	0	1	2	1	3	3	1	2
ROBINSON 2	0	0	1	2	0	0	0	3	2	0	0	2
SALEM 1	4	4	2	3	1	2	0	2	0	2	2	1
SALEM 2	1	1	0	1	1	1	0	4	1	2	1	0
SAN ONOFRE 1	0	2	0	1	1	0	0	0	1	NA	NA	NA
SAN ONOFRE 2	1	1	0	2	1	1	0	0	0	0	0	0
SAN ONOFRE 3	0	1	0	2	4	3	0	0	0	0	0	0
SEABROOK	2	1	2	2	0	1	1	2	1	1	1	1
SEQUOYAH 1	2	1	2	4	2	2	1	2	2	3	2	1
SEQUOYAH 2	3	5	2	4	3	3	1	3	2	2	1	1
SOUTH TEXAS 1	1	3	1	0	1	1	0	3	1	0	1	0
SOUTH TEXAS 2	0	0	1	0	1	0	0	1	0	2	1	0
ST. LUCIE 1	0	1	0	2	1	1	1	0	0	1	1	0
ST. LUCIE 2	1	0	2	0	0	0	1	0	0	1	1	0
SUMMER	0	1	0	0	0	1	2	0	0	0	2	0
SURRY 1	1	1	5	2	1	2	3	0	0	2	1	2
SURRY 2	0	1	4	1	1	3	2	0	0	1	1	1
SUSQUEHANNA 1	1	0	0	0	0	1	1	2	0	0	0	0
SUSQUEHANNA 2	2	1	2	0	0	0	0	2	1	1	0	0
THREE MILE ISL 1	0	0	0	1	0	0	0	0	1	2	0	0
TROJAN	2	2	2	2	1	2	1	2	1	NA	NA	NA
TURKEY POINT 3	1	0	0	2	0	1	1	0	2	2	0	0
TURKEY POINT 4	1	1	0	0	0	1	0	0	1	1	1	1
VERMONT YANKEE	2	1	0	0	0	4	2	0	1	1	1	0
VOGTLE 1	1	2	0	1	1	0	1	0	0	1	2	1
VOGTLE 2	3	2	0	1	0	0	2	1	0	1	0	1
WASH. NUCLEAR 2	2	1	2	1	1	1	3	2	2	1	0	1
WATERFORD 3	1	1	4	0	1	0	0	2	1	0	0	1
WOLF CREEK	1	0	0	2	1	0	1	0	0	1	0	1
YANKEE-ROWE	3	0	0	1	1	1	NA	NA	NA	NA	NA	NA
ZION 1	1	2	2	3	2	0	2	2	4	0	1	0
ZION 2	1	2	1	3	0	1	1	0	2	0	1	0
TOTAL	158	118	138	120	100	111	113	98	104	88	80	49

NA - The plant is not yet licensed.
- The plant is permanently shutdown.

TABLE 10.15 CAUSE CODES

MAINTENANCE PROBLEMS

Plant Name	Year - Calendar Quarter											
	90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
ARKANSAS 1	7	2	5	0	2	0	3	0	1	1	0	0
ARKANSAS 2	4	7	7	0	4	2	1	2	3	0	1	0
BEAVER VALLEY 1	6	7	7	4	3	3	2	2	2	2	4	1
BEAVER VALLEY 2	9	0	1	2	1	2	4	2	2	4	1	1
BIG ROCK POINT	2	0	2	1	4	3	2	1	2	1	1	4
BRAIDWOOD 1	5	2	1	3	3	4	0	2	4	2	0	1
BRAIDWOOD 2	1	1	1	4	3	2	2	3	3	1	1	3
BROWNS FERRY 1	3	5	8	0	0	1	4	2	2	3	2	0
BROWNS FERRY 2	2	8	11	1	0	1	5	3	3	4	4	1
BROWNS FERRY 3	4	4	7	0	1	2	4	2	4	2	2	0
BRUNSWICK 1	12	7	7	6	3	7	7	5	2	1	3	0
BRUNSWICK 2	6	3	3	7	4	3	4	7	3	4	3	1
BYRON 1	3	1	0	1	2	0	2	1	0	2	0	0
BYRON 2	3	1	0	1	3	0	3	2	0	2	0	1
CALLAWAY	6	0	1	1	3	1	2	2	0	0	0	1
CALVERT CLIFFS 1	1	0	1	2	3	1	1	1	1	2	1	0
CALVERT CLIFFS 2	2	0	4	0	1	3	1	5	0	3	2	0
CATAWBA 1	5	5	4	5	8	2	2	5	1	4	1	0
CATAWBA 2	5	3	3	5	6	4	1	1	2	6	0	0
CLINTON 1	2	3	0	1	4	5	2	1	2	0	0	0
COMANCHE PEAK 1	6	8	3	2	7	4	6	2	5	4	3	0
COMANCHE PEAK 2	NA	NA	NA	NA	NA	NA	NA	NA	NA	2	3	0
COOK 1	5	2	2	3	2	2	3	4	3	0	0	0
COOK 2	2	4	0	2	3	3	2	3	3	2	1	3
COOPER STATION	1	3	1	2	7	4	2	1	2	5	8	3
CRYSTAL RIVER 3	4	0	5	1	6	2	3	6	4	1	2	0
DAVIS-BESSE	2	1	0	2	5	3	0	3	0	1	1	0
DIABLO CANYON 1	6	5	2	5	2	1	4	5	5	1	0	0
DIABLO CANYON 2	0	0	0	4	3	3	1	2	3	4	0	0
DRESDEN 2	11	6	7	17	6	8	9	8	7	4	3	3
DRESDEN 3	1	3	5	9	3	10	7	3	7	7	3	4
DUANE ARNOLD	2	2	0	2	2	1	3	2	4	0	3	1
FARLEY 1	0	0	5	0	3	1	0	1	2	1	0	1
FARLEY 2	2	0	3	0	2	2	5	1	0	2	0	1
FERMI 2	2	3	9	2	4	2	2	2	2	4	2	1
FITZPATRICK	7	3	2	7	3	4	12	5	6	2	6	3
FORT CALHOUN	1	3	5	0	5	6	5	5	1	4	5	0
GINNA	3	2	2	1	1	3	2	0	0	0	1	1
GRAND GULF	7	1	3	2	2	1	7	1	2	2	2	3
HADDAM NECK	7	6	1	4	6	4	3	0	1	3	7	3
HARRIS	4	7	8	3	3	1	1	6	0	2	5	0
HATCH 1	6	8	5	5	12	7	6	8	2	2	9	1
HATCH 2	7	9	9	3	7	8	7	9	7	2	5	1
HOPE CREEK	8	5	7	1	1	4	3	4	0	2	2	2
INDIAN POINT 2	8	5	1	6	2	6	5	1	0	5	0	1
INDIAN POINT 3	4	3	1	2	1	3	5	3	5	4	13	2
KEWAUNEE	4	0	2	1	4	5	3	3	4	7	3	1
LASALLE 1	2	6	6	4	4	3	3	0	5	8	2	4
LASALLE 2	6	4	5	6	1	5	5	3	2	2	2	3
LIMERICK 1	13	8	8	4	7	3	7	2	2	4	5	2
LIMERICK 2	8	7	11	5	4	4	9	1	2	7	3	4
MAINE YANKEE	3	2	2	0	2	3	2	0	3	2	5	3
MCGUIRE 1	5	3	2	4	3	3	2	1	2	1	3	2
MCGUIRE 2	4	2	4	5	2	4	3	1	2	4	1	2
MILLSTONE 1	2	1	8	3	2	4	2	2	3	1	4	1
MILLSTONE 2	3	5	0	1	1	4	2	3	2	4	3	4
MILLSTONE 3	4	5	5	5	2	6	4	5	8	4	2	4
MONTICELLO	1	3	6	2	0	3	0	3	2	2	1	1
NINE MILE PT. 1	7	4	2	3	0	5	2	3	0	3	1	0

TABLE 10.15 CAUSE CODES (CONTINUED)

MAINTENANCE PROBLEMS

Plant Name	Year - Calendar Quarter											
	90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
NINE MILE PT. 2	9	4	6	4	1	7	6	1	4	2	1	3
NORTH ANNA 1	1	5	5	4	3	7	2	2	3	6	6	0
NORTH ANNA 2	3	2	4	7	2	7	7	1	3	2	4	1
OCONEE 1	0	0	2	0	1	3	3	3	3	0	1	1
OCONEE 2	0	0	1	0	1	4	0	2	2	0	2	2
OCONEE 3	0	1	1	1	1	5	0	3	2	2	2	0
OYSTER CREEK	3	0	0	1	2	0	6	2	2	2	0	0
PALISADES	3	5	4	2	3	6	5	3	1	2	2	3
PALO VERDE 1	1	3	1	1	0	3	3	1	0	3	2	0
PALO VERDE 2	1	2	2	2	3	0	2	0	2	1	3	0
PALO VERDE 3	1	3	0	3	2	1	1	2	1	1	2	1
PEACH BOTTOM 2	4	4	11	9	6	5	5	5	5	4	5	1
PEACH BOTTOM 3	5	3	8	7	3	3	4	1	5	3	1	2
PERRY	9	6	2	4	6	6	7	2	6	6	2	3
PILGRIM	2	5	8	4	3	2	3	4	2	4	7	3
POINT BEACH 1	0	0	5	3	4	2	3	0	2	3	2	1
POINT BEACH 2	3	0	2	0	5	1	1	1	4	5	2	1
PRAIRIE ISLAND 1	3	2	5	1	0	3	0	5	2	4	2	4
PRAIRIE ISLAND 2	7	2	3	1	0	4	0	3	1	2	1	2
QUAD CITIES 1	8	8	4	4	8	7	6	7	6	3	1	8
QUAD CITIES 2	6	3	2	6	6	10	9	4	2	9	5	7
RIVER BEND	15	2	4	3	3	3	4	7	9	4	9	4
ROBINSON 2	0	0	1	4	0	3	4	4	4	1	1	2
SALEM 1	5	13	8	7	3	5	4	2	3	2	3	1
SALEM 2	7	4	3	2	6	6	5	3	1	3	3	0
SAN ONOFRE 1	2	5	3	4	5	0	0	0	1	NA	NA	NA
SAN ONOFRE 2	4	4	1	3	4	4	3	1	1	1	0	1
SAN ONOFRE 3	2	3	2	3	6	5	3	1	1	1	1	1
SEABROOK	2	2	2	2	1	4	4	6	5	4	3	4
SEQUOYAH 1	5	3	6	5	4	6	4	2	8	6	4	3
SEQUOYAH 2	7	6	5	5	2	5	4	6	10	5	3	2
SOUTH TEXAS 1	2	8	4	2	3	2	2	8	4	10	4	1
SOUTH TEXAS 2	3	5	3	0	1	2	4	3	4	9	4	3
ST. LUCIE 1	0	2	1	2	3	2	2	0	0	2	1	1
ST. LUCIE 2	1	1	3	1	0	0	1	3	1	2	2	1
SUMMER	0	1	1	2	1	1	2	0	2	2	1	0
SURRY 1	7	2	7	7	2	6	3	2	0	4	3	0
SURRY 2	4	3	8	8	2	7	3	4	1	1	5	2
SUSQUEHANNA 1	8	3	2	1	3	3	3	3	2	2	3	3
SUSQUEHANNA 2	6	4	5	2	5	2	1	3	3	3	2	2
THREE MILE ISL 1	0	0	0	3	2	1	0	1	1	3	1	1
TROJAN	3	5	5	7	5	9	5	7	4	NA	NA	NA
TURKEY POINT 3	4	1	0	3	3	4	2	2	4	1	0	0
TURKEY POINT 4	5	1	0	0	2	6	1	4	3	1	0	0
VERMONT YANKEE	4	5	3	0	2	8	4	0	3	3	3	3
VOGTLE 1	2	4	1	1	6	0	4	1	2	3	2	2
VOGTLE 2	4	5	2	3	3	1	6	2	1	2	1	2
WASH. NUCLEAR 2	6	4	5	8	5	9	9	6	5	9	5	1
WATERFORD 3	3	2	9	1	2	1	2	5	3	1	0	1
WOLF CREEK	3	3	5	3	6	5	2	1	1	1	3	1
YANKEE-ROWE	4	1	0	2	1	2	NA	NA	NA	NA	NA	NA
ZION 1	2	5	6	3	3	1	6	5	8	3	1	2
ZION 2	4	6	2	4	0	1	4	2	2	1	1	1
TOTAL	449	369	403	339	342	391	373	307	300	313	267	167

NA - The plant is not yet licensed.
- The plant is permanently shutdown.

TABLE 10.16 CAUSE CODES

DESIGN/CONSTRUCTION/INSTALLATION/FABRICATION/PROBLEMS

Plant Name	Year - Calendar Quarter											
	90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
ARKANSAS 1	3	0	2	1	2	0	2	0	0	1	0	0
ARKANSAS 2	2	3	3	3	1	0	0	1	0	0	1	0
BEAVER VALLEY 1	0	1	4	1	1	1	0	0	2	2	1	0
BEAVER VALLEY 2	2	0	0	0	1	1	0	0	1	4	0	0
BIG ROCK POINT	0	1	0	0	0	1	2	1	0	0	0	3
BRAIDWOOD 1	1	0	0	1	0	1	0	2	0	2	0	0
BRAIDWOOD 2	0	0	0	1	0	0	0	2	0	2	0	0
BROWNS FERRY 1	0	0	1	0	0	1	0	0	1	0	0	0
BROWNS FERRY 2	0	0	1	2	0	1	1	0	2	0	0	0
BROWNS FERRY 3	2	0	1	0	0	1	0	0	3	0	0	0
BRUNSWICK 1	1	2	1	2	0	1	4	4	1	5	0	0
BRUNSWICK 2	2	1	2	2	3	3	4	4	1	4	1	0
BYRON 1	1	0	0	1	0	0	0	2	0	2	0	0
BYRON 2	1	0	0	1	0	1	0	2	0	2	0	0
CALLAWAY	1	0	0	0	0	0	1	0	0	0	0	0
CALVERT CLIFFS 1	2	1	0	0	1	1	1	0	1	0	1	0
CALVERT CLIFFS 2	3	1	1	0	0	2	1	0	1	0	0	0
CATAWBA 1	1	2	0	4	1	2	0	1	1	2	0	1
CATAWBA 2	1	3	0	4	1	1	0	1	2	1	0	0
CLINTON 1	1	0	0	0	2	2	1	0	0	1	0	0
COMANCHE PEAK 1	2	1	2	1	0	1	2	1	1	0	0	0
COMANCHE PEAK 2	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	2	0
COOK 1	2	0	0	1	0	1	0	1	0	0	1	0
COOK 2	2	0	0	1	0	2	1	1	2	0	2	0
COOPER STATION	0	1	0	1	3	1	3	2	2	4	6	2
CRYSTAL RIVER 3	2	1	0	0	4	1	6	2	2	0	3	1
DAVIS-BESSE	0	0	0	0	1	0	1	0	0	0	1	0
DIABLO CANYON 1	1	1	0	0	2	2	1	2	1	1	0	0
DIABLO CANYON 2	0	0	0	0	1	1	2	2	2	1	0	0
DRESDEN 2	2	0	3	5	5	2	2	2	4	2	2	2
DRESDEN 3	0	0	2	3	2	3	4	1	2	2	1	2
DUANE ARNOLD	2	0	1	2	0	3	3	3	1	0	1	0
FARLEY 1	0	0	0	0	0	0	0	0	1	0	0	0
FARLEY 2	0	0	0	0	0	0	0	0	0	0	0	0
FERMI 2	1	2	0	0	0	1	2	0	0	2	0	2
FITZPATRICK	1	1	3	6	8	11	7	1	2	3	2	0
FORT CALHOUN	1	2	1	4	3	6	4	5	0	2	0	0
GINNA	2	0	0	0	0	0	0	0	0	1	0	0
GRAND GULF	1	0	1	1	0	0	5	2	0	0	0	0
HADDAM NECK	2	2	0	1	4	4	2	1	0	0	0	1
HARRIS	1	0	1	1	1	2	0	1	0	1	1	0
HATCH 1	1	1	2	3	1	1	3	0	0	1	0	0
HATCH 2	0	1	2	4	0	0	3	3	2	2	0	0
HOPE CREEK	8	1	2	0	2	1	0	0	2	0	0	1
INDIAN POINT 2	0	0	1	2	0	0	2	2	0	1	0	1
INDIAN POINT 3	1	0	0	1	0	1	3	1	2	2	2	2
KEWAUNEE	1	2	0	1	2	1	3	0	0	2	0	0
LASALLE 1	1	1	0	0	1	1	1	1	1	1	0	0
LASALLE 2	0	1	0	0	0	0	1	2	0	0	1	0
LIMERICK 1	3	0	1	0	0	0	5	1	0	2	1	1
LIMERICK 2	2	0	1	0	1	0	6	1	0	3	1	1
MAINE YANKEE	4	0	0	1	1	2	0	1	0	0	1	0
MCGUIRE 1	5	2	1	2	1	2	1	1	0	1	1	0
MCGUIRE 2	4	2	2	3	1	0	1	0	0	2	1	0
MILLSTONE 1	0	3	4	3	2	9	2	1	0	1	2	0
MILLSTONE 2	3	1	0	0	1	2	2	2	0	0	1	3
MILLSTONE 3	1	3	1	3	2	1	4	2	2	0	3	1
MONTICELLO	1	0	3	1	0	1	1	0	1	4	0	0
NINE MILE PT. 1	1	1	0	2	2	0	0	1	0	1	0	0

TABLE 10.16 CAUSE CODES (CONTINUED)

DESIGN/CONSTRUCTION/INSTALLATION/FABRICATION/PROBLEMS

Plant Name	Year - Calendar Quarter											
	90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
NINE MILE PT. 2	1	2	1	1	0	1	0	1	0	0	0	1
NORTH ANNA 1	0	0	1	0	0	1	0	1	0	2	0	0
NORTH ANNA 2	1	0	0	0	0	1	0	2	0	1	1	1
OCONEE 1	1	1	4	2	2	0	1	3	5	2	2	1
OCONEE 2	1	1	5	2	2	0	1	3	5	2	2	1
OCONEE 3	1	2	5	2	3	0	2	3	5	3	2	1
OYSTER CREEK	1	1	0	0	1	1	1	1	1	0	0	1
PALISADES	1	0	1	1	1	12	0	3	0	0	0	3
PALO VERDE 1	1	1	0	1	2	3	2	2	3	1	1	0
PALO VERDE 2	1	1	0	1	2	1	3	2	2	2	1	1
PALO VERDE 3	2	1	1	2	3	2	3	1	2	1	1	0
PEACH BOTTOM 2	1	2	3	1	1	0	0	3	1	1	0	0
PEACH BOTTOM 3	1	1	2	2	0	0	0	3	2	2	0	1
PERRY	0	1	1	0	6	3	0	1	1	2	0	0
PILGRIM	1	2	2	1	2	2	1	1	2	1	0	3
POINT BEACH 1	1	0	1	1	0	0	0	1	1	0	1	0
POINT BEACH 2	1	0	1	1	0	0	0	2	2	0	1	0
PRAIRIE ISLAND 1	1	1	1	0	0	3	2	0	0	0	0	0
PRAIRIE ISLAND 2	1	1	0	0	0	2	1	0	0	0	0	0
QUAD CITIES 1	3	2	2	2	3	1	4	2	1	0	1	2
QUAD CITIES 2	4	3	1	2	5	1	5	1	1	1	1	2
RIVER BEND	2	2	2	4	1	2	0	0	1	1	0	1
ROBINSON 2	0	0	0	2	0	1	2	1	3	0	0	0
SALEM 1	2	5	3	3	3	2	3	4	2	4	3	2
SALEM 2	5	6	2	3	3	2	3	3	1	3	5	1
SAN ONOFRE 1	0	3	0	0	0	0	1	0	0	NA	NA	NA
SAN ONOFRE 2	1	1	1	1	2	2	0	0	0	0	0	1
SAN ONOFRE 3	0	1	0	1	0	1	0	0	0	0	0	1
SEABROOK	1	0	2	2	0	1	0	2	1	1	3	0
SEQUOYAH 1	2	0	2	4	3	2	1	2	0	0	2	1
SEQUOYAH 2	0	0	2	4	2	2	1	2	0	0	2	1
SOUTH TEXAS 1	0	1	1	1	2	0	0	1	1	2	0	2
SOUTH TEXAS 2	0	1	0	1	2	0	0	0	1	2	0	2
ST. LUCIE 1	0	0	0	0	0	1	0	0	0	0	1	0
ST. LUCIE 2	0	0	1	0	1	0	1	1	0	1	0	0
SUMMER	1	0	0	0	1	0	1	1	0	0	0	0
SURRY 1	0	0	2	0	0	0	0	0	0	0	0	0
SURRY 2	0	0	3	0	0	0	0	0	0	0	0	0
SUSQUEHANNA 1	1	0	1	2	2	3	1	3	1	1	1	0
SUSQUEHANNA 2	1	0	3	2	2	2	0	2	0	1	0	0
THREE MILE ISL 1	0	0	0	0	0	1	0	0	0	0	0	0
TROJAN	2	2	3	3	0	3	5	3	3	NA	NA	NA
TURKEY POINT 3	0	0	0	1	1	0	0	0	2	1	0	0
TURKEY POINT 4	0	0	0	1	1	0	0	0	0	0	1	0
VERMONT YANKEE	1	0	4	0	0	1	1	0	1	0	0	0
VOGTLE 1	1	0	0	1	1	0	1	0	1	0	1	0
VOGTLE 2	1	1	0	0	1	0	1	0	0	0	0	0
WASH. NUCLEAR 2	8	1	8	2	3	4	9	4	1	8	2	1
WATERFORD 3	1	1	3	2	0	1	0	0	2	0	0	0
WOLF CREEK	0	1	0	2	1	0	0	0	0	2	0	0
YANKEE-ROWE	0	0	0	0	1	0	NA	NA	NA	NA	NA	NA
ZION 1	0	1	2	0	0	0	1	3	2	1	0	0
ZION 2	1	1	1	0	0	0	1	4	1	1	0	0
TOTAL	138	96	128	140	130	148	159	138	104	120	75	55

NA - The plant is not yet licensed.
- The plant is permanently shutdown.

TABLE 10.17 CAUSE CODES

MISCELLANEOUS

Plant Name	Year - Calendar Quarter											
	90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
ARKANSAS 1	0	0	0	0	0	0	0	1	0	0	0	0
ARKANSAS 2	0	0	0	0	0	0	0	1	0	0	0	0
BEAVER VALLEY 1	0	0	0	2	0	0	0	0	0	0	0	0
BEAVER VALLEY 2	0	0	0	0	0	0	0	0	0	0	0	1
BIG ROCK POINT	0	0	0	0	0	0	0	0	0	0	0	0
BRAIDWOOD 1	0	2	0	1	0	0	0	0	0	1	0	0
BRAIDWOOD 2	0	0	0	1	0	1	0	0	0	0	0	0
BROWNS FERRY 1	0	0	0	0	0	0	1	0	0	0	0	0
BROWNS FERRY 2	0	1	0	0	1	1	1	0	0	0	0	0
BROWNS FERRY 3	0	0	0	0	0	0	1	0	0	0	0	0
BRUNSWICK 1	0	0	1	0	1	1	0	0	0	0	0	0
BRUNSWICK 2	1	0	0	0	1	1	0	0	0	0	0	1
BYRON 1	0	1	1	0	0	0	1	0	0	0	0	0
BYRON 2	0	1	1	0	1	0	2	0	0	0	1	0
CALLAWAY	2	0	0	0	1	0	1	0	0	0	0	0
CALVERT CLIFFS 1	0	0	0	0	0	0	0	0	0	0	0	0
CALVERT CLIFFS 2	0	0	0	1	0	0	0	0	0	0	0	0
CATAWBA 1	0	0	1	0	0	0	0	0	0	1	0	0
CATAWBA 2	0	0	1	0	0	0	0	0	0	1	0	0
CLINTON 1	0	0	0	0	0	0	0	0	0	0	0	0
COMANCHE PEAK 1	0	0	1	1	0	0	1	0	0	0	0	0
COMANCHE PEAK 2	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0	1
COOK 1	0	0	0	0	0	0	0	0	0	0	0	0
COOK 2	0	1	0	0	0	0	0	0	0	0	1	0
COOPER STATION	0	0	0	1	0	0	0	0	0	0	0	0
CRYSTAL RIVER 3	0	0	0	0	0	0	0	1	0	1	0	0
DAVIS-BESSE	0	0	0	0	0	0	0	0	0	0	0	0
DIABLO CANYON 1	1	0	1	0	0	0	0	0	0	0	0	0
DIABLO CANYON 2	0	0	0	0	0	0	0	0	0	0	0	0
DRESDEN 2	0	0	0	1	0	0	0	1	0	0	0	0
DRESDEN 3	0	0	0	1	0	1	0	0	1	0	0	0
DUANE ARNOLD	0	0	0	2	0	0	0	1	0	1	0	0
FARLEY 1	0	0	0	1	0	0	0	0	1	0	0	1
FARLEY 2	0	0	1	1	0	0	0	0	0	0	0	1
FERMI 2	2	0	1	0	0	0	0	0	0	0	0	0
FITZPATRICK	0	0	0	0	0	0	0	0	0	1	0	0
FORT CALHOUN	0	0	0	0	0	0	0	0	0	0	0	0
GINNA	1	1	0	0	0	1	0	0	1	0	0	0
GRAND GULF	0	0	1	1	1	0	1	0	0	0	0	0
HADDAM NECK	0	0	0	0	0	0	1	0	0	0	1	0
HARRIS	0	0	0	0	0	0	0	0	0	0	0	0
HATCH 1	1	3	0	1	1	0	0	0	0	0	1	0
HATCH 2	0	4	1	0	1	0	1	1	0	0	1	0
HOPE CREEK	1	0	0	2	0	0	0	0	1	0	0	0
INDIAN POINT 2	0	0	0	1	0	0	0	0	0	0	0	0
INDIAN POINT 3	0	0	0	0	1	0	0	0	0	0	0	0
KEWAUNEE	0	0	0	0	0	0	0	0	0	0	0	1
LASALLE 1	0	0	0	0	0	0	0	0	0	1	0	0
LASALLE 2	0	0	0	0	1	0	0	0	0	0	0	0
LIMERICK 1	0	1	0	0	1	0	0	1	0	0	0	0
LIMERICK 2	0	0	0	0	1	0	0	1	0	0	0	0
MAINE YANKEE	1	0	0	0	0	0	0	0	0	0	0	0
MCGUIRE 1	0	0	0	0	0	0	0	0	0	0	0	0
MCGUIRE 2	1	0	0	1	1	0	0	1	0	0	0	0
MILLSTONE 1	0	0	0	0	0	0	0	0	0	0	0	0
MILLSTONE 2	0	0	0	0	0	0	0	0	0	0	0	0
MILLSTONE 3	0	0	1	0	0	0	0	0	0	1	0	0
MONTICELLO	0	0	0	1	0	0	0	0	0	0	0	0
NINE MILE PT. 1	0	0	0	0	0	0	0	0	0	0	0	1

TABLE 10.17 CAUSE CODES (CONTINUED)

MISCELLANEOUS

Plant Name	Year - Calendar Quarter											
	90-4	91-1	91-2	91-3	91-4	92-1	92-2	92-3	92-4	93-1	93-2	93-3
NINE MILE PT. 2	0	1	0	0	0	0	0	1	0	0	0	0
NORTH ANNA 1	0	0	0	0	0	0	0	0	0	0	0	0
NORTH ANNA 2	0	0	0	2	0	0	0	0	0	0	1	0
OCONEE 1	0	0	0	0	0	0	0	1	0	0	0	0
OCONEE 2	0	0	0	0	0	0	0	1	0	0	1	0
OCONEE 3	1	0	1	0	0	0	0	1	0	0	0	0
OYSTER CREEK	0	0	0	0	0	0	0	1	0	0	0	0
PALISADES	0	0	0	0	0	0	0	0	0	0	0	0
PALO VERDE 1	0	0	1	1	0	0	0	0	0	0	0	0
PALO VERDE 2	0	0	0	0	0	0	0	0	0	0	0	0
PALO VERDE 3	1	0	0	0	1	0	0	0	0	0	0	0
PEACH BOTTOM 2	0	0	0	1	0	0	1	1	0	0	0	0
PEACH BOTTOM 3	0	0	0	1	0	0	0	1	1	0	0	1
PERRY	0	0	0	0	0	1	0	0	0	0	1	0
PILGRIM	0	0	0	0	1	0	0	0	1	3	0	1
POINT BEACH 1	0	0	1	0	0	0	0	0	0	0	0	0
POINT BEACH 2	0	0	0	0	0	0	0	0	0	0	0	0
PRAIRIE ISLAND 1	0	0	0	1	0	0	0	0	0	0	0	0
PRAIRIE ISLAND 2	0	0	0	0	0	0	0	0	0	0	0	0
QUAD CITIES 1	0	1	0	0	0	0	1	0	0	0	0	0
QUAD CITIES 2	1	1	0	0	0	0	0	0	0	0	0	0
RIVER BEND	0	1	0	0	0	1	0	1	0	0	0	0
ROBINSON 2	0	1	0	0	0	0	0	1	0	0	0	0
SALEM 1	0	1	1	1	0	0	0	0	0	0	0	0
SALEM 2	0	0	2	1	0	0	0	0	0	0	1	0
SAN ONOFRE 1	0	0	0	0	0	0	0	0	0	NA	NA	NA
SAN ONOFRE 2	0	0	0	1	0	0	0	0	0	0	0	0
SAN ONOFRE 3	0	0	0	1	0	0	0	0	0	1	0	0
SEABROOK	0	0	0	0	0	0	0	0	1	0	0	0
SEQUOYAH 1	0	1	0	0	0	0	0	0	0	1	0	0
SEQUOYAH 2	0	0	0	0	0	0	0	0	0	0	0	0
SOUTH TEXAS 1	0	0	3	0	0	0	0	0	0	0	0	0
SOUTH TEXAS 2	1	0	1	1	0	1	0	0	2	0	0	0
ST. LUCIE 1	0	0	0	0	0	0	0	1	0	0	0	0
ST. LUCIE 2	1	0	0	0	0	0	0	0	0	0	0	0
SUMMER	0	0	0	1	1	0	0	0	0	0	0	0
SURRY 1	0	0	0	0	0	0	0	0	0	0	0	0
SURRY 2	0	0	0	1	0	0	0	0	0	0	0	1
SUSQUEHANNA 1	0	0	0	2	1	1	0	0	0	0	0	1
SUSQUEHANNA 2	0	0	1	1	1	1	0	1	0	0	0	1
THREE MILE ISL 1	0	0	0	0	0	0	0	0	0	0	1	0
TROJAN	0	1	0	1	1	0	0	1	0	NA	NA	NA
TURKEY POINT 3	0	0	0	0	0	0	0	0	0	0	0	0
TURKEY POINT 4	0	0	0	0	1	0	0	0	0	0	0	0
VERMONT YANKEE	0	0	1	0	0	1	0	0	0	0	0	0
VOGTLE 1	0	1	0	2	0	0	1	1	0	0	0	0
VOGTLE 2	0	3	0	1	0	0	1	1	0	0	1	0
WASH. NUCLEAR 2	0	0	0	1	1	0	0	0	0	0	0	0
WATERFORD 3	0	0	1	0	0	0	1	0	0	0	1	0
WOLF CREEK	0	0	1	0	0	1	0	0	0	0	0	0
YANKEE-ROWE	0	0	1	0	0	0	NA	NA	NA	NA	NA	NA
ZION 1	0	0	0	0	0	0	0	0	0	0	0	0
ZION 2	0	0	1	0	0	0	0	0	0	0	0	0
TOTAL	16	27	28	41	21	13	16	23	9	13	12	12

NA - The plant is not yet licensed.
- The plant is permanently shutdown.

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11 REVISION OF DATA

CONTAINED IN THE

FIRST QUARTER 1993 REPORT

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11. REVISION OF DATA CONTAINED IN THE FIRST QUARTER 1993 REPORT

An intensive review of data sources and application of detailed screening criteria have resulted in some changes to the data previously reported in the first quarter 1993 report. These changes are summarized in Tables 11.1 through 11.15. In aggregate, they do not significantly alter the overall picture presented in the first quarter 1993 report.

TABLE 11.1 REVISIONS TO SCRAMS > 15% POWER/1000 CRITICAL HOURS (TABLE 10.3 OF THE FIRST QUARTER 1993 REPORT)

Plant Name	Year-Quarter	Old Value	Revised Value
MONTICELLO	93-1	1.22	0.00

TABLE 11.2 REVISIONS TO SCRAMS <= 15% POWER (TABLE 10.4 OF THE FIRST QUARTER 1993 REPORT)

Plant Name	Year-Quarter	Old Value	Revised Value
MONTICELLO	93-1	0	1

TABLE 11.3 REVISIONS TO SAFETY SYSTEM ACTUATIONS (TABLE 10.5 OF THE FIRST QUARTER 1993 REPORT)

Plant Name	Year-Quarter	Old Value	Revised Value
PILGRIM	93-1	1	2

TABLE 11.4 REVISIONS TO SIGNIFICANT EVENTS (TABLE 10.6 OF THE FIRST QUARTER 1993 REPORT)

Plant Name	Year-Quarter	Old Value	Revised Value
CRYSTAL RIVER 3	93-1	0	1
DRESDEN 2	92-2	0	1
DRESDEN 3	92-2	0	1
INDIAN POINT 3	93-1	0	1

TABLE 11.5 REVISIONS TO SAFETY SYSTEM FAILURES (TABLE 10.7 OF THE FIRST QUARTER 1993 REPORT)

Plant Name	Year-Quarter	Old Value	Revised Value
BRUNSWICK 2	91-4	1	2
CATAWBA 1	93-1	1	2
CATAWBA 2	93-1	1	2
FERMI 2	93-1	3	2
FORT CALHOUN	93-1	0	1
HARRIS	93-1	0	2
INDIAN POINT 3	92-3	1	0
INDIAN POINT 3	92-4	1	2
KEWAUNEE	93-1	1	2
NORTH ANNA 1	93-1	1	3
PALISADES	93-1	1	2
PERRY	93-1	1	0
PILGRIM	93-1	3	5
POINT BEACH 2	93-1	2	3
QUAD CITIES 1	92-3	4	5
QUAD CITIES 1	93-1	3	2
QUAD CITIES 2	93-1	3	2
RIVER BEND	93-1	1	2
SEQUOYAH 1	92-4	0	1
SEQUOYAH 2	92-3	2	3
SEQUOYAH 2	92-4	2	3
SURRY 1	93-1	0	2
SURRY 2	93-1	0	1
VOGTLE 1	92-4	0	1
WASH. NUCLEAR 2	93-1	7	6

TABLE 11.6 REVISIONS TO FORCED OUTAGE RATE (TABLE 10.8 OF THE FIRST QUARTER 1993 REPORT)

Plant Name	Year-Quarter	Old Value	Revised Value
SOUTH TEXAS 2	93-1	51	49

TABLE 11.7 REVISIONS TO EQUIPMENT FORCED OUTAGES/1000 COMMERCIAL CRITICAL HOURS (TABLE 10.9 OF THE FIRST QUARTER 1993 REPORT)

Plant Name	Year-Quarter	Old Value	Revised Value
PALISADES	92-4	1.00	0.50

TABLE 11.7 REVISIONS TO EQUIPMENT FORCED OUTAGES/1000 (CONTINUED) COMMERCIAL CRITICAL HOURS (TABLE 10.9 OF THE FIRST QUARTER 1993 REPORT)

Plant Name	Year-Quarter	Old Value	Revised Value
WATERFORD 3	92-2	0.58	0.46

TABLE 11.8 REVISIONS TO CRITICAL HOURS (TABLE 10.10 OF THE FIRST QUARTER 1993 REPORT)

Plant Name	Year-Quarter	Old Value	Revised Value
PALO VERDE 1	93-1	2118	2130
ST. LUCIE 2	92-1	1440	2184
WATERFORD 3	92-2	1733	2183

TABLE 11.9 REVISIONS TO COLLECTIVE RADIATION EXPOSURE (TABLE 10.11 OF THE FIRST QUARTER 1993 REPORT)

Plant Name	Year-Quarter	Old Value	Revised Value
ARKANSAS 1	92-1	184	342
ARKANSAS 1	92-2	129	189
ARKANSAS 2	92-1	184	25
ARKANSAS 2	92-2	129	68
BEAVER VALLEY 1	92-1	60	6
BEAVER VALLEY 1	92-2	62	4
BEAVER VALLEY 2	92-1	60	113
BEAVER VALLEY 2	92-2	62	120
DIABLO CANYON 1	91-1	145	146
DIABLO CANYON 2	91-1	145	146
LIMERICK 1	92-1	29	49
LIMERICK 1	92-2	110	215
LIMERICK 2	92-1	29	9
LIMERICK 2	92-2	110	5
MCGUIRE 1	90-4	87	86
MCGUIRE 2	90-4	87	86
MILLSTONE 1	92-1	43	39
MILLSTONE 1	92-3	25	26
MILLSTONE 2	92-1	39	35
MILLSTONE 2	92-2	149	141
MILLSTONE 2	92-3	491	507
NINE MILE PT. 1	92-1	63	39
NINE MILE PT. 1	92-2	168	133
NINE MILE PT. 2	92-1	63	87

TABLE 11.9 REVISIONS TO COLLECTIVE RADIATION EXPOSURE (CONTINUED) (TABLE 10.11 OF THE FIRST QUARTER 1993 REPORT)

Plant Name	Year-Quarter	Old Value	Revised Value
NINE MILE PT. 2	92-2	168	204
PERRY	92-3	11	10
SALEM 1	92-1	65	8
SALEM 1	92-2	136	254
SALEM 2	92-1	65	122
SALEM 2	92-2	136	17
SAN ONOFRE 1	91-3	43	38
SAN ONOFRE 2	91-3	43	38
SAN ONOFRE 3	91-3	43	38
SEQUOYAH 1	92-1	85	15
SEQUOYAH 1	92-2	136	18
SEQUOYAH 2	92-1	85	154
SEQUOYAH 2	92-2	136	254

TABLE 11.10 REVISIONS TO CAUSE CODES ADMINISTRATIVE CONTROL PROBLEMS (TABLE 10.12 OF THE FIRST QUARTER 1993 REPORT)

Plant Name	Year-Quarter	Old Value	Revised Value
ARKANSAS 1	93-1	0	1
BRAIDWOOD 2	93-1	0	1
BRUNSWICK 1	92-3	3	4
BRUNSWICK 2	93-1	2	3
CATAWBA 1	93-1	1	4
CATAWBA 2	93-1	1	4
COOK 1	93-1	0	1
COOPER STATION	93-1	1	3
CRYSTAL RIVER 3	93-1	0	1
DIABLO CANYON 1	92-4	3	7
DIABLO CANYON 2	92-4	1	3
DIABLO CANYON 2	93-1	1	3
DRESDEN 2	93-1	2	3
DRESDEN 3	92-4	4	5
DRESDEN 3	93-1	2	3
FERMI 2	90-4	3	2
FERMI 2	93-1	2	3
FITZPATRICK	91-3	4	3
FITZPATRICK	92-4	7	8
FITZPATRICK	93-1	1	2

TABLE 11.10 REVISIONS TO CAUSE CODES (CONTINUED)
ADMINISTRATIVE CONTROL PROBLEMS
(TABLE 10.12 OF THE FIRST QUARTER 1993 REPORT)

Plant Name	Year-Quarter	Old Value	Revised Value
FORT CALHOUN	92-2	6	5
GINNA	92-2	0	1
GRAND GULF	93-1	0	2
HADDAM NECK	93-1	0	1
HARRIS	93-1	0	1
HOPE CREEK	91-1	3	2
HOPE CREEK	93-1	1	2
INDIAN POINT 3	92-1	1	2
INDIAN POINT 3	93-1	1	2
LASALLE 1	92-2	0	1
LASALLE 2	92-2	1	2
LIMERICK 2	93-1	3	4
MAINE YANKEE	93-1	1	3
MILLSTONE 2	93-1	1	3
MONTICELLO	93-1	0	1
NINE MILE PT. 1	93-1	2	5
NORTH ANNA 1	93-1	1	4
NORTH ANNA 2	93-1	1	2
PALO VERDE 2	93-1	0	1
PEACH BOTTOM 2	93-1	1	2
PEACH BOTTOM 3	93-1	0	1
PILGRIM	93-1	0	1
POINT BEACH 1	93-1	2	3
POINT BEACH 2	93-1	2	4
QUAD CITIES 1	93-1	2	3
QUAD CITIES 2	93-1	3	4
RIVER BEND	93-1	1	2
SALEM 1	91-2	4	5
SALEM 2	91-2	3	1
SAN ONOFRE 3	93-1	0	1
SEQUOYAH 1	91-4	1	2
SEQUOYAH 1	93-1	1	3
SEQUOYAH 2	93-1	0	3
SOUTH TEXAS 1	93-1	9	10
SOUTH TEXAS 2	93-1	5	7
SURRY 1	93-1	1	2
SURRY 2	93-1	1	2
TURKEY POINT 3	93-1	0	1
TURKEY POINT 4	93-1	0	1
WASH. NUCLEAR 2	93-1	6	12
WATERFORD 3	92-1	1	2

TABLE 11.10 REVISIONS TO CAUSE CODES (CONTINUED) ADMINISTRATIVE CONTROL PROBLEMS (TABLE 10.12 OF THE FIRST QUARTER 1993 REPORT)

Plant Name	Year-Quarter	Old Value	Revised Value
ZION 1	92-4	5	6
ZION 2	92-4	2	1

TABLE 11.11 REVISIONS TO CAUSE CODES LICENSED OPERATOR ERRORS (TABLE 10.13 OF THE FIRST QUARTER 1993 REPORT)

Plant Name	Year-Quarter	Old Value	Revised Value
BRAIDWOOD 1	93-1	0	1
BRUNSWICK 1	92-3	0	1
BRUNSWICK 2	93-1	0	1
COMANCHE PEAK 1	93-1	1	2
FITZPATRICK	92-4	1	0
INDIAN POINT 3	93-1	0	1
MILLSTONE 1	93-1	0	1
MILLSTONE 2	93-1	2	3
NINE MILE PT. 1	93-1	1	2
PILGRIM	93-1	0	1
POINT BEACH 2	93-1	1	2
SALEM 2	91-2	1	0
SEABROOK	93-1	0	1
WOLF CREEK	93-1	0	2

TABLE 11.12 REVISIONS TO CAUSE CODES OTHER PERSONNEL ERRORS (TABLE 10.14 OF THE FIRST QUARTER 1993 REPORT)

Plant Name	Year-Quarter	Old Value	Revised Value
BRUNSWICK 1	92-3	2	1
COOPER STATION	93-1	1	3
DIABLO CANYON 1	92-3	1	2
DIABLO CANYON 1	92-4	1	2
DIABLO CANYON 2	92-3	0	1
DIABLO CANYON 2	93-1	1	3
DRESDEN 2	93-1	0	1
FITZPATRICK	91-3	4	3
FITZPATRICK	92-4	4	3
FORT CALHOUN	92-2	4	3

TABLE 11.12 REVISIONS TO CAUSE CODES (CONTINUED) OTHER PERSONNEL ERRORS (TABLE 10.14 OF THE FIRST QUARTER 1993 REPORT)

Plant Name	Year-Quarter	Old Value	Revised Value
HADDAM NECK	93-1	1	2
HARRIS	93-1	0	1
INDIAN POINT 2	93-1	1	2
INDIAN POINT 3	93-1	1	2
LASALLE 1	92-2	0	1
LASALLE 2	92-2	0	1
LIMERICK 2	92-2	3	4
MCGUIRE 2	93-1	0	1
NINE MILE PT. 1	93-1	1	2
NORTH ANNA 2	93-1	0	1
PALO VERDE 1	93-1	1	2
PALO VERDE 2	91-4	0	1
PILGRIM	93-1	0	2
RIVER BEND	93-1	1	3
SALEM 2	91-2	1	0
SALEM 2	93-1	1	2
SEQUOYAH 1	92-3	1	2
SEQUOYAH 1	93-1	1	3
SEQUOYAH 2	93-1	1	2
ST. LUCIE 1	93-1	0	1
ST. LUCIE 2	93-1	2	1
SURRY 1	93-1	1	2
SURRY 2	93-1	0	1
TURKEY POINT 3	93-1	1	2
VOGTLE 1	93-1	0	1
VOGTLE 2	93-1	0	1
WOLF CREEK	93-1	0	1
ZION 2	92-4	3	2

TABLE 11.13 REVISIONS TO CAUSE CODES MAINTENANCE PROBLEMS (TABLE 10.15 OF THE FIRST QUARTER 1993 REPORT)

Plant Name	Year-Quarter	Old Value	Revised Value
ARKANSAS 1	93-1	0	1
BEAVER VALLEY 2	93-1	3	4
BRAIDWOOD 1	93-1	1	2
BROWNS FERRY 2	93-1	3	4
BRUNSWICK 2	91-4	3	4

TABLE 11.13 REVISIONS TO CAUSE CODES (CONTINUED)
MAINTENANCE PROBLEMS
(TABLE 10.15 OF THE FIRST QUARTER 1993 REPORT)

Plant Name	Year-Quarter	Old Value	Revised Value
BRUNSWICK 2	92-1	4	3
BRUNSWICK 2	93-1	3	4
CALVERT CLIFFS 1	91-2	2	1
CALVERT CLIFFS 2	91-2	5	4
CATAWBA 1	93-1	1	4
CATAWBA 2	93-1	2	6
COMANCHE PEAK 1	93-1	3	4
COOPER STATION	93-1	0	5
CRYSTAL RIVER 3	93-1	0	1
DIABLO CANYON 1	92-3	4	5
DIABLO CANYON 1	92-4	3	5
DIABLO CANYON 2	92-3	1	2
DIABLO CANYON 2	93-1	2	4
DRESDEN 3	92-4	6	7
DRESDEN 3	93-1	6	7
FERMI 2	90-4	3	2
FERMI 2	91-4	5	4
FERMI 2	93-1	3	4
FITZPATRICK	91-3	9	7
FITZPATRICK	92-4	5	6
FITZPATRICK	93-1	1	2
FORT CALHOUN	92-2	7	5
GRAND GULF	93-1	0	2
HADDAM NECK	93-1	1	3
HARRIS	93-1	0	2
HATCH 1	93-1	1	2
HOPE CREEK	91-1	6	5
HOPE CREEK	93-1	1	2
INDIAN POINT 2	93-1	3	5
INDIAN POINT 3	92-1	2	3
INDIAN POINT 3	93-1	2	4
KEWAUNEE	90-4	5	4
KEWAUNEE	93-1	3	7
LASALLE 1	93-1	7	8
LIMERICK 2	92-2	8	9
LIMERICK 2	93-1	6	7
MAINE YANKEE	93-1	1	2
MCGUIRE 2	93-1	3	4
MILLSTONE 2	93-1	2	4
MILLSTONE 3	93-1	2	4
MONTICELLO	93-1	1	2

TABLE 11.13 REVISIONS TO CAUSE CODES (CONTINUED)
MAINTENANCE PROBLEMS
(TABLE 10.15 OF THE FIRST QUARTER 1993 REPORT)

Plant Name	Year-Quarter	Old Value	Revised Value
NINE MILE PT. 1	93-1	1	3
NORTH ANNA 1	93-1	3	6
NORTH ANNA 2	93-1	0	2
OCONEE 1	92-1	4	3
OCONEE 2	92-1	5	4
OCONEE 3	92-1	6	5
PALISADES	93-1	1	2
PALO VERDE 1	93-1	2	3
PALO VERDE 2	91-4	2	3
PALO VERDE 2	93-1	0	1
PEACH BOTTOM 2	93-1	3	4
PEACH BOTTOM 3	93-1	2	3
PERRY	93-1	4	6
PILGRIM	93-1	1	4
POINT BEACH 1	93-1	2	3
POINT BEACH 2	93-1	3	5
QUAD CITIES 1	92-3	6	7
QUAD CITIES 1	93-1	2	3
QUAD CITIES 2	92-3	3	4
QUAD CITIES 2	93-1	8	9
RIVER BEND	93-1	3	4
SALEM 1	91-2	7	8
SALEM 2	91-2	4	3
SALEM 2	92-3	4	3
SALEM 2	93-1	2	3
SAN ONOFRE 2	91-2	2	1
SAN ONOFRE 3	93-1	0	1
SEABROOK	93-1	3	4
SEQUOYAH 1	91-4	3	4
SEQUOYAH 1	92-3	3	2
SEQUOYAH 1	93-1	2	6
SEQUOYAH 2	93-1	1	5
SOUTH TEXAS 1	93-1	9	10
SOUTH TEXAS 2	93-1	8	9
ST. LUCIE 1	93-1	1	2
ST. LUCIE 2	93-1	3	2
SUMMER	93-1	1	2
SURRY 1	93-1	3	4
SURRY 2	93-1	0	1
THREE MILE ISL 1	93-1	2	3
TURKEY POINT 3	93-1	0	1

TABLE 11.13 REVISIONS TO CAUSE CODES (CONTINUED) MAINTENANCE PROBLEMS (TABLE 10.15 OF THE FIRST QUARTER 1993 REPORT)

Plant Name	Year-Quarter	Old Value	Revised Value
TURKEY POINT 4	93-1	0	1
VOGTLE 1	93-1	2	3
VOGTLE 2	93-1	1	2
WASH. NUCLEAR 2	93-1	4	9
WATERFORD 3	93-1	0	1
WOLF CREEK	93-1	0	1
ZION 1	93-1	2	3
ZION 2	92-4	4	2
ZION 2	93-1	0	1

TABLE 11.14 REVISIONS TO CAUSE CODES DESIGN/CONSTRUCTION/INSTALLATION/FABRICATION PROBLEMS (TABLE 10.16 OF THE FIRST QUARTER 1993 REPORT)

Plant Name	Year-Quarter	Old Value	Revised Value
ARKANSAS 1	93-1	0	1
BEAVER VALLEY 2	93-1	2	4
BRUNSWICK 1	93-1	4	5
BRUNSWICK 2	92-1	2	3
BRUNSWICK 2	93-1	3	4
CATAWBA 1	93-1	0	2
CATAWBA 2	93-1	0	1
CLINTON 1	93-1	0	1
COOK 2	92-4	1	2
COOPER STATION	93-1	1	4
DRESDEN 2	93-1	1	2
DRESDEN 3	92-4	3	2
DRESDEN 3	93-1	1	2
FITZPATRICK	91-4	7	8
FITZPATRICK	92-1	12	11
FITZPATRICK	92-4	1	2
GINNA	93-1	0	1
HARRIS	93-1	0	1
INDIAN POINT 2	93-1	0	1
INDIAN POINT 3	92-3	0	1
INDIAN POINT 3	92-4	1	2
KEWAUNEE	93-1	0	2
LIMERICK 2	92-2	5	6
LIMERICK 2	93-1	2	3

TABLE 11.14 REVISIONS TO CAUSE CODES (CONTINUED) DESIGN/CONSTRUCTION/INSTALLATION/FABRICATION PROBLEMS (TABLE 10.16 OF THE FIRST QUARTER 1993 REPORT)

Plant Name	Year-Quarter	Old Value	Revised Value
MCGUIRE 2	93-1	1	2
MILLSTONE 1	93-1	0	1
MILLSTONE 3	93-1	1	0
MONTICELLO	92-4	2	1
MONTICELLO	93-1	2	4
NINE MILE PT. 1	93-1	0	1
NORTH ANNA 1	93-1	1	2
PALO VERDE 1	92-3	1	2
PALO VERDE 2	92-3	1	2
PALO VERDE 2	93-1	1	2
PALO VERDE 3	92-3	0	1
PEACH BOTTOM 2	92-4	0	1
PEACH BOTTOM 2	93-1	0	1
PEACH BOTTOM 3	93-1	1	2
PERRY	93-1	1	2
PILGRIM	93-1	0	1
QUAD CITIES 2	93-1	0	1
RIVER BEND	93-1	0	1
SALEM 1	93-1	2	4
SALEM 2	92-3	2	3
SALEM 2	93-1	1	3
SAN ONOFRE 2	91-2	0	1
ST. LUCIE 2	93-1	0	1
SUSQUEHANNA 1	93-1	0	1
SUSQUEHANNA 2	93-1	0	1
TURKEY POINT 3	93-1	2	1
TURKEY POINT 4	93-1	1	0
WASH. NUCLEAR 2	93-1	5	8
WOLF CREEK	93-1	0	2
ZION 2	92-4	2	1

TABLE 11.15 REVISIONS TO CAUSE CODES MISCELLANEOUS (TABLE 10.17 OF THE FIRST QUARTER 1993 REPORT)

Plant Name	Year-Quarter	Old Value	Revised Value
CATAWBA 1	93-1	0	1
CATAWBA 2	93-1	0	1
CRYSTAL RIVER 3	93-1	0	1
DIABLO CANYON 1	92-3	1	0
DIABLO CANYON 2	92-3	1	0

TABLE 11.15 REVISIONS TO CAUSE CODES (CONTINUED)
MISCELLANEOUS
(TABLE 10.17 OF THE FIRST QUARTER 1993 REPORT)

Plant Name	Year-Quarter	Old Value	Revised Value
INDIAN POINT 3	92-3	1	0
MILLSTONE 3	93-1	0	1
PILGRIM	93-1	1	3