

December 20, 1996

Virginia Electric and Power Company  
ATTN: Mr. J. P. O'Hanlon  
Senior Vice President - Nuclear  
Innsbrook Technical Center  
5000 Dominion Boulevard  
Glen Allen, VA 23060

SUBJECT: MEETING SUMMARY - NORTH ANNA PERFORMANCE  
NORTH ANNA - DOCKET NOS. 50-338, 50-339

Dear Mr. O'Hanlon:

This refers to the meeting conducted at your request at the NRC Region II Office in Atlanta, Georgia on December 18, 1996. The meeting's purpose was to discuss North Anna performance.

It is our opinion that this meeting was beneficial in that it provided us with a better understanding of North Anna's performance. Specific topics discussed included an introduction, historical regulatory trend, action plan and current performance, and closing remarks.

A list of attendees and a copy of your handout is enclosed.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10 Code of Federal Regulations, a copy of this letter and its enclosures will be placed in the NRC Public Document Room.

Should you have any questions concerning this letter, please contact us.

Sincerely,

Original signed by George A. Belisle

George A. Belisle, Chief  
Reactor Projects Branch 5  
Division of Reactor Projects

Docket Nos. 50-338, 50-339  
License Nos. NPF-4, NPF-7

Enclosure: 1. List of Attendees  
2. North Anna Performance  
December 18, 1996

cc w/encs: See page 2

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PDR ADOCK 05000338  
P PDR

1145

cc w/encls:

M. L. Bowling, Manager  
Nuclear Licensing and Operations Support  
Virginia Electric & Power Company  
Innsbrook Technical Center  
5000 Dominion Boulevard  
Glen Allen, VA 23060

W. R. Matthews, Manager  
North Anna Power Station  
P. O. Box 402  
Mineral, VA 23117

D. A. Christian, Manager  
Surry Power Station  
Virginia Electric & Power Company  
5570 Hog Island Road  
Surry, VA 23883

Executive Vice President  
Old Dominion Electric Cooperative  
4201 Dominion Boulevard  
Glen Allen, VA 23060

Dr. W. T. Lough  
Virginia Corporation Commission  
Division of Energy Regulation  
P. O. Box 1197  
Richmond, VA 23209

William C. Porter, Jr.  
County Administrator  
Louisa County  
P. O. Box 160  
Louisa, VA 23093

Michael W. Maupin, Esq.  
Hunton and Williams  
Riverfront Plaza, East Tower  
951 E. Byrd Street  
Richmond, VA 23219

Attorney General  
Supreme Court Building  
900 East Main Street  
Richmond, VA 23219

cc w/encls: See page 3

VEPCO

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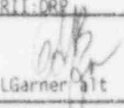
cc w/encls continued:  
Robert B. Strobe, M.D., M.P.H.  
State Health Commissioner  
Office of the Commissioner  
Virginia Department of Health  
P. O. Box 2448  
Richmond, VA 23218

Distribution w/encls:

B. Buckley, NRR  
R. Gibbs, RII  
P. Fillion, RII  
D. Jones, RII  
W. Stansberry, RII  
C. Payne, RII  
PUBLIC

NRC Resident Inspector  
U.S. Nuclear Regulatory Commission  
1024 Haley Drive  
Mineral, VA 23117

NRC Resident Inspector  
U.S. Nuclear Regulatory Commission  
Surry Nuclear Power Station  
5850 Hog Island Road  
Surry, VA 23883

OFFICE	RII:DRP					
SIGNATURE						
NAME	L. Garner alt					
DATE	12 / 10 / 96	12 / / 96	12 / / 96	12 / / 96	12 / / 96	12 / / 96
COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

OFFICIAL RECORD COPY

DOCUMENT NAME: G:\NAMTG.SUM

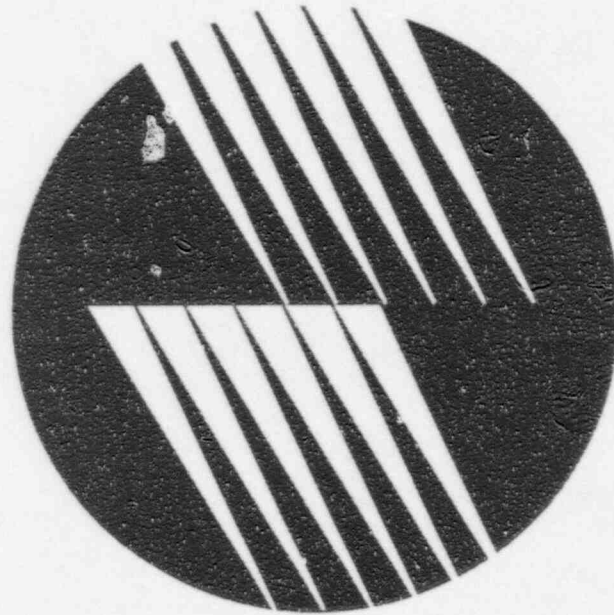
## LIST OF ATTENDEES

### NRC Attendees:

E. W. Merschhoff, Director, Division of Reactor Projects (DRP)  
J. P. Jaudon, Deputy Director, Division of Reactor Safety (DRS)  
G. A. Belisle, Chief, Reactor Projects Branch 5, DRP  
R. D. McWhorter, Senior Resident Inspector, North Anna Power Station  
C. A. Casto, Chief, Engineering Branch (EB), DRS  
C. D. Payne, Licensing Examiner, Operator Licensing and Human Performance Branch, DRS  
P. J. Fillion, Reactor Inspector, EB, DRS

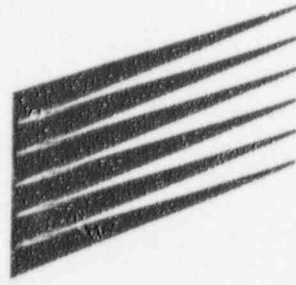
### Licensee Attendees:

M. R. Kansler, Vice President, Nuclear Operations  
W. R. Matthews, Station Manager, North Power Station (NAPS)  
D. A. Heacock, Assistant Station Manager, Nuclear Safety and Licensing, NAPS  
M. S. McCarthy, Director, Nuclear Oversight, NAPS



***VIRGINIA POWER***

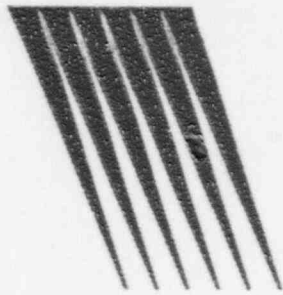
***North Anna Power Station***  
***December 18, 1996***



# *Virginia Power Nuclear Vision*

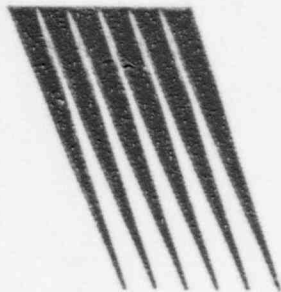


*We are a Safe, Competitive,  
World Class Nuclear Operator*



# ***AGENDA***

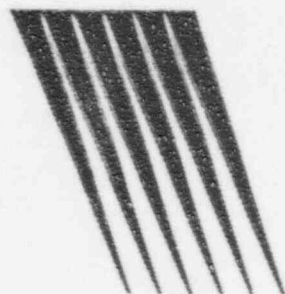
- **Introduction** **M. R. Kansler**
- **Historical Regulatory Trend** **D. A. Heacock**
- **Action Plan and Current Performance** **W. R. Matthews**
- **Closing Remarks** **M. R. Kansler**



***VIRGINIA POWER***

**INTRODUCTION**

**M. R. Kansler**  
**Vice President - Nuclear Operations**

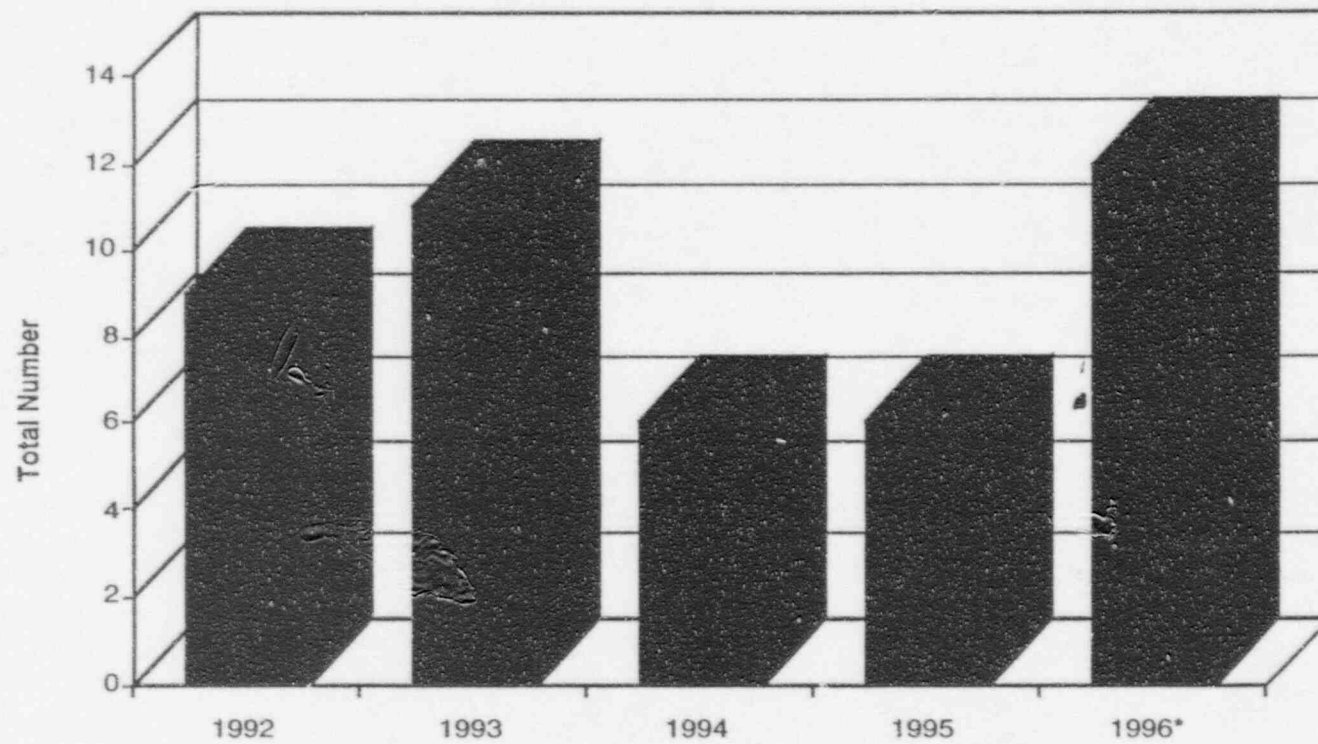


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**HISTORICAL REGULATORY TREND**

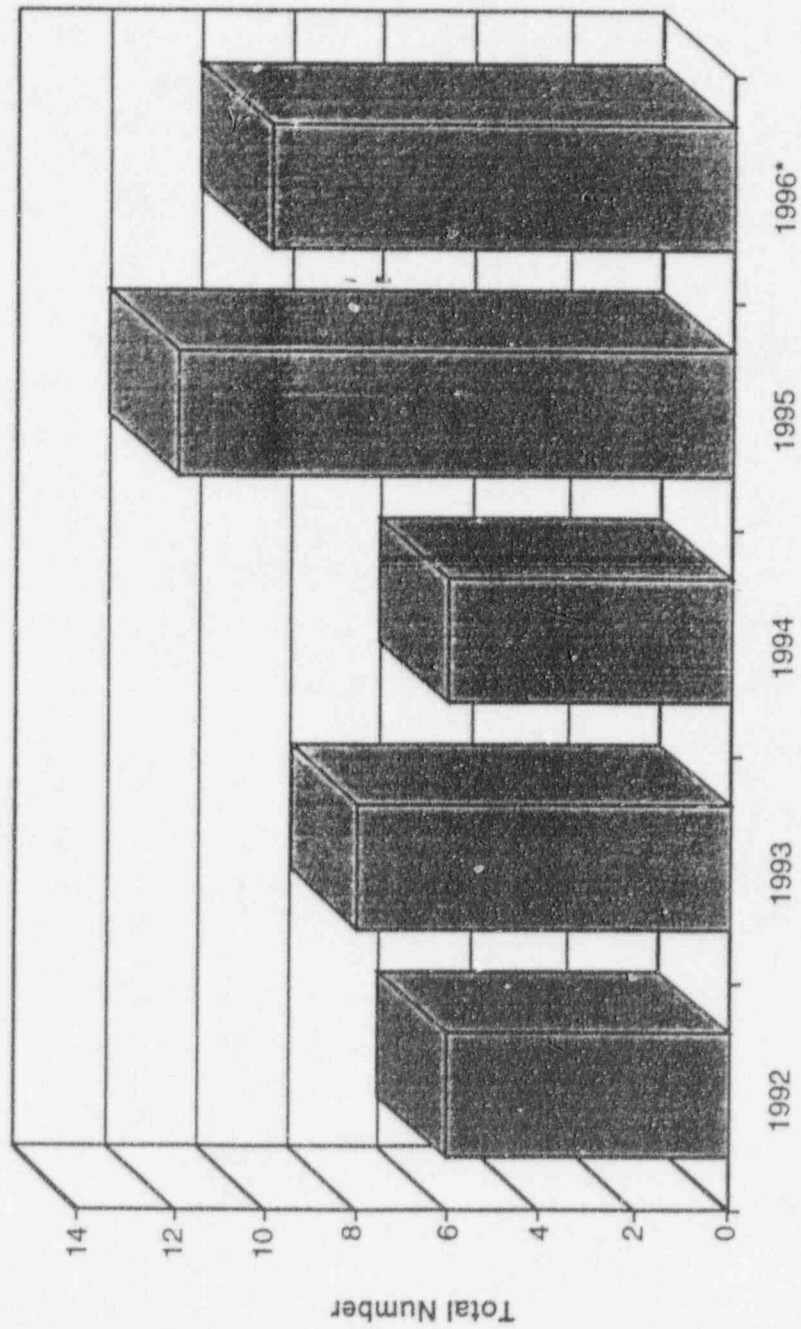
**D. A. Heacock**  
**Assistant Station Manager**

# Cited Violations



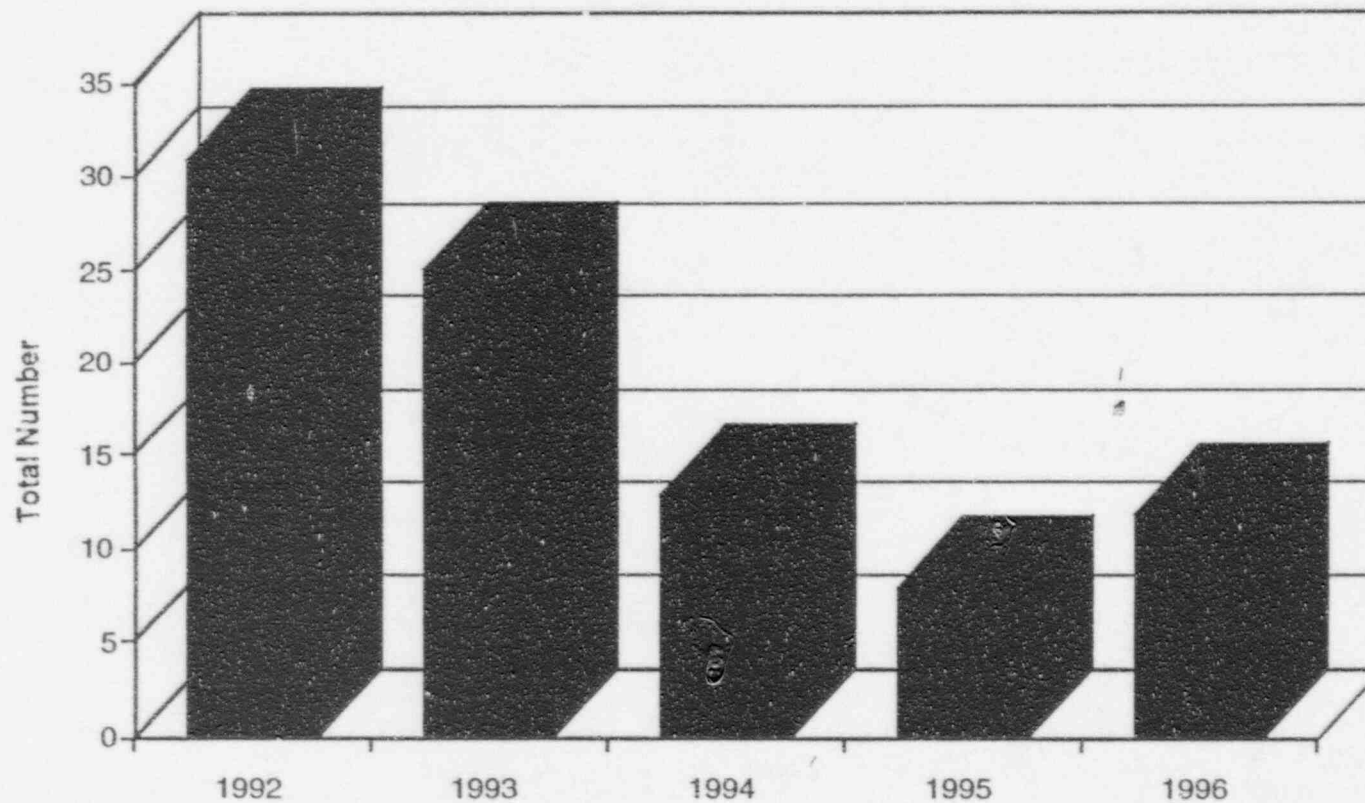
\* Through November 2, 1996

# Non - Cited Violations



\* Through November 2, 1996

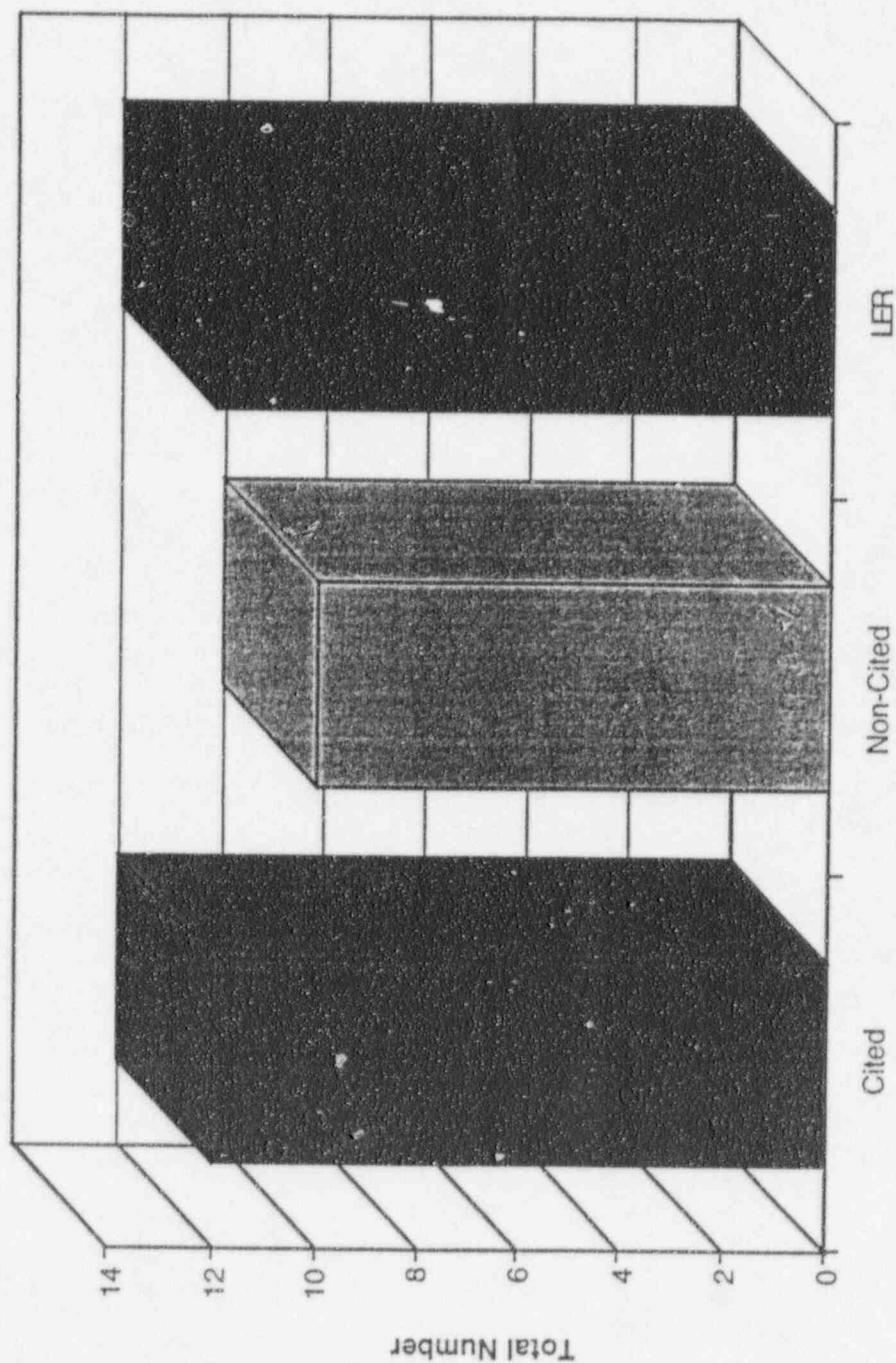
# Licensee Event Reports



\* Through November 2, 1996

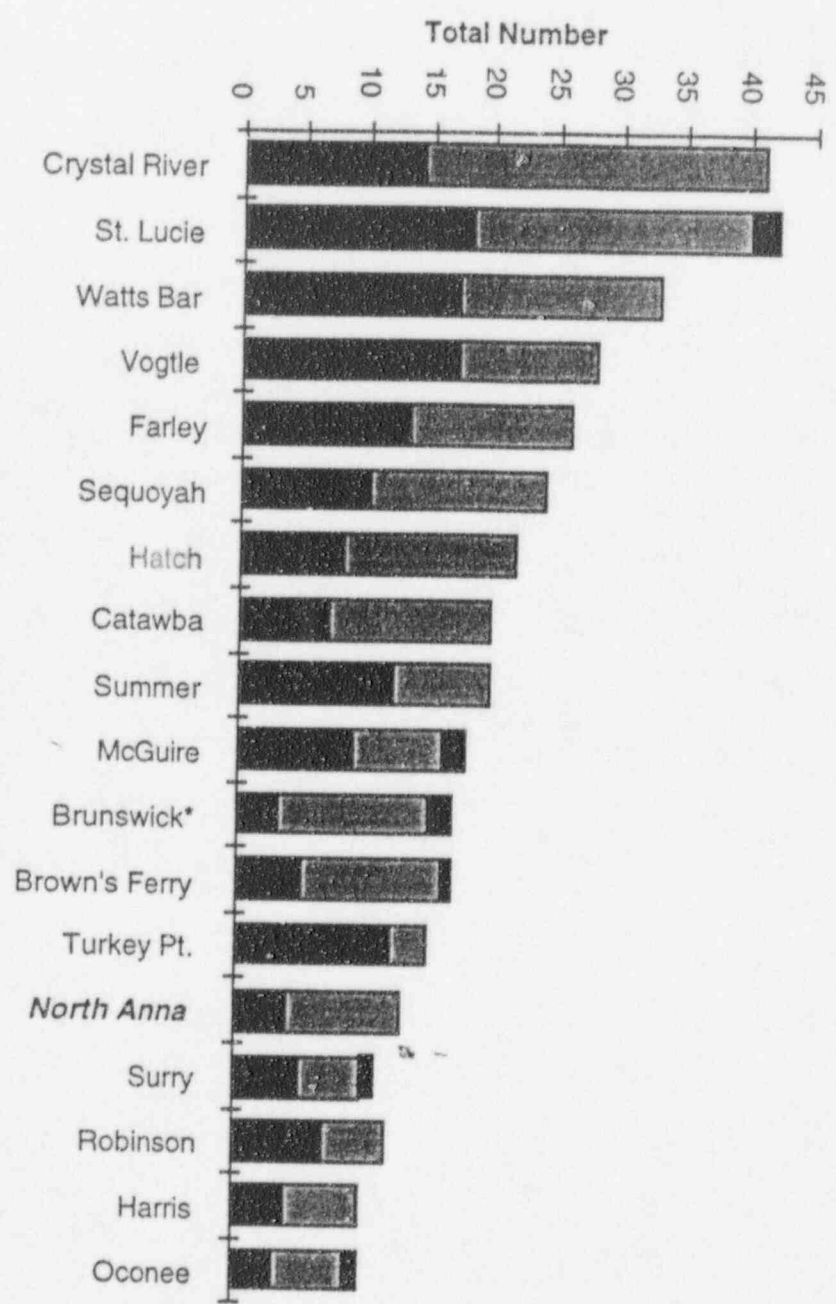
# Station Events

(34 Total)



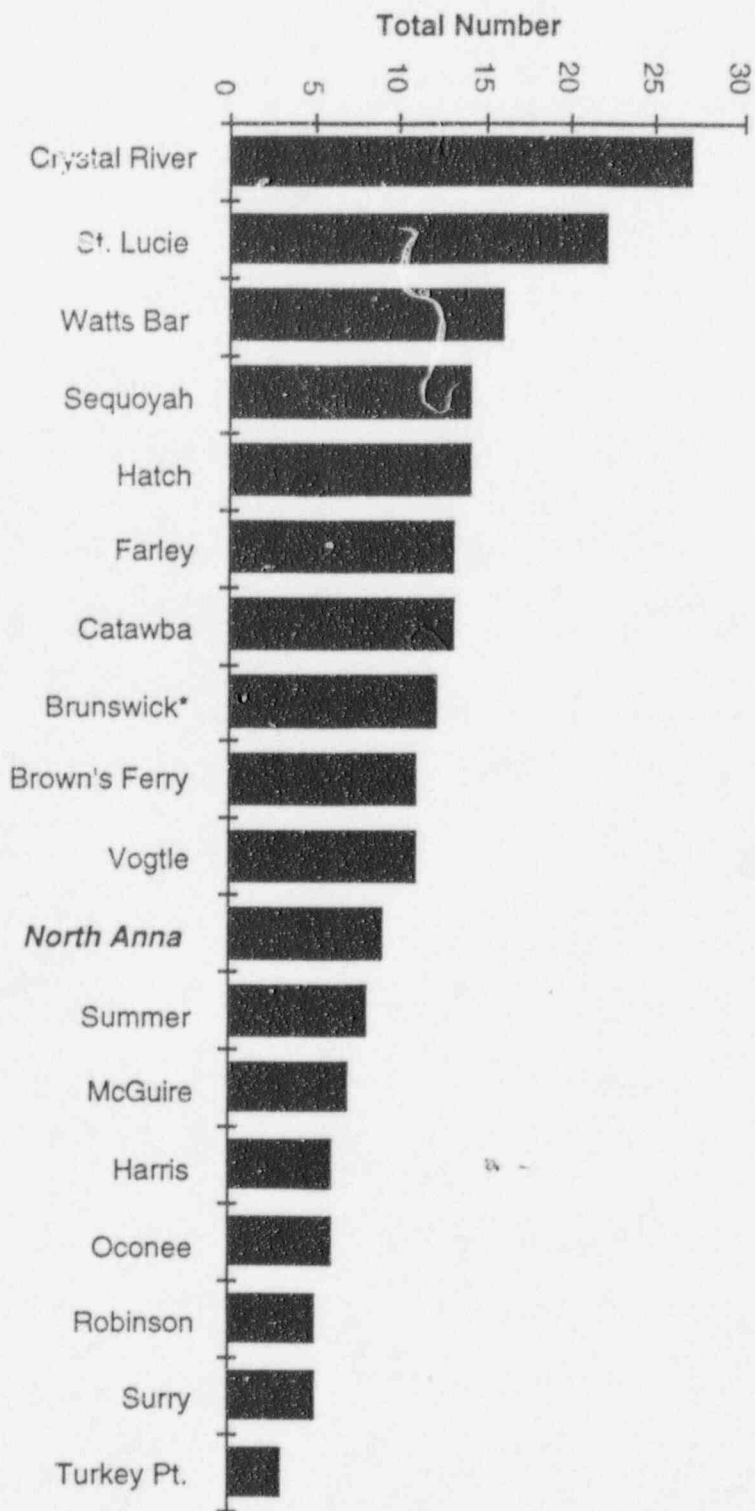
January 1, 1996 through November 2, 1996

# Total Violations Region II Comparison



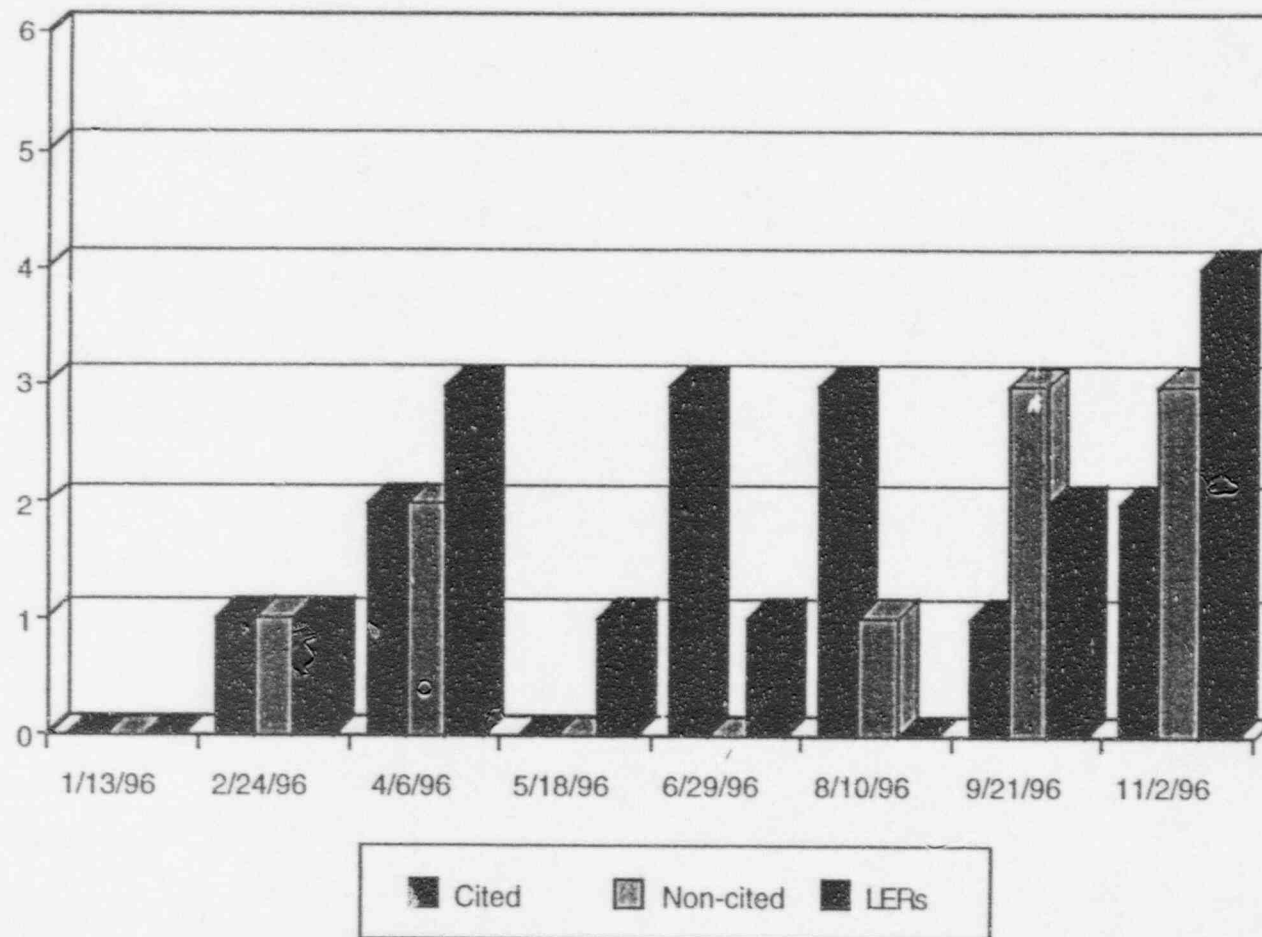
\* Information obtained from NUS

# Level IV Violations Region II Comparison



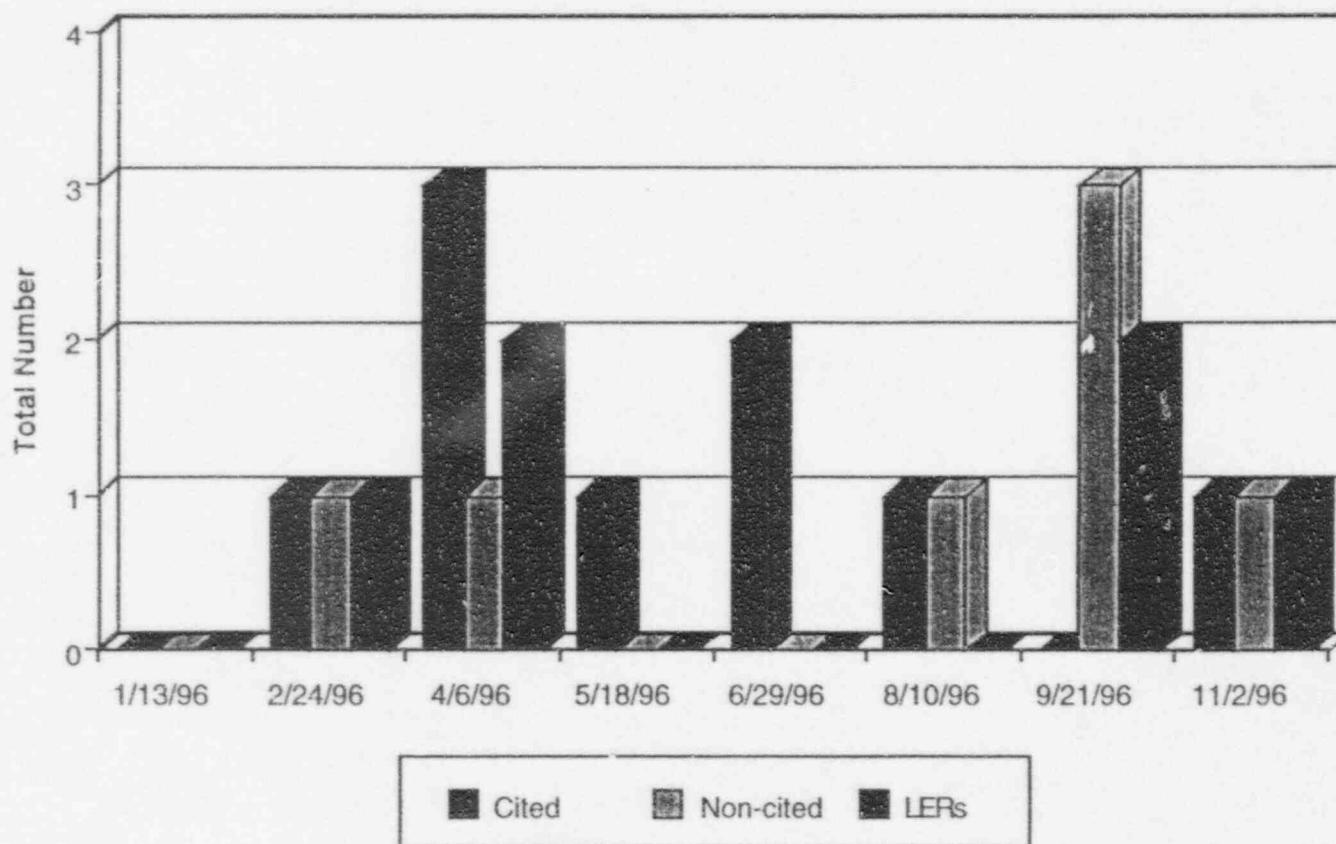
# Events by Inspection Period

(34 Total)



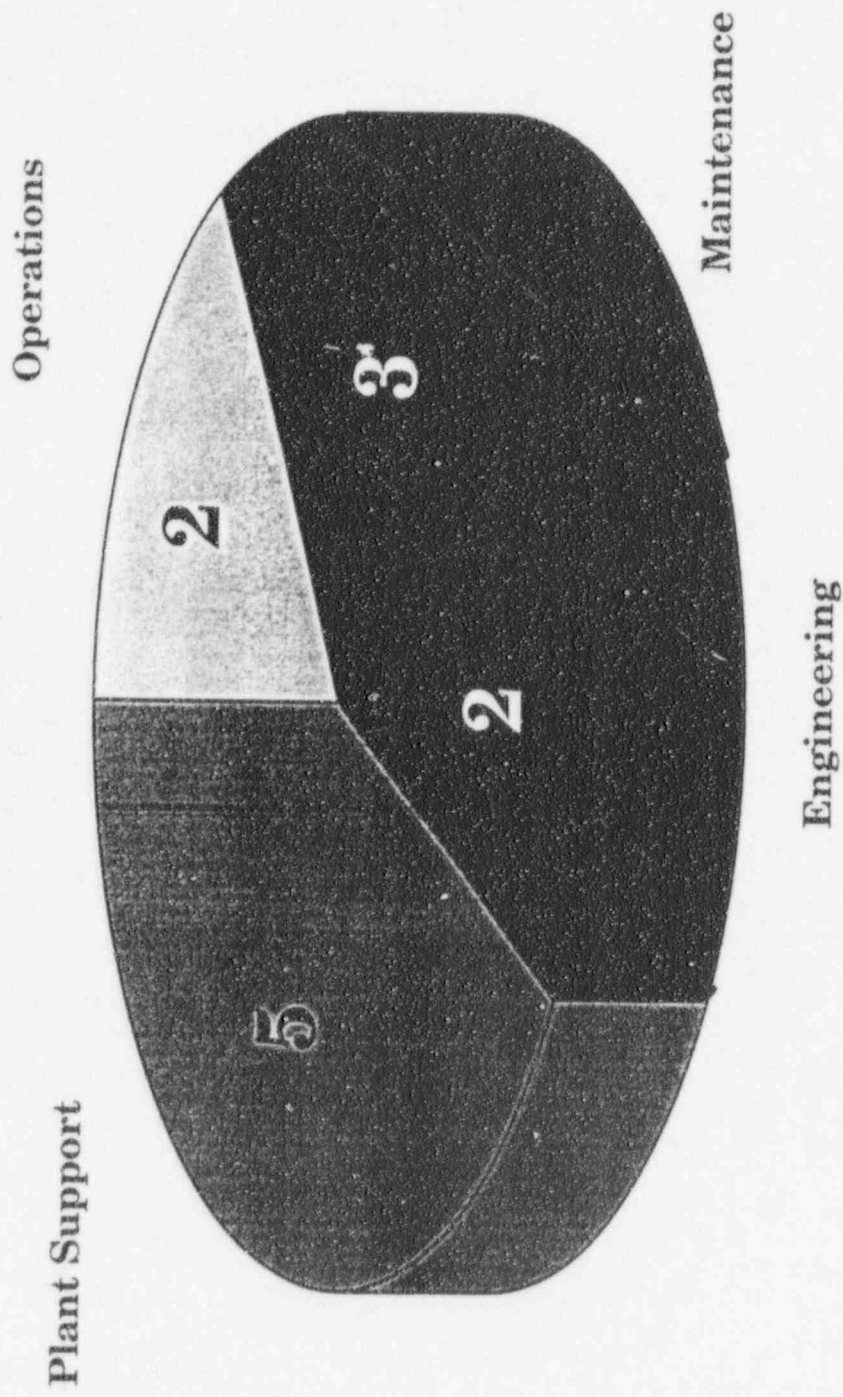
# Events Actually Occurring 1996

(22 Total)



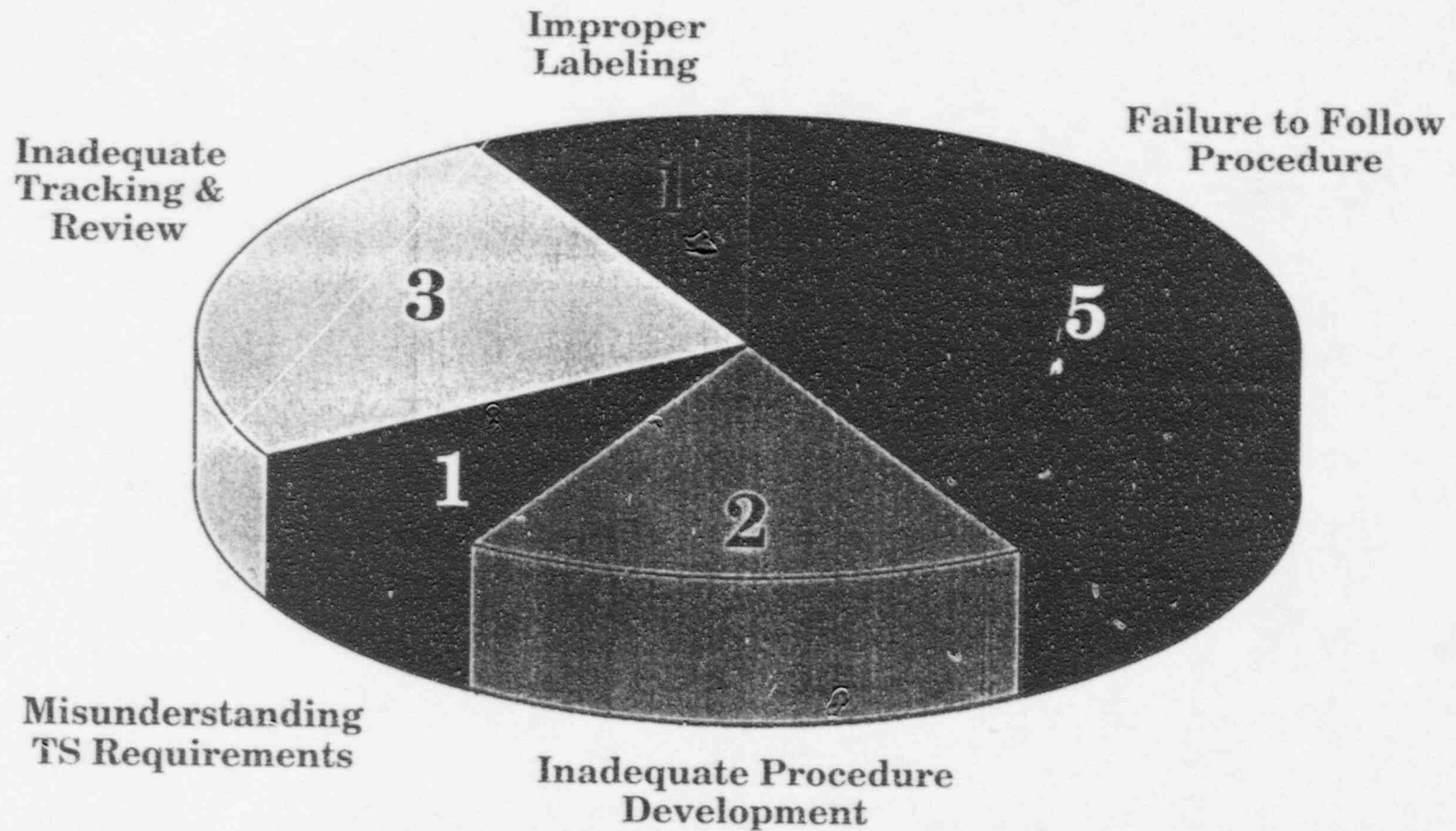
# Cited Violations by SALP Category

(12 Total)



# Personnel Error Causes

(Cited Violations)

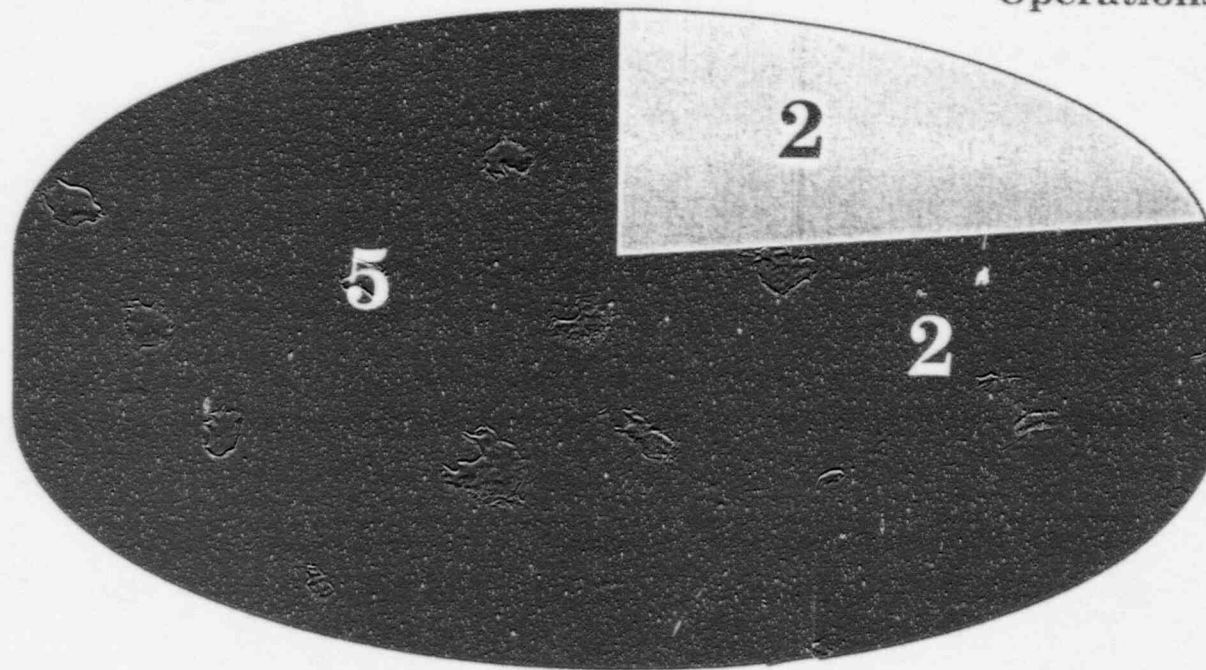


# Cited Violations

(Actually Occurring in 1996)

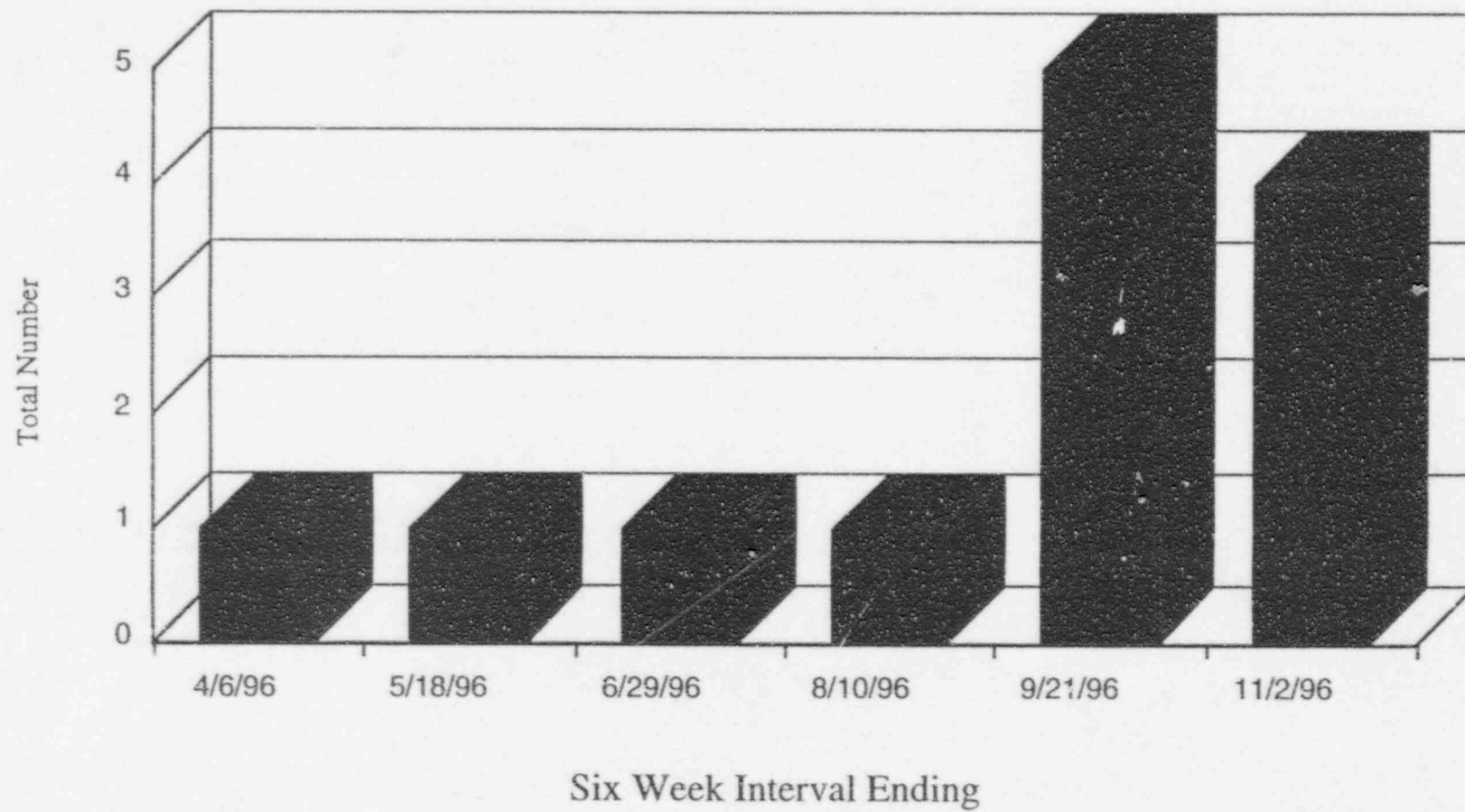
Plant Support

Operations

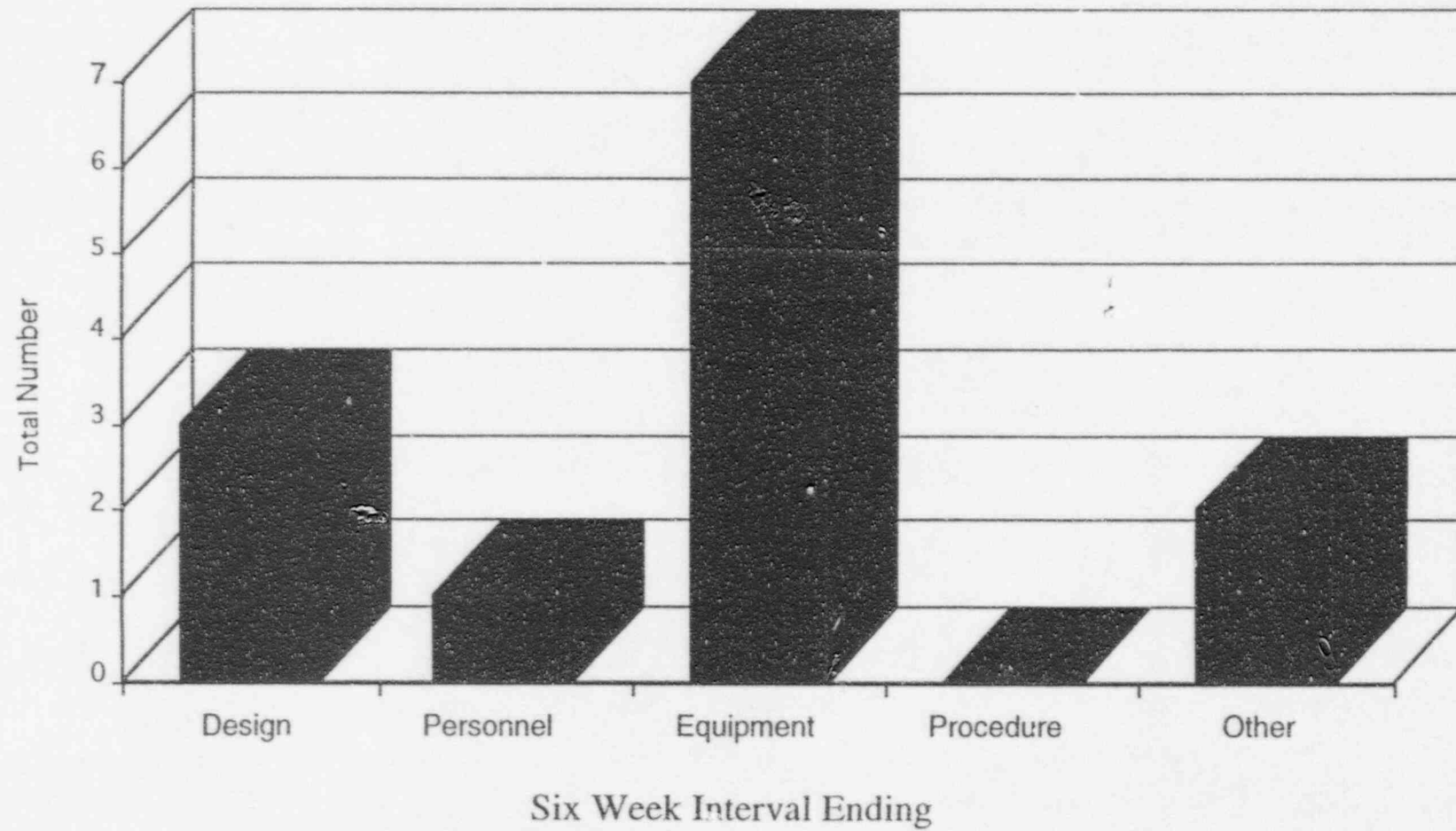


Maintenance

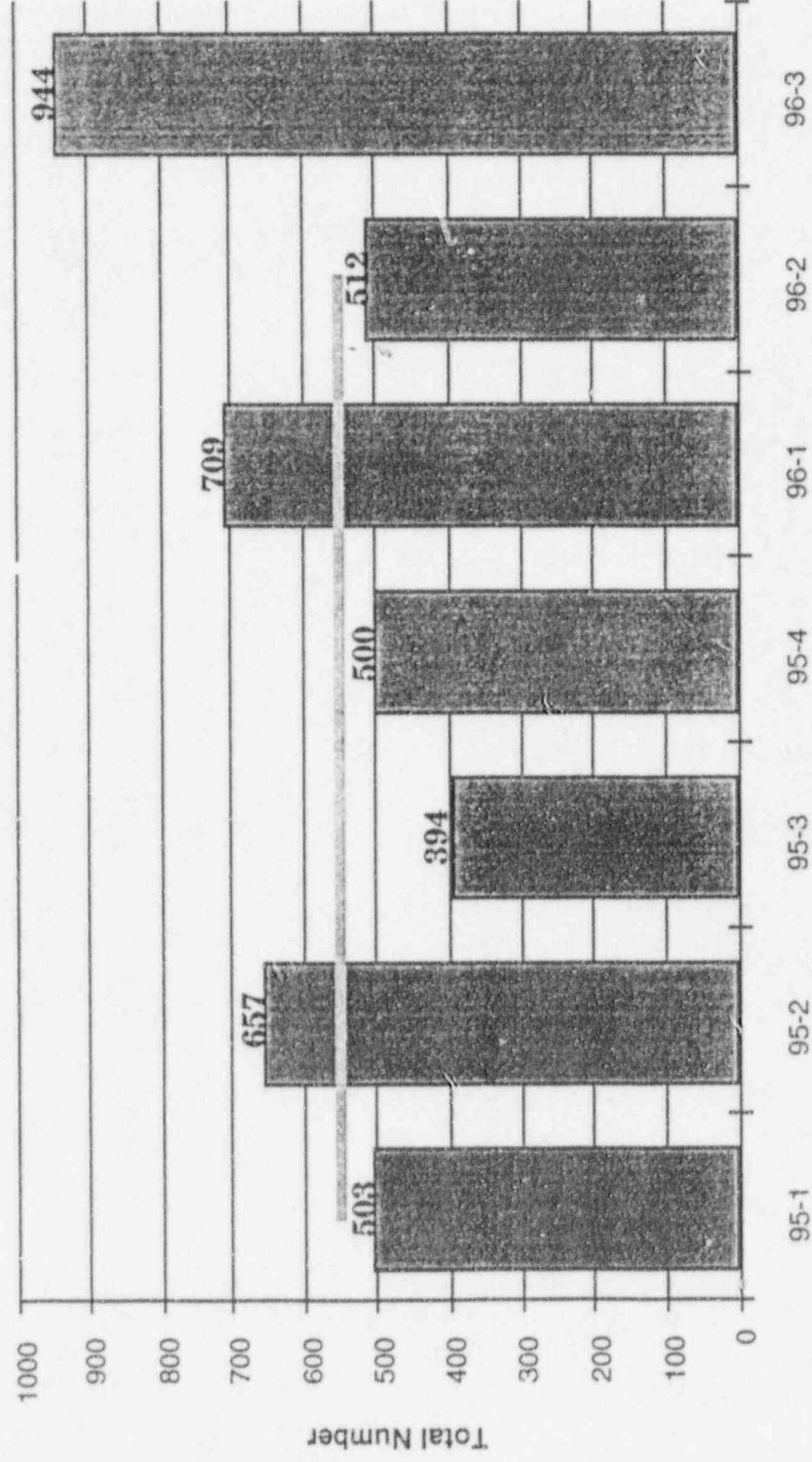
## Prompt NRC Reports



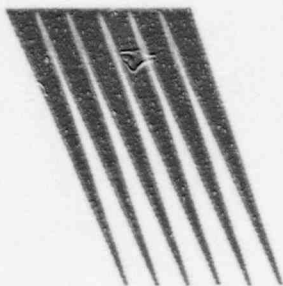
## NRC Prompt Reports By Cause 4/6/96 Through 11/2/96



# Deviation Reports Quarterly Trend



Six Quarter Average = 546 DRs per Qtr



# North Anna Performance Annunciator Panel

Third Quarter 1996

## Personnel Performance

Operations	Maintenance	Radiological Protection	NSS	Engineering	Station Support
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## Equipment Performance

Reactor Trips	ESF Actuations	RCS/Secondary System Integrity	Fuel Reliability	Key Safety System Performance	System Material Condition
Net/Generation Thermal Performance	Plant Capacity Factor	Emergency Preparedness Equipment	Chemistry Performance		

## Program Performance

Operations Program	Maintenance Program	Radiation Protection Program	Site Services Program	Engineering Program	Security Program
Regulatory Performance Program	Emergency Preparedness Program	Safety & Loss Prevention Program	Safety Assessment Program	Materials Program	Training Program
Planning and Scheduling Program	Procedure Program	Business Plan/Adm. Services	Adherence to Nuclear Safety Policy	Significant and Precursor Events	Complacency Avoidance

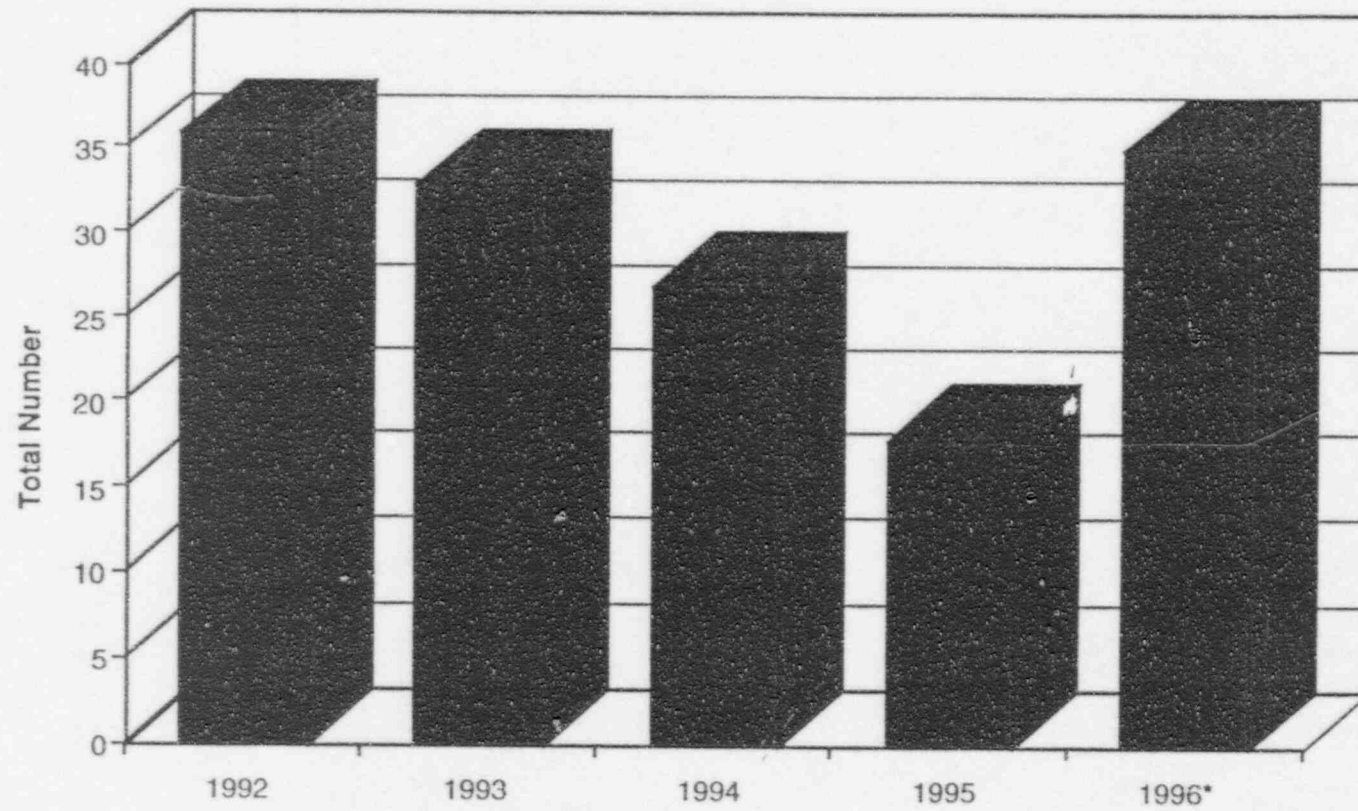
RED  
 YELLOW  
 WHITE  
 GREEN

- Significant Weakness  
 - Improvement Needed  
 - Satisfactory  
 - Significant Strength

### Legend

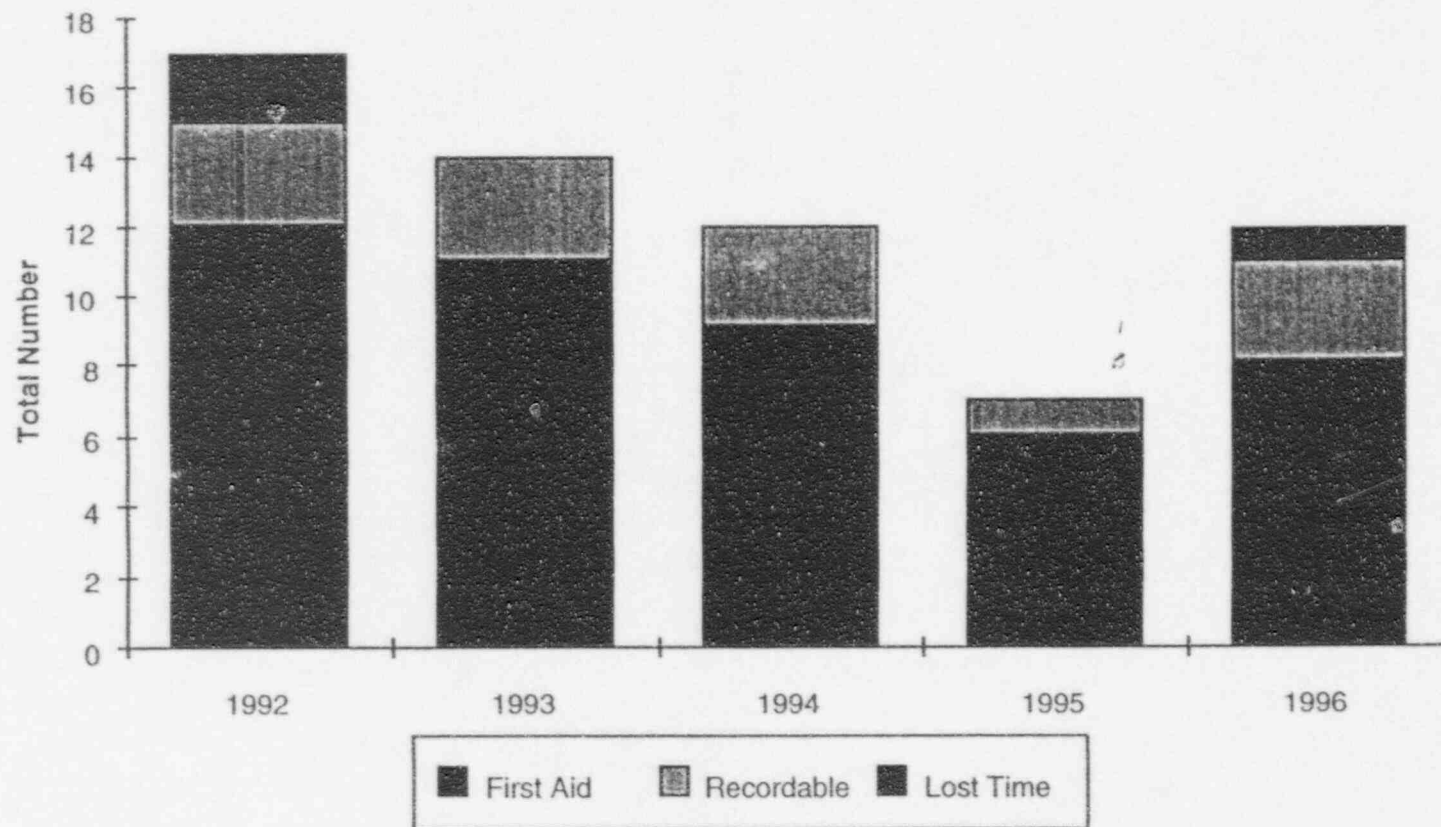
40/95 10/96 20/96  
 Third Quarter  
 1996

# Minor Accidents

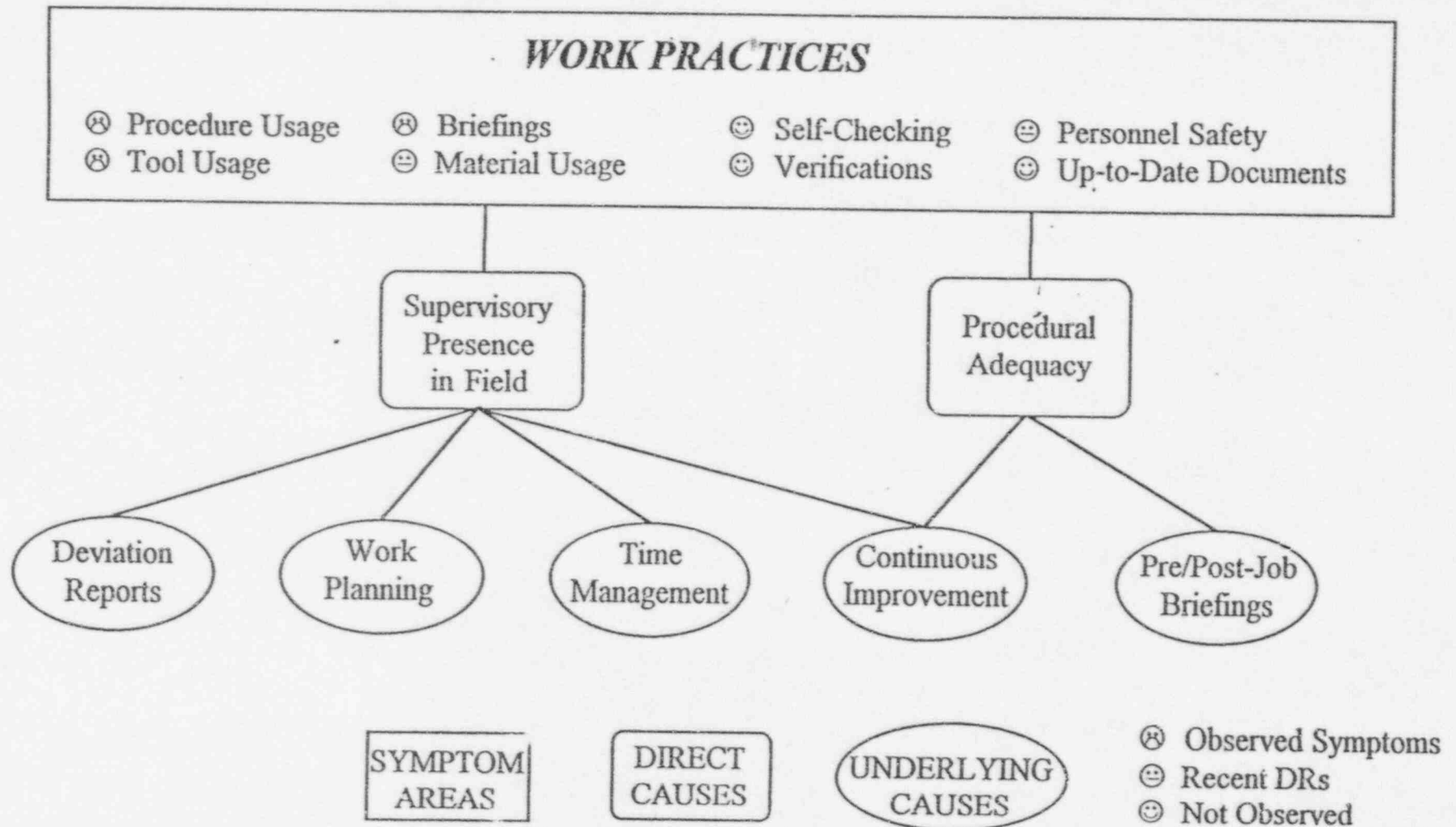


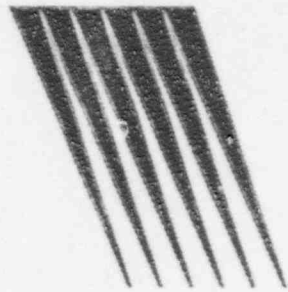
\* Through November 2, 1996

# Station Safety



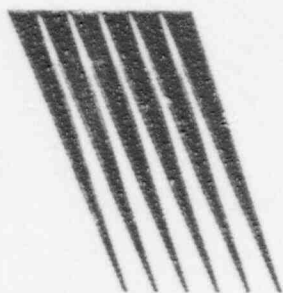
# WORK PRACTICE CAUSAL ANALYSIS





## **Conclusions**

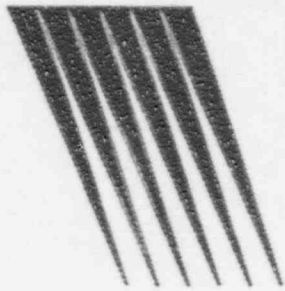
- **Indication of a Performance Decline**
  - **Procedure Compliance**
  - **Industrial Safety**
  - **Work Practice Standards**



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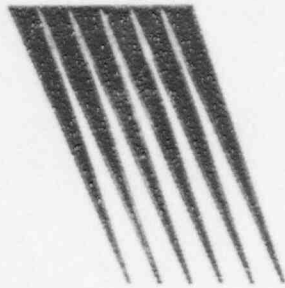
**ACTION PLAN  
AND CURRENT PERFORMANCE**

**W. R. Matthews  
Station Manager**



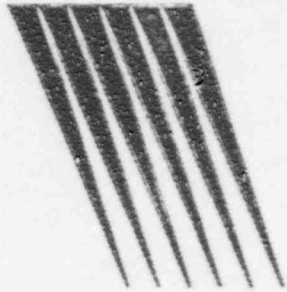
# **North Anna Power Station Corrective Action Plan**

- **Stabilize Current Organization**
- **Enhancement/Evaluate Peer Checks:**
  - **Maintenance (Existing)**
  - **Radiological Protection (Evaluate)**
  - **Engineering (Evaluate)**
  - **Operations (Existing)**
- **Re-institute Front Line Leadership Course:**
  - **Maintenance**
  - **Operations**
  - **Radiological Protection**
- **Mentor Program - Department Heads**



## **North Anna Power Station Corrective Action Plan**

- **Increase Industry Benchmarking - At All Levels**
- **Rewards for Meeting Quarterly Performance Goals:**
  - **Forced Outage Rate**
  - **Reactor Trips**
  - **Safety**
  - **Dose**
  - **Quality Performance**
- **Shift QC Inspectors from NSS to Maintenance**
- **SPS - Commitment on Outage Peers**
- **First Line Maintenance Supervisor Task Team**
- **Management Retreat / Team Building**



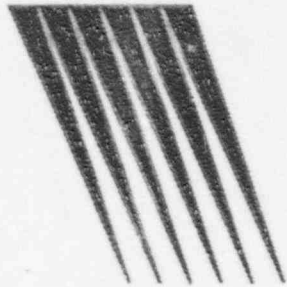
## Recent Accomplishments

### Unit 2 Refueling Outage

- Lowest Dose - 117.394 Man-Rem
- Lowest Outage Cost - \$13.82 Million
- 53 Personnel Contamination Events
- No Prompt NRC Reports Due to Outage Activities

### Unit 2 Forced Outage Due to High Pressure Turbine Balance Line Leak (10/21/96 - 10/25/96)

- No Regulatory Issues
- Total Duration - 96.1 Hours
- Conservative Decision to Shutdown



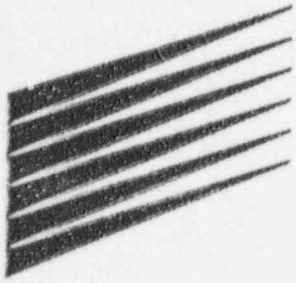
## Recent Accomplishments

### Unit 1 Reactor Trip Due to Negative Phase Sequence Relay Actuation (10/24/96 - 10/25/96)

- No Regulatory Issues
- Total Duration - 28.7 Hours
- Conservative Decision to Startup Units in Series

### Unit 2 Reactor Trip and Forced Outage Due to Generator Failure (11/12/96 - Present)

- No Regulatory Issues
- Conservative Decision to Maintain Unit in Hot Shutdown until Service Water Work was Completed
- Aggressive Approach to Service Water MIC Issue



***VIRGINIA POWER***

**CLOSING REMARKS**

**M. R. Kansler**  
**Vice President - Nuclear Operations**