January 31, 1995

Carolina Power and Light Company

ATTN: Mr. C. S. Hinnant Vice President

H. B. Robinson Steam Electric Plant

Unit 2

3581 West Entrance Road Hartsville, SC 29550

SUBJECT: MANAGEMENT MEETING SUMMARY - ROBINSON

This refers to the management meeting conducted in the Region II office on January 20, 1995. The purpose of the meeting was to discuss the results of the Robinson 1994 Near-Term Improvement Plan and the 1995 Business Plan Summary. The meeting also addressed your mid-SALP cycle review and operator performance improvement status. A list of attendees and a copy of your slides are 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: Jon R. Johnson/for

Ellis W. Merschoff, Director Division of Reactor Projects

Docket No.: 50-261 License No.: DPR-23

Enclosures:

List of Attendees
 Licensee Slides

cc w/encls:

Dale E. Young Plant Manager

H. B. Robinson Steam Electric Plant

3581 West Entrance Road Hartsville, SC 29550

H. W. Habermeyer, Jr.

Vice President

Nuclear Services Department Carolina Power & Light Company P. O. Box 1551 - Mail OHS7

Raleigh, NC 27602

cc w/encls:

(See page 2)

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(cont'd)
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H. B. Robinson Steam Electric Plant
3581 West Entrance Road
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Distribution w/encls: (See page 3)

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B. Mozafari, NRR

G. A. Hallstrom, RII

**PUBLIC** 

NRC Resident Inspector U. S. Nuclear Regulatory Commission 2112 Old Camden Road Hartsville, SC 29550

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#### LIST OF ATTENDEES

#### Nuclear Regulatory Commission:

S. D. Ebneter, Regional Administrator, Region II (RII)

L. A. Reyes, Deputy Regional Administrator, RII

- B. S. Mallett, Deputy Director, Division of Radiation Safety and Safeguards,
- C. A. Casto, Acting Chief, Engineering Branch, Division of Reactor Safety, RII

H. O. Christensen, Acting Chief, Reactor Projects Branch 1, Division of

Reactor Projects (DRP), RII

W. T. Orders, Senior Resident Inspector - Robinson, DRP, RII

#### Licensee Attendees:

- W. Orser, Executive Vice President, Nuclear Generation Group
- C. Hinnant, Vice President, Robinson
- W. Robinson, Vice President, Harris

D. Young, Plant Manager, Robinson

R. Krich, Manager, Regulatory Affairs, Robinson

R. Rogan, Manager, Regulatory Compliance

G. Miller, Manager, Robinson Engineering Support Services

B. Clark, Manager, Maintenance

J. Moyer, Manager, NAS

K. Jury, Manager, Licensing Programs

#### Carolina Power & Light Company

H. B. Robinson Steam Electric Plant, Unit No. 2

## 1994 Near-Term Improvement Plan Results And 1995 Business Plan Summary

# Mid-SALP Cycle Review / Operator Performance Improvement Status

January 20, 1995 Atlanta, Georgia



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Engineering	G. D. Miller
Operations/ Improvement Status	D. E. Young
Plant Support	D. E. Young
Summary And Concluding Remarks	C. S. Hinnant



## Near-Term Improvement Plan Results

### What Did We Expect?

- Starting In 1994, Significant Improvement In Management Effectiveness,
   Culture, And Plant Staff Core Capabilities
- To Establish The Foundation For The Development Of A Culture Of Continuous Performance Improvement
- Plan Implementation To Occur In 1994

As Committed In May 1994, This Meeting Provides The 1994 Results Of The Near-Term Improvement Plan (NTIP) Implementation



## Near-Term Improvement Plan Initiatives

#### Site Wide Initiatives

- Build A Capable Management Team
- Establish And Reinforce Organizational Performance Standards And Expectations
- Make Self-Assessment A Way Of Life
- Implement Effective Performance Management (EPM) System
- Improve Our Ability To Identify And Effectively Correct Problems
- Communicate The Reasons Why Rapid, Fundamental Change Is Needed



# Near-Term Improvement Plan Initiatives

### **Specific Program Initiatives**

- Consolidate The Site Commitment Tracking Systems
- Centralize The Program For Surveillance Testing And Tracking
- Centralize The Tool Calibration Program
- Establish Emergency Diesel Generator (EDG) Maintenance Improvement
   Program
- Respond To The 1993 Employee Opinion Survey (EOS)



# Near-Term Improvement Plan Results Summary And Future Actions

#### **Results Summary**

- All Initiatives Implemented; Follow-On Activities Being Carried Out As
   Planned
- Positive Results Evident In A Number Of Areas
  - Employee Opinions
  - Maintenance
  - Plant Management
  - Self-Assessments
  - EDG Performance
  - Surveillance Test Scheduling
  - Corrective Action Program Implementation



# Near-Term Improvement Plan Results Summary And Future Actions

#### **Future Actions**

- Effectiveness Assessment Of NTIP Implementation
  - Led By The Corporate Performance Evaluation Section
  - Assessment Team Composed Of Personnel From The Other CP&L Sites, INPO, And Outside Consultants
  - Objective Is To Measure Progress In Addressing Fundamental
    Weaknesses And Identify Any Needed Plan Changes
  - Conducted In February 1995
- Effectiveness Of Each Initiative Will Be Assessed In 1995 In Accordance
   With Established Schedules



## 1995 Business Plan Initiatives

#### **Business Plan Follow-On Initiatives**

- Personnel Error Reduction Plant General Manager
  - Reduce Personnel Error Through Effective Human Performance

    Methods
- Standards And Expectations Related To Nuclear Safety And Procedural
   Compliance Manager, Regulatory Affairs
  - Increase Accountability For Procedure Adequacy And Eliminate Causes

    For Procedure Non-Compliance



# 1995 Business Plan Initiatives

## **Business Plan Follow-On Initiatives** (Cont'd)

- Self-Assessment/Improvement Plans Manager, Plant Support
  - Improve Plant Management And Staff Self-Assessment Capabilities, And Follow-Through In Implementing Improvements
- Outage Management Team Manager, Outage Management
  - Plan And Direct Execution Of World-Class Refueling Outage In 1995
- Local Automated Maintenance Management System Re-Engineering Manager, Work Control
  - Increase Efficiency Of Maintenance Work Planning And Execution



## Agenda

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- Performance Rating Last Assessment Period Category 3
- Performance Issues Identified In The Last Assessment
  - Weak Procedural Controls
  - Failure To Follow Procedures
  - Failure To Take Effective Corrective Actions
  - Oversight Of Maintenance And Refueling Activities



# Mid-SALP Cycle Review Maintenance

- Performance Improvements Achieved
  - Improved Procedural Controls
    - Generated 63 New Procedures (Increase Of 710%)
    - Changed 450 Procedures
      - Reflects Improved Problem Identification And Effective
        Correction
    - Improved Compliance
      - Confirmed By Nuclear Assessment Department (NAD), INPO,
        And Corporate Performance Evaluation Section
      - Demonstrated By Craft Workers



- Performance Improvements Achieved (Cont'd)
  - Programmatic Improvements
    - Implemented Measuring And Test Equipment Calibration Lab And Program
    - Trending Transmitter Calibration Data
    - Improved Out-Of-Calibration Instrumentation Review Process
    - Completed Setpoint Methodology Confirmation Study
    - Implemented Centralized And Computer-Based Surveillance Test
      Scheduling System



- Strengths
  - Supervisory/Management Oversight
    - Change Management
  - Quality Of Management/Supervision
    - New Mechanical Subunit Manager
    - 2 Of 6 Supervisors Replaced
    - Supervisor Field Observations
  - Quality Of Personnel
  - Effective Performance Management



- Current Challenges
  - Increase Effectiveness Of Instrumentation Calibration Program
  - Attain Consistency Of Procedure Quality
  - Improved Use Of Operating Experience (OE) Information
  - Maintain Current High Rate Of Performance Improvement
  - Exercise Strong Management Oversight Of Refueling Activities



- Improvement Initiatives
  - Improved Work Control/Process
  - Reviewed Technical Specification (TS) Surveillance Requirements

    Implementation
    - No TS Compliance Issues Identified
  - Implemented Calibrated Instrument Review Program
  - Backlog Reduction Effort
    - Implemented "Fix-It-Now" Teams
    - Reduced Number Of "Blue Dots" From Previous Cycles
  - Implemented EDG Integrated Action Plan



- Improvement Initiatives (Cont'd)
  - Cultural Changes
    - Procedural Compliance
    - Increased Work Ticket Generation
    - Work Is Now "Being Done Right The First Time"
      - Emergency Diesel Generators
      - Ground Loops On Instrument Busses
      - Refueling Outage "Ownership"



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- Performance Rating Last Assessment Period Category 2
- Performance Issues Identified In The Last Assessment
  - Weak Interface Between Design Engineering And Plant Technical Staff
  - Support Of Refueling Outage Activities
  - Root Cause Analyses, Corrective Action Effectiveness, And Timeliness



- Performance Improvements Achieved
  - Integrated Design Engineering, Technical Support, And Project

    Management
    - Strengthened Management Team
    - Improved Technical Capabilities, Responsiveness, And Facilitated
      Interface Between Organizations

- Performance Improvements Achieved (Cont'd)
  - Established Single Work Request Process (i.e., Engineering Services Request (ESR))
  - Performing Critical Self-Assessments
  - Strengthened EPM Implementation
  - Improved Resolution Of Plant Issues



- Performance Improvements Achieved (Cont'd)
  - Strengthened Engineering Evaluation Development And Review Process
  - Strengthened Nuclear Fuel Procurement Engineering
  - Improved Root Cause Analysis Noted By Corporate NAD Assessments
- Strengths
  - Cooperation And Teamwork Within Engineering Organization
  - Integrated EDG Action Plan
  - Accessibility To Plant Staff
  - Staff Qualifications/Senior Reactor Operator (SRO) Certifications



- Current Challenges
  - Improve Integration Of Engineering Organization
  - Strengthen System Engineering Activities
  - Reduce Engineering Backlogs
    - Target For End Of 1995 : < 200 Total Open ESRs, Adverse</li>
       Condition Reports, And Commitments
  - Improve Quality Of Engineering Products



- Improvement Initiatives
  - Executing Engineering Excellence Improvement Plans
  - Established "Top 10" Equipment List
  - Strengthening Specific Program Areas



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. C. S. Hinnant

# Mid-SALP Cycle Review Operations

- Performance Rating Last Assessment Period Category 2
- Performance Issues Identified In The Last Assessment
  - Mixed Operator Response To Events
  - Control Room Performance And Professionalism
  - Implementation Of Management Expectations
  - Management Oversight



**Operations** 

- Performance Improvements Achieved
  - Established Operations Management/Organization
    - Increased Management Oversight
      - Simulator Evaluations
    - Enforcing Higher Standards And Expectations
  - Implemented EPM Process
    - Increased Accountability
    - Encouraging Candid Communication And Feedback



# Mid-SALP Cycle Review Operations

- Performance Improvements Achieved (Cont'd)
  - Upgraded Emergency Operating And Abnormal Operating Procedures
  - Improving Self-Assessment Capabilities
    - NAD Involvement/Contributions
    - Self-Identifying Problems/Questioning Attitude





# Mid-SALP Cycle Review Operations

#### Strengths

- Plant Reliability/Performance
- Daily Crew And Management Communication
- Excellent Operator Response To Transients
  - April And August 1994 Manual Trips
    - Demonstrated Conservative Operation
  - Loss Of Condenser Vacuum
  - Feedwater Regulating Valve Closure



### **Operations**

- Current Challenges
  - Improve Operator Performance And Heighten Attention To Detail
  - Improve Self-Assessment Capabilities
    - Increase Percentage Of Self-Identified Items
  - Timely Procedure Changes And Corrective Actions



# Mid-SALP Cycle Review Operations

#### **Improvement Status**

- Actions Taken To Achieve Rapid Improvement
  - Interim Actions
    - Communicated Adverse Performance Trend During Licensed
       Operator Requalification (LOR) Training
    - Performing Independent Verification And System Line-Ups For All
       Clearances
    - Increased Field Observations By NAD

# Mid-SALP Cycle Review Operations

#### **Improvement Status** (Cont'd)

- Actions Taken (Cont'd)
  - Corrective Actions To Achieve Lasting High Performance
    - Using Three-Way Communications
    - Implemented Self-Checking Evaluations
    - Developed And Implementing Control Room Switch Position
       Checklist
    - Reviewing Operations Surveillance Test Procedures To Ensure
       Proper Equipment Configurations Specified At End Of Test



# Mid-SALP Cycle Review Operations

- Improvement Initiatives
  - Improved Operator Training Process
    - Rigorous Candidate Screening Criteria
    - Training Six Auxiliary Operator And Eight SRO Candidates
  - Use Of Overtime Now Minimized



### Mid-SALP Cycle Review Operations

- Improvement Initiatives (Cont'd)
  - Modernize Control Room
  - Improved Work Control Process
    - Creating New Facility
    - Dedicated Day-Shift Staff
  - Plan And Execute Refueling Outage
    - Lead Outage Execution
    - Selected Operations Personnel Dedicated To Outage Planning

laintenance Process

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Performance Rating Last Assessment Period - Category 2

- Performance Issues Identified In The Last Assessment
  - Timely Resolution Of Technical Problems
- Performance Improvements Achieved
  - Improved Resolution Of Technical Issues
    - Dedicated Maintenance Technicians
    - Assigned System Engineer



- Performance Improvements Achieved (Cont'd)
  - Results
    - Reduced Maintenance Backlog
    - Reduced Compensatory Posting Hours
    - Established Comprehensive Preventive Maintenance Program
  - Security System Improvements
    - Video Capture System
    - Improved Closed Circuit Television Coverage And Performance



- Strengths
  - Strong Management Support Of Security Program
  - High Security Force Morale
  - Dedicated Maintenance And Engineering Support
  - Effective Oversight Of Contract Security Force
  - Active Security Manager Peer Group



- Current Challenges
  - Maintain The Heightened Sense Of Awareness Within The Security

    Force To Strive Toward Excellence
  - Guard Against Complacency By Plant Employees With Regard To
    Security Program Requirements



- Improvement Initiatives
  - Implement Hand Geometry System
  - Improve Self-Assessment Process
    - Participation In NAD Assessments At Other CP&L Plants
  - Integrate Security Force Into Robinson Plant Team

#### **Emergency Preparedness (EP)**

- Performance Issues Identified In The Last Assessment
  - Event Classification And Notification
  - Corrective Action Timeliness
- Performance Improvements Achieved
  - 1994 Annual Exercise Evaluated By NRC Inspector As Best In Five
     Years No Weaknesses
  - Demonstrated Improvement In Event Classification And Notification
  - Timely Corrective Actions Are Being Taken



### Mid-SALP Cycle Review

#### Plant Support

#### **Emergency Preparedness**

- **Strengths** 
  - **Strong Management Support**
  - **Emergency Response Facilities/Computerized Functions**
  - Thorough Drill/Exercise Critiques
  - **Excellent Relationship With And Support From State And Local Agencies**



#### **Emergency Preparedness**

- Current Challenges
  - Upgrade Emergency Plan And Procedures
  - Remove Technical Support Center From Protected Area Boundary
- Improvement Initiatives
  - Implementing Emergency Response Organization Teams
  - Converting To Nuclear Generation Group Emergency Plan And Procedures
  - Converting To Industry/NRC Accepted Emergency Action Levels



### **Radiological Protection And Chemistry**

- Performance Issues Identified In The Last Assessment
  - Quality Of Radiation Control Procedures
- Performance Improvements Achieved
  - Increased Ownership Of Procedures

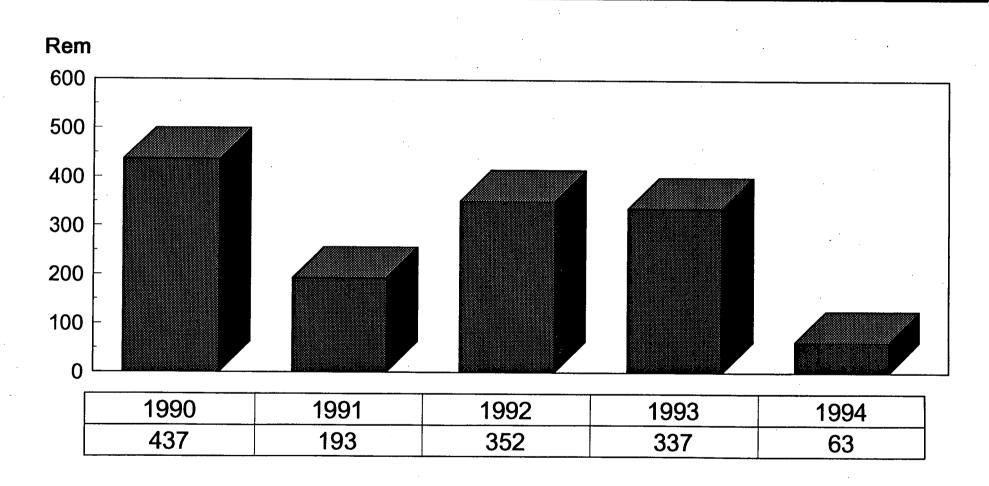
#### **Radiological Protection And Chemistry**

- Strengths
  - Health Physics
    - Best Performance In Plant History
      - Exposure 63 Man-Rem
      - Contaminated Floor Space 1254 Sq. Ft. Year Avg.
      - Personnel Contamination Events 54 Events
      - Radwaste Buried 33 M<sup>3</sup>
    - Internal Self-Assessment
      - Effective Implementation Of Corrective Action Program
      - Recognized By NAD/INPO



### Site Exposure

### Lowest In History - 63 Rem

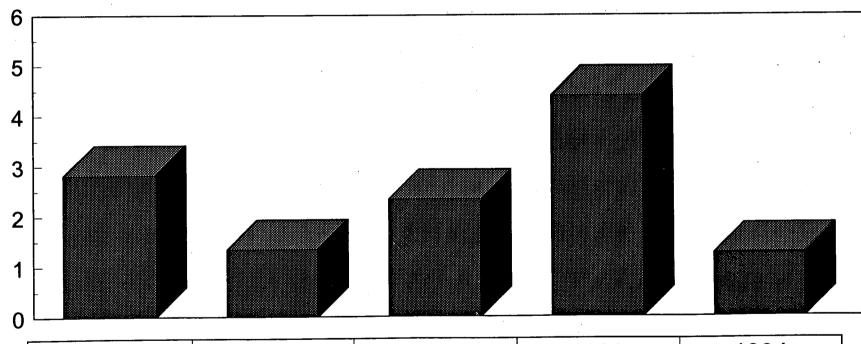




### **Contaminated Square Footage**

### Lowest In History - 1254 Square Feet

#### Sq. Ft. (Thousands)

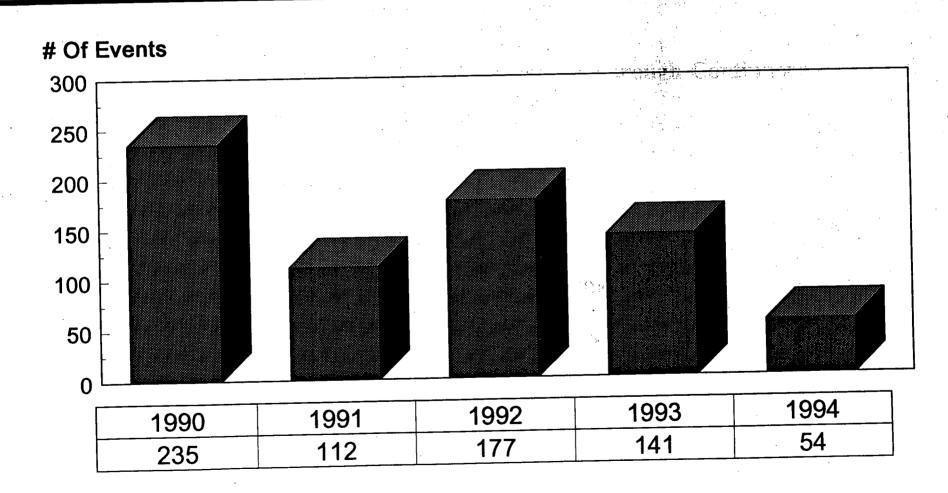


1990	1991	1992	1993	1994
2.820	1.340	2.332	4.389	1.254



# Contamination Events

### Lowest In History - 54 Events





### **Total Radwaste Buried**

### **Lowest In History - 33 Cubic Meters**

#### **Cubic Meters**



### Mid-SALP Cycle Review

#### Plant Support

#### **Radiological Protection And Chemistry**

- Strengths (Cont'd)
  - Chemistry
    - Total Radioactive Effluents Well Below Regulatory Limits
    - Radioactive Resin Management
    - Secondary Chemistry Maintained Within INPO Industry Top

      Quartile
    - Radiochemistry Interlab Comparisons
      - 100% Agreement

- Cam Introversame In:

#### **Radiological Protection And Chemistry**

- Current Challenges
  - Maintain Excellent Level Of Performance Through Continuous

    Improvements
- Improvement Initiatives
  - Developing Advanced Radiation Worker Program
  - Developing Interim Onsite Radwaste Storage
  - Continued Reduction In Radiation Exposure
    - 172 Man-Rem Goal For Outage Year 1995

mance Continue To se

#### **Radiological Protection and Chemistry**

- Improvement Initiatives (Cont'd)
  - Continuing Chemistry Improvement Programs
  - Improved Staff Training And Knowledge
    - SRO Certification Class Graduate
    - National Registration Of Radiological Protection Technicians
       (NRRPT) Certifications
  - Actively Pursuing The Best Practices In Industry



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Summary And Concluding Remarks				



### Summary And Concluding Remarks

#### **Summary**

- NTIP Has Been Implemented As Planned And Is Producing Results
- Business Plan Initiatives Have Been Developed And Are Being Implemented
   To Achieve Continuous Future Improvement
- Since Returning To Service, The Plant Has Operated Well And Is In Good
   Materiel Condition
- The Robinson Management Team Has And Is Continuing To Resolve Issues

  That Are Obstacles To World Class Performance



### Summary And Concluding Remarks

- We Have Achieved Significant Improvement In:
  - Maintenance Performance
  - Engineering Products
  - Self-Assessment Capability (NAD And Line)
- Our Attention Is Focused On Operator Performance Improvements
- Health Physics, Chemistry, And Security Performance Continue To Be
   Excellent



### Summary And Concluding Remarks

### **RESULTS COUNT**

- For The 1995 Portion Of The SALP Period, We Are Focused On Realizing
   Results From Our Initiatives Implemented In 1994
- We Believe 1995 Will Be Robinson's Best Performance Year EVER in:
  - Safety
  - Production
  - Cost

#### **WATCH**

You Too Will See These Results!

