

October 8, 1996

Carolina Power & 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: MEETING SUMMARY - SELF-ASSESSMENT PRIOR TO SYSTEMATIC ASSESSMENT OF
LICENSEE PERFORMANCE (SALP) H. B. ROBINSON - DOCKET NO. 50-261

Dear Mr. Hinnant:

This refers to a meeting requested by Carolina Power & Light Company on September 24, 1996, in Atlanta, Georgia. The purpose of the meeting was to discuss the H. B. Robinson self-assessment prior to the cycle 13 SALP. It is our opinion, that this meeting was beneficial.

Enclosed is a List of Attendees and Carolina Power & Light Handout. The agenda included discussions of the following topics: Robinson Refueling Outage 17, the plant self-assessment digest, and plant self-assessment.

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 A. Belisle for)

Milton B. Shymlock, Chief
Reactor Projects Branch 4
Division of Reactor Projects

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

Enclosures: 1. List of Attendees
2. Carolina Power & Light Handout

cc w/encls: (See page 2)

220006

9610220089 961008
PDR ADOCK 05000261
Q PDR

1/1
R2

12/10

cc w/encls:

Dale E. Young
Plant Manager
H. B. Robinson Steam Electric Plant
3581 West Entrance Road
Hartsville, SC 29551-0790

J. Cowan, Manager
Operations & Environmental
Support MS OHS7
Carolina Power & Light Company
P. O. Box 1551
Raleigh, NC 27602

R. M. Krich, Manager
Regulatory Affairs
H. B. Robinson Steam Electric Plant
3581 West Entrance Road
Hartsville, SC 29551-0790

Max Batavia, Chief
Bureau of Radiological Health
Dept. of Health and Environmental
Control
2600 Bull Street
Columbia, SC 29201

Dayne H. Brown, Director
Division of Radiation Protection
N. C. Department of Environmental
Health & Natural Resources
P. O. Box 27687
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W. D. Johnson, Vice President
and Senior Counsel
Carolina Power & Light Co.
P. O. Box 1551
Raleigh, NC 27602

Karen E. Long
Assistant Attorney General
State of North Carolina
P. O. Box 629
Raleigh, NC 27602

(cc w/encls cont'd - See page 3)

CP&L

3

(cc w/encls cont'd)
Robert P. Gruber
Executive Director
Public Staff - NCUC
P. O. Box 29520
Raleigh, NC 27626-0520

Public Service Commission
State of South Carolina
P. O. Box 11649
Columbia, SC 29211

Hartsville Memorial Library
147 W. College Avenue
Hartsville, SC 29551-0790

Distribution w/encl:

M. Shymlock, RII
B. Mozafari, NRR
M. N. Miller, RII
R. Aiello, RII
G. A. Hallstrom, RII
PUBLIC

NRC Resident Inspector
1. S. Nuclear Regulatory Commission
2112 Old Camden Road
Hartsville, SC 29551-0790

OFFICE	RII:DRP	RII:DRP				
SIGNATURE	<i>Gom</i>	<i>FJape</i>				
NAME	GMacDonald:ser	FJape				
DATE	10 / 7 / 96	10 / 8 / 96	10 / / 96	10 / / 96	10 / / 96	10 / / 96
COPY?	<input checked="" type="checkbox"/> YES NO	<input checked="" type="checkbox"/> YES NO	YES NO	YES NO	YES NO	YES NO

OFFICIAL RECORD COPY

DOCUMENT NAME: G:\CPLMTGS\ROBSALP.SUM

LIST OF ATTENDEES

Carolina Power & Light Company

C. S. Hinnant, Vice President, H. B. Robinson Plant
J. S. Keenan, Director Site Operations
R. M. Krich, Manager, Regulatory Affairs
S. S. Young, Superintendent of Security
R. Warden, Nuclear Assessment Manager (Acting)
G. Miller, Robinson Engineering Support Service Manager
D. Young, Plant Manager

Nuclear Regulatory Commission

S. Ebnetter, Regional Administrator, Region II (RII)
L. Reyes, Deputy Regional Administrator, RII
A. Gibson, Director, Division of Reactor Safety (DRS), RII
J. Johnson, Acting Director, Division of Reactor Projects (DRP), RII
J. Jaudon, Acting Deputy Director, DRP, RII
B. Mozafari, Project Manager, Office of Nuclear Reactor Regulation (NRR)
M. Reinhart, Project Manager, NRR
M. Shymlock, Chief, Reactor Projects Branch 4 (RPB4), DRP, RII
D. Verrelli, Technical Assistant, DRS
B. Rankin, Senior Project Manager, Plant Support Branch, DRS, RII
J. Zeiler, Acting Senior Resident, Robinson, RPB4, DRP, RII
B. Desai, Resident Inspector, Turkey Point, RPB3, DRP, RII
G. MacDonald, Project Engineer, RPB4, DRP, RII
G. Wiseman, Project Engineer, RPB4, DRP, RII

ENCLOSURE 2

Carolina Power & Light Company

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

Robinson Performance Review

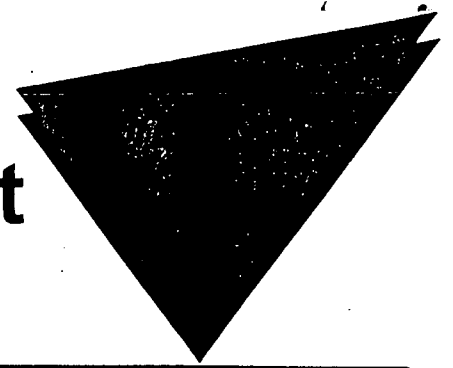
**Meeting With The NRC
September 24, 1996
Atlanta, Georgia**

Agenda

Overview.....	C. S. Hinnant
Self Assessment.....	J. S. Keenan
Engineering.....	G. D. Miller
Operations.....	D. E. Young
Maintenance.....	D. E. Young
Plant Support	
Health Physics And Chemistry.....	D. E. Young
Emergency Preparedness.....	D. E. Young
Security.....	S. S. Young
Summary.....	C. S. Hinnant

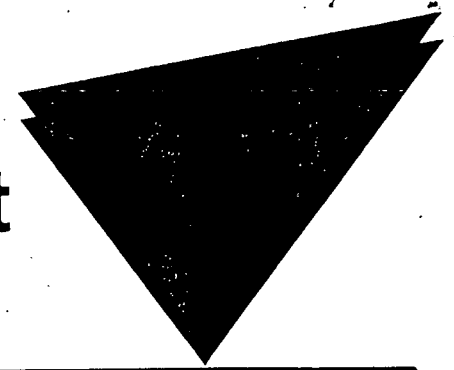
Robinson Today Is A Different Plant

What's Different?



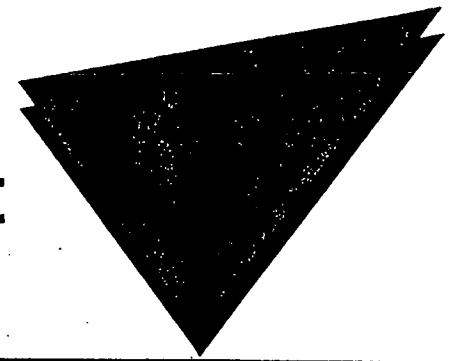
- Higher Standards And Expectations
- First Class Facilities
- A Culture Of Open Communication And Team Work ... We Are Finding And Fixing Our Own Problems
- A Staff That Believes That We Can Be And Will Be Recognized As "One Of The Best !"

Robinson Today Is A Different Plant



Why Is Robinson Different Today?

- **Self Assessment - Our Investment In Organized Self Assessments As Part Of Normal Business Is Paying Off**
- **Corrective Action Program (CAP) - We Focus On Root Cause, The Right Corrective Actions, And Track Commitments To Completion**
- **Operating Experience (OE) Program - We Use Industry Data To Avoid Problems**



Robinson Today Is A Different Plant

Why Is Robinson Different Today ? (Cont'd)

- **Better Training**

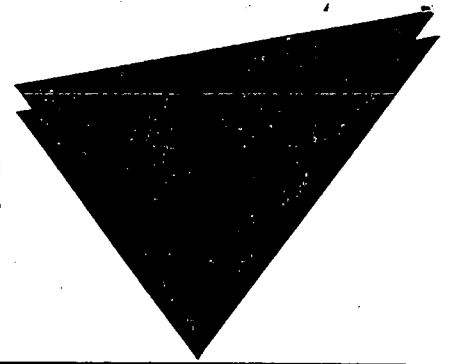
- Higher Quality
- More In-Depth
- More Hands-On

- **Management And Staff**

- Team Work
- The Right People In The Right Job
- A Focus On The Competition And The Future Rather Than On "Comfort" And Accomplishments Of The Past

Robinson Today Is A Different Plant

How Do We Know We Are Different Today?



Results

- Improved Safety
- Improved Production
- Improved Costs
- Involved And Motivated People

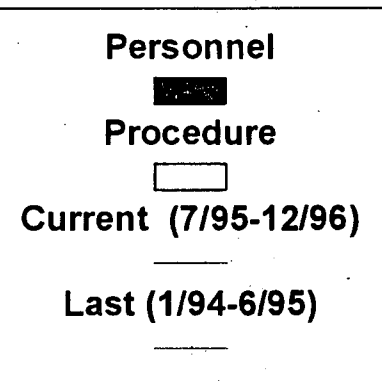
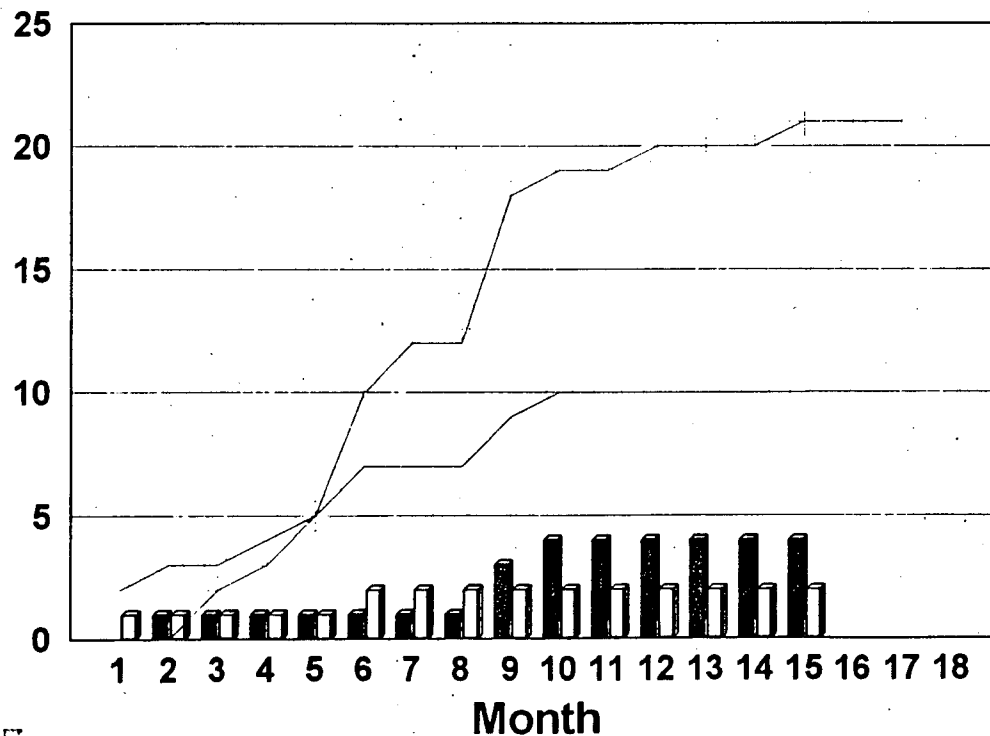
Robinson Today Is A Different Plant

How Do We Know We Are Different Today?

Safety - Results

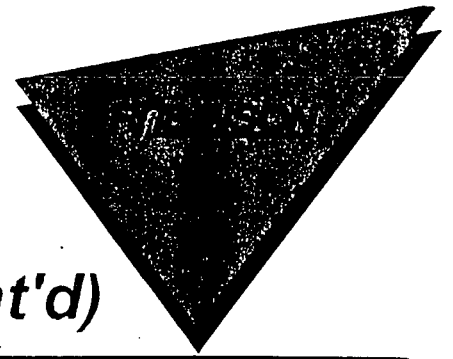
Licensee Event Reports (LERs)

Number



Robinson Today Is A Different Plant

How Do We Know We Are Different Today? (Cont'd)



Safety-Results

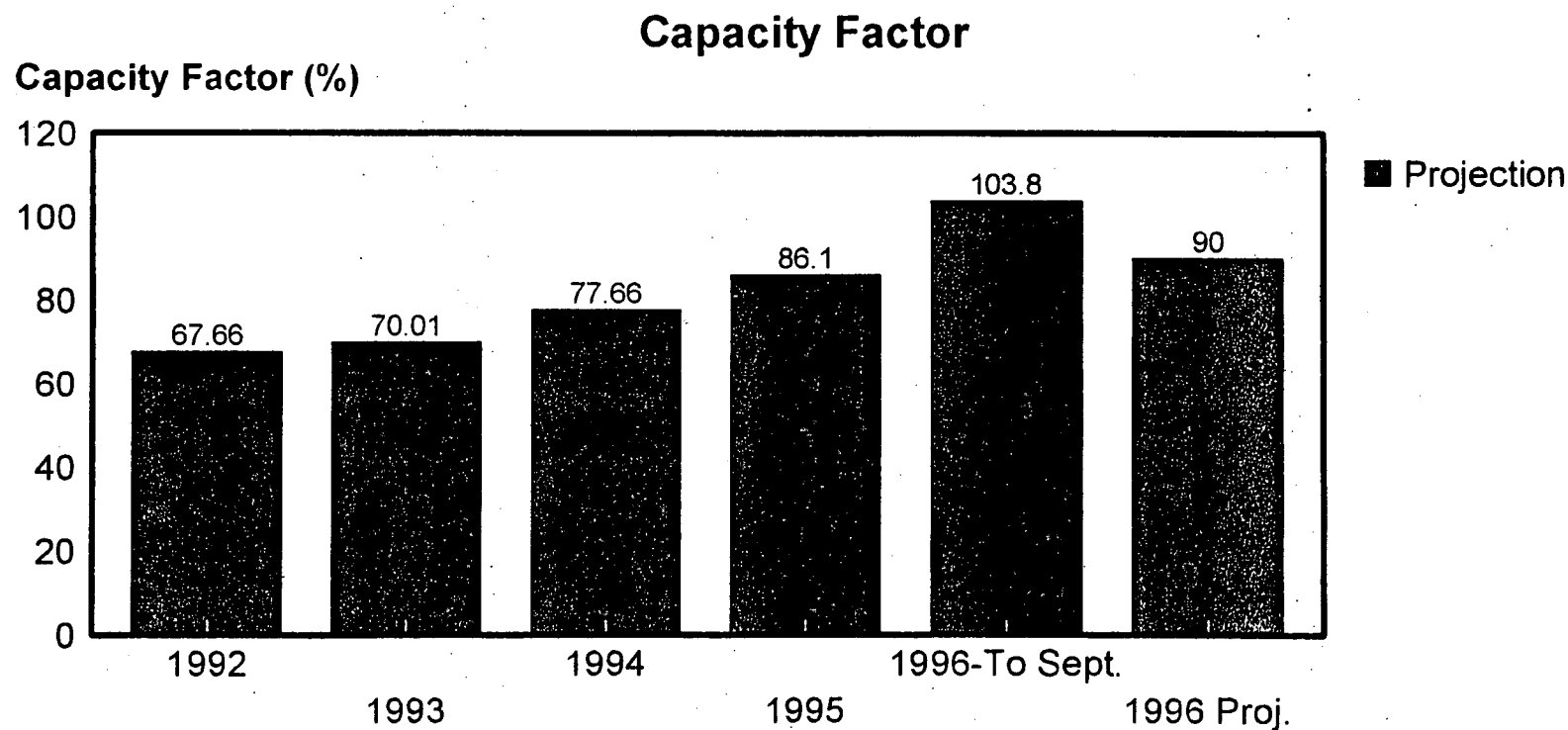
Emergency Plan Declarations

Last SALP Cycle	5
Current SALP Cycle	3

Robinson Today Is A Different Plant

How Do We Know We Are Different Today? (Cont'd)

Production-Results



Note: Fuel Cycle 17 Capacity Factor = 101.3% (Based On MDC)

GP&E

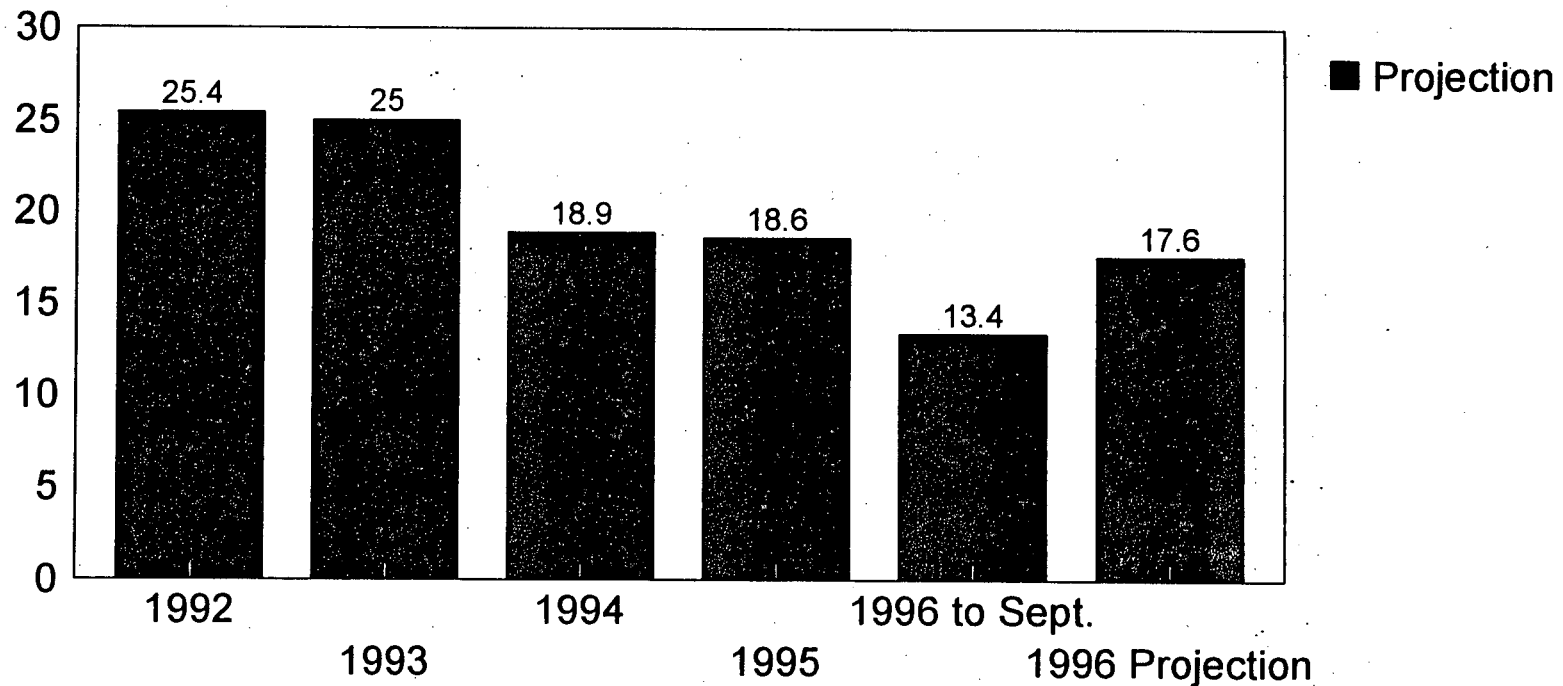
Robinson Today Is A Different Plant

How Do We Know We Are Different Today? (Cont'd)

Costs-Results

Production Costs

Mills/KWH



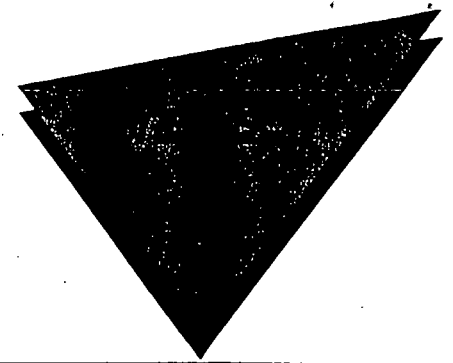
Robinson Today Is A Different Plant

How Do We Know We Are Different Today?



- 19 -- Additional Licensed Operators
- 13 -- Enhanced Engineering Staff
- 11 -- Enhanced Supervisors/Managers Staff
- Smaller, Better Qualified And Focused Staff

Robinson Today Is A Different Plant

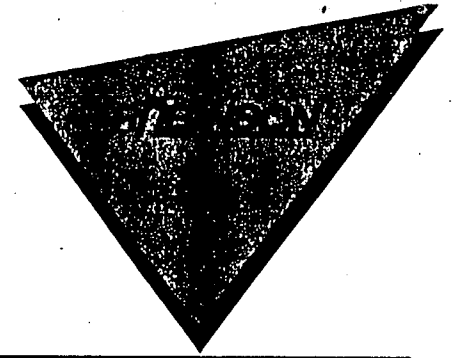


Why Will We Continue To Improve?

- **Plant Excellence Is The Driver**
 - **Staff Understands The Need For Continual Improvement**
- **Higher Robinson Standards And Expectations**
 - **Focused On**
 - **Safety**
 - **Production**
 - **Costs**
 - **Human Resources (People)**
- **CP&L Management Will Accept Nothing Less Than World Class Performance**

Self Assessment

Why Self Assessment ?



- **In The Past We Had:**

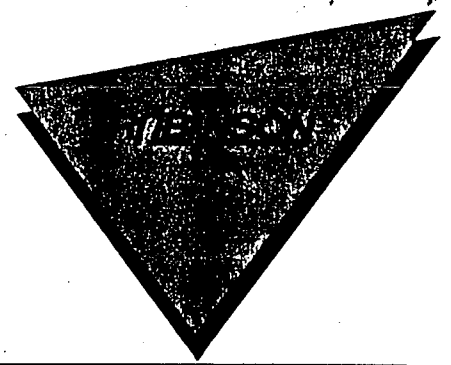
- Inconsistent Plant Performance
- Non-Self Critical Culture
- Inwardly Focused Staff

- **Self Assessment Is:**

- A Proven Industry Tool
- An Effective Way To Focus On Finding And Fixing Our Own Problems
- A Cultural Foundation To Build Future Success

Self Assessment

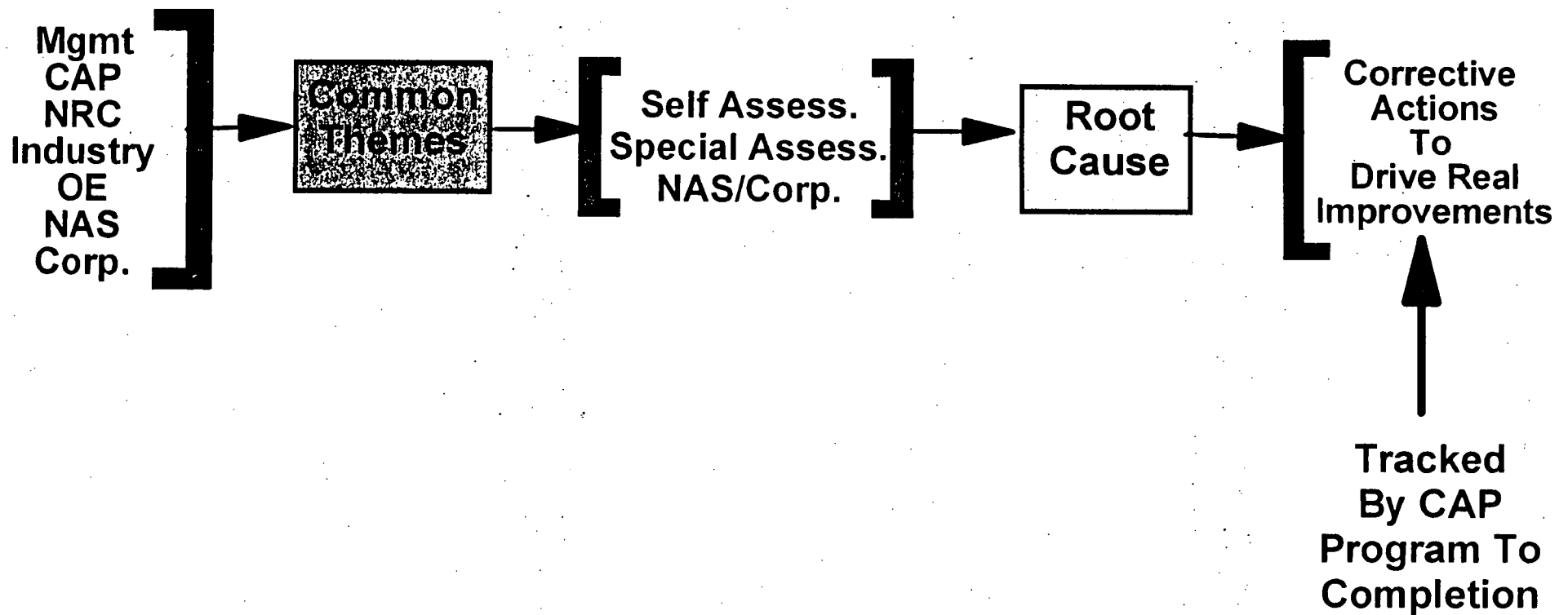
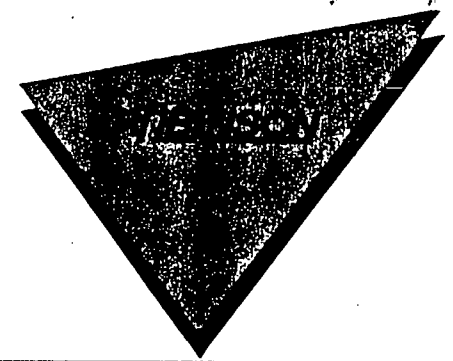
Action Plan



- 1994 Near Term Improvement Plan (NTIP) Initiative/Steering Committee
- "Way Of Life" Philosophy
- Nuclear Assessment Section (NAS)...Guiding Light
- 1995 Self Assessment Advisory Board (SAAB)
- 1996 Aggressive Self Assessment Plan
- 1997 Additional Improvement Planned

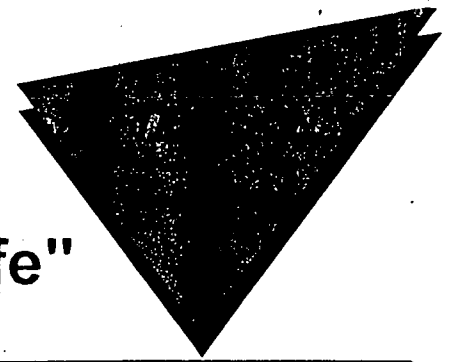
Self Assessment

Focused Selection Of Self Assessment



Self Assessment

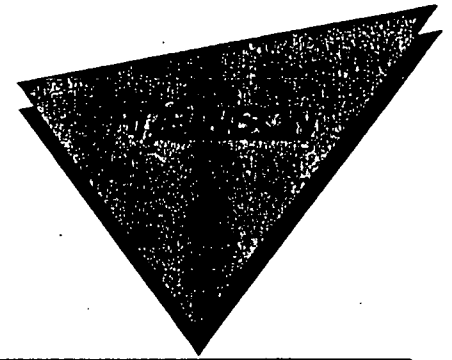
Integrating Self Assessment Culture "Way Of Life"



- STAR
- Identify Discrepant Conditions
- Pre-Job Briefings
- Post-Job Critiques
- Self Critical/Questioning Attitude
- Peer Checking
- Focused Selection Of Self Assessment

Self Assessment

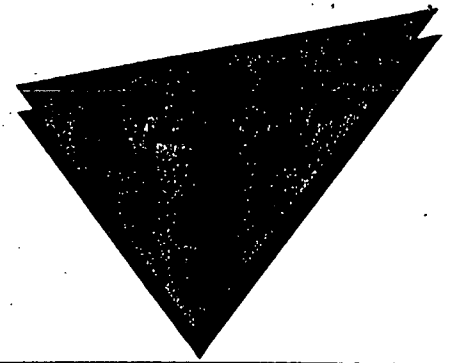
Results



- Changing Culture
- Finding/Fixing Our Problems
- Pro-Active vs Reactive
- Producing Positive Performance Results
- IPAP/INPO

Self Assessments

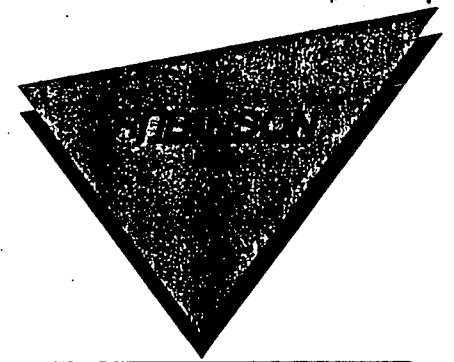
1997 Planned Improvements



- Increased Depth And Independence
- Expand Use Of Industry Peers/Experts
- Upgrade Plant Staff Expertise
- Broaden Membership Of SAAB
- Journey —▶ Excellence

Engineering

Results



-
- **Conducting High Quality Self-Assessments**
 - **Improved Problem Identification And Resolution**
 - **Involvement In / Support Of Operations And Maintenance**
 - **Rapid Response Team**
 - **Top-10 List, Operator Work-Around List, Plant Review Group Approved Modifications**
 - **Participation In Major Operations / Maintenance Surveillance Tests**
 - **Engineering Is Fully Integrated Into Day-To-Day Plant Operations**
 - **Engineering Involvement And Initiatives Reflected By Good Plant Performance**

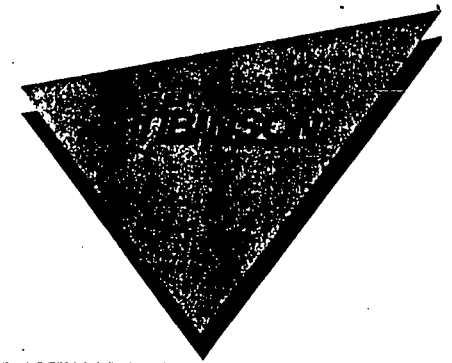
Engineering

Results (Cont'd)

- **Added Increased Technical Capability Of Staff Via Targeted Recruiting**
- **Significant Involvement With Conversion To Improved Technical Specifications**

Engineering

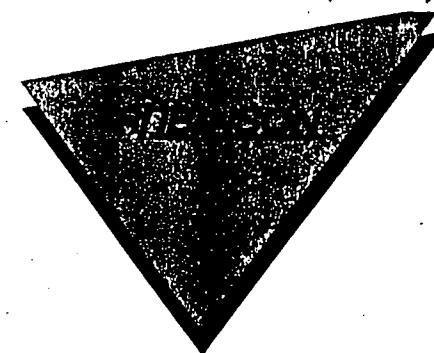
Top-10 List



#	Issue	RO-17 Work
1	Hagan Rack Refurbishments	YES
2	Improve Plant Transmitter Venting / Calibration	YES
3	Eliminate Penetration Pressurization System (PPS)	YES
4	Improve Net Generation	YES
5	Improve Charging System Pressure Control	YES
6	Improve Air Compressor Reliability / Air Quality	YES
7	Improve Hypochlorite System Reliability	On-Line
8	Improve Steam Generator Blowdown Control	YES
9	Reduce EDG Manifold Oil Leakage	On-Line
10	Improve Reliability Of Lundell Annunciator System	RO-18

Engineering

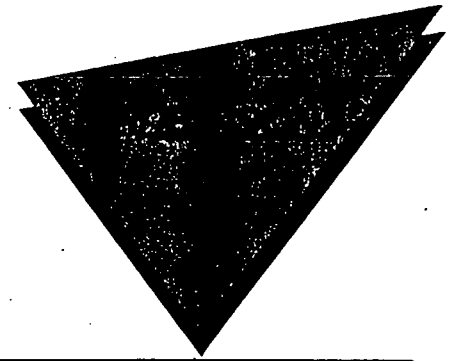
Operator Work-Arounds



#	Issue	RO17 Work
1	Manual Valve Operation For PPS	YES
2	FT-114 Reliability	YES
3	LPMS Inhibit During Rod Movement	YES
4	Hotwell Level Indication Reliability	On-Line
5	Consistent Seal Injection Flow To RCPs	YES
6	S/G Blowdown Level Control Valve Leakage	On-Line
7	PPS Leakage Monitoring	YES
8	Condensate Pump Seal Injection Control Valve	YES
9	Condensate Polishing Neutralization Control	On-Line
10	RVLIS/ICCM Screen Improvements	YES

Engineering

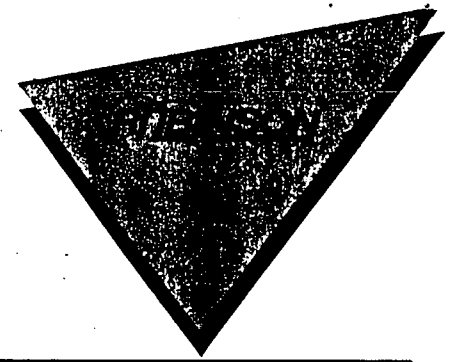
Focus Areas



- **Continue To Improve Product Quality**
- **Increase Technical Capability Of Engineering Staff**
 - **Continued Emphasis On Staff Training And Qualification**
- **Technical Program Upgrades**
 - **Self Assessment**
 - **Targeted Personnel Recruitment**

Engineering

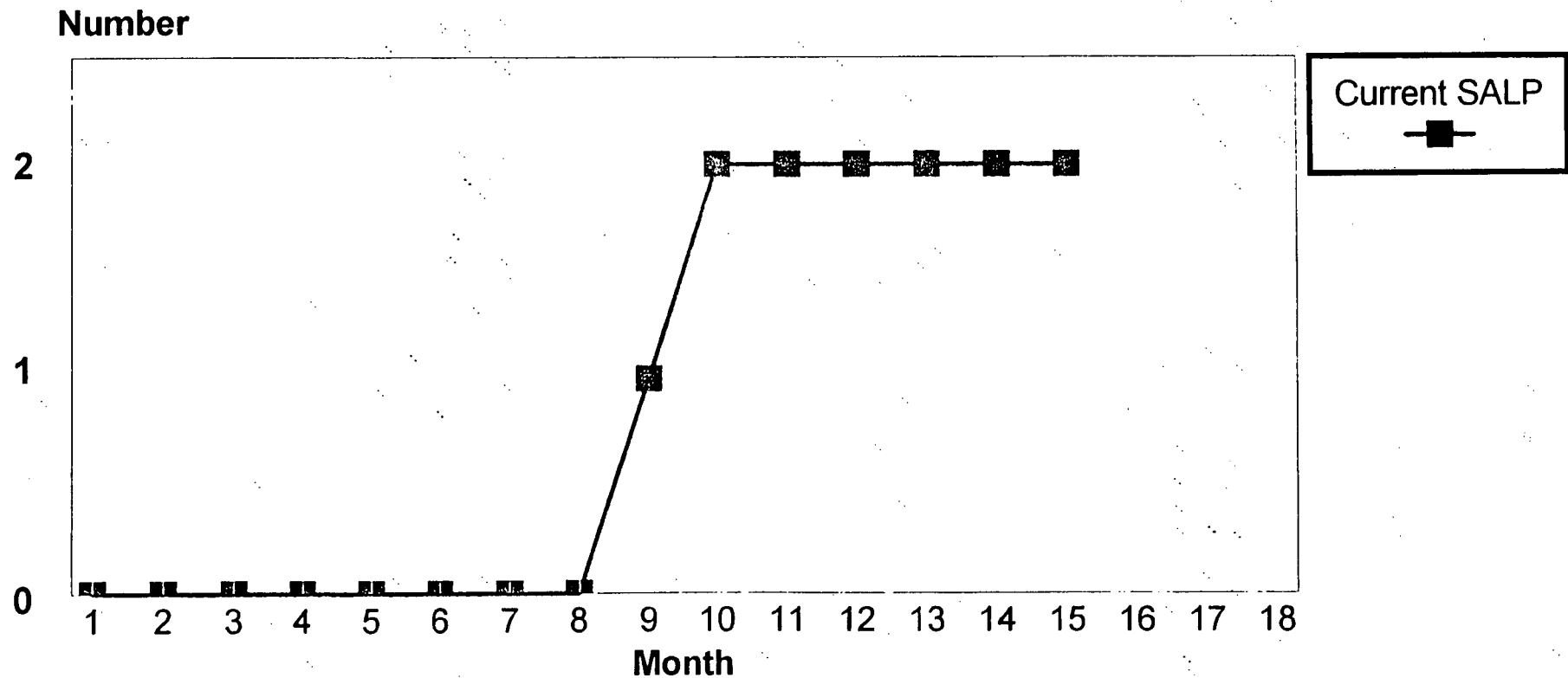
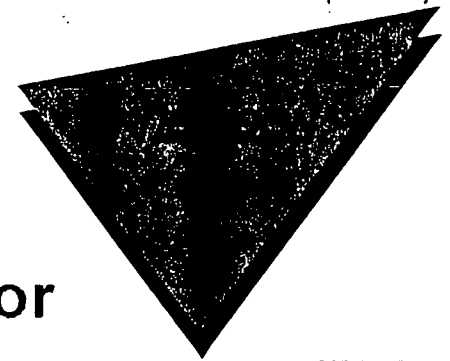
Future Initiatives



- **Improve Predictive / Preventive Maintenance Programs To Support Maintenance Rule Implementation**
- **Organized Review Of Updated Final Safety Analysis Report**
- **RESS'96 Engineering Plan**

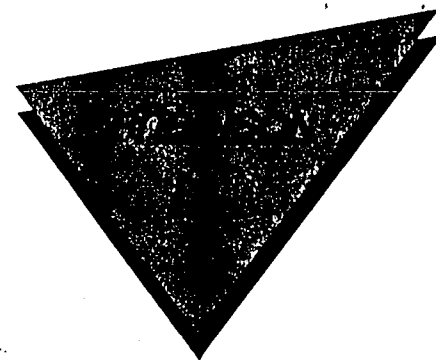
Operations

Licensee Event Reports Due To Operator Error



Operations

NRC Violations Due To Operator Error



Number

12

10

8

6

4

2

0

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

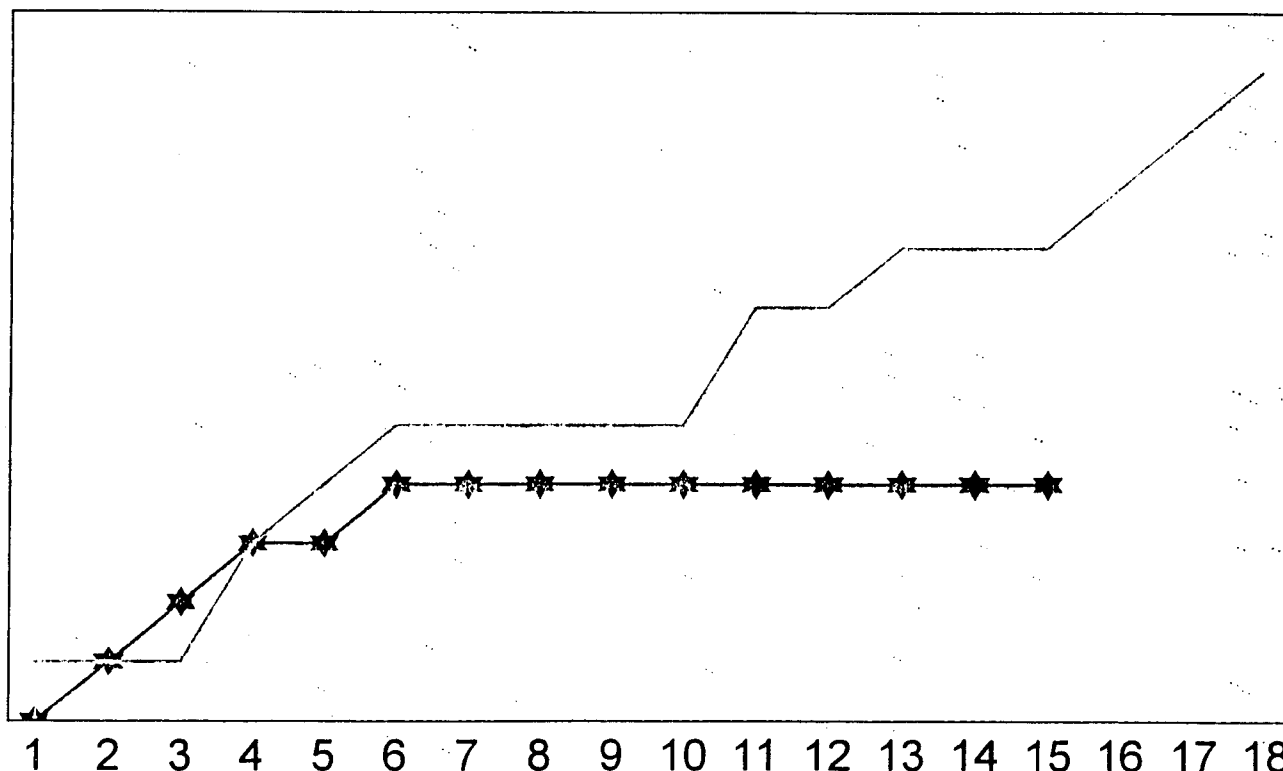
16

17

18

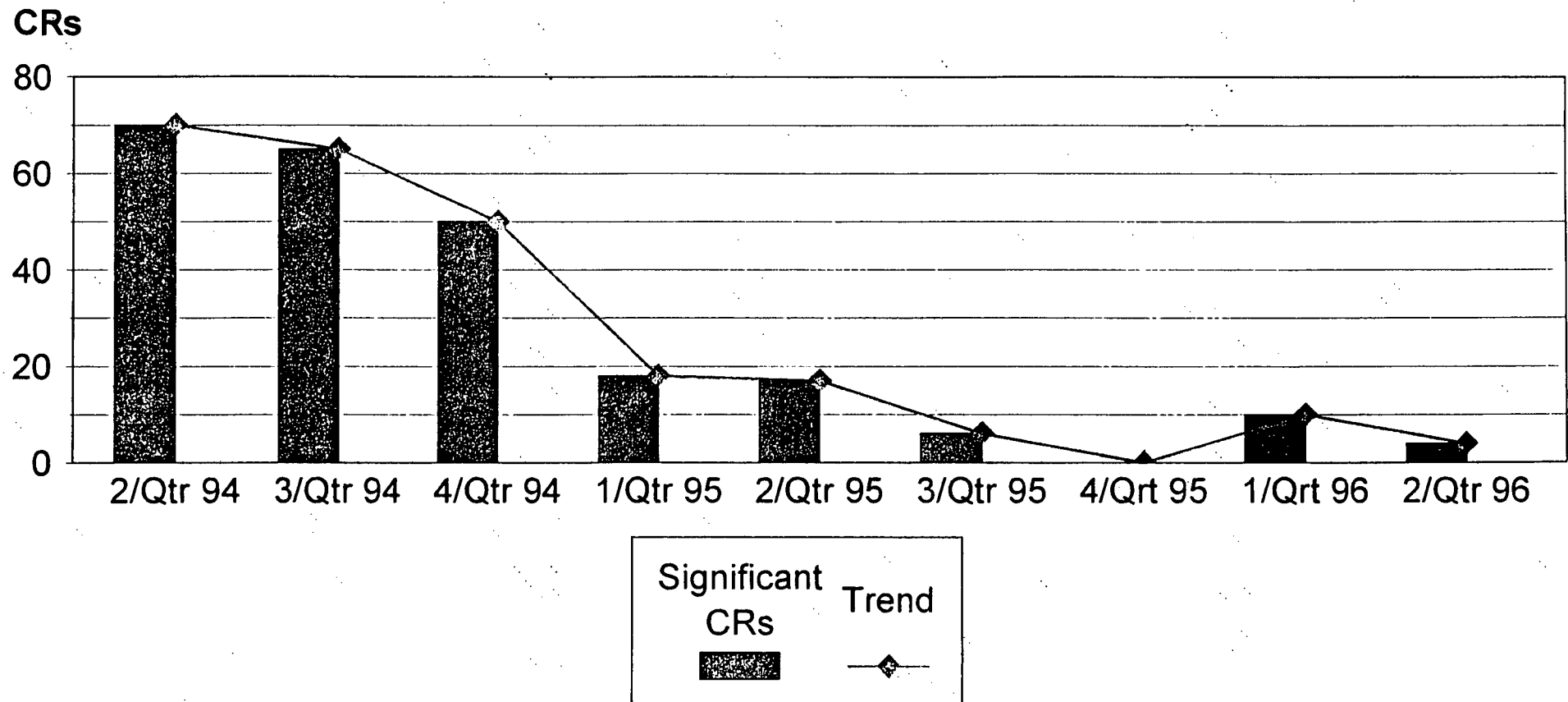
Month

Current
SALP Cycle
—★—
Last
SALP Cycle
——



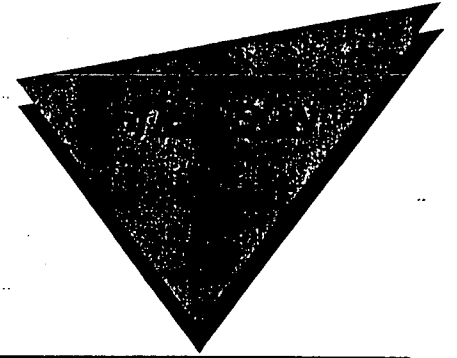
Operations

Personnel Error Trend March 1994 - June 1996



Operations

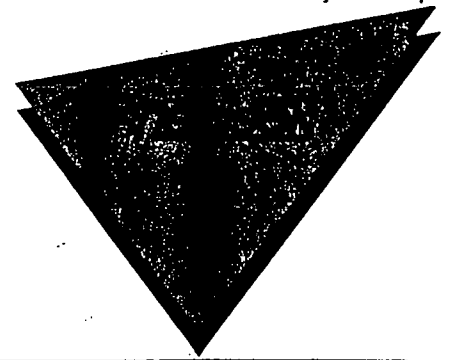
Results Areas



- Personnel Development
- Error Reduction
- Site Work Coordination
- Self Assessment

Operations

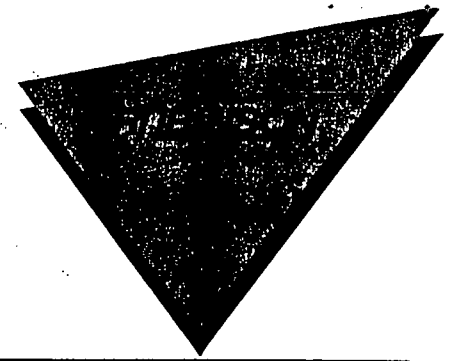
Personnel Development



- **5 Shift Superintendents**
- **6 AOs**
- **5 Instant SROs**
- **6 ROs / 8 Instant SROs**
- **Management Involvement In Training**
- **Teamwork, Communication, Professionalism**

Operations

Error Reduction

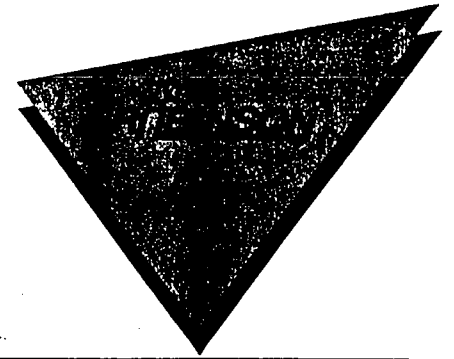


- Crew Error Reduction Plans
- Routine Self Assessments
- Pre- And Post-Job Briefings
- Labeling Program

- 1997-1998

Operations

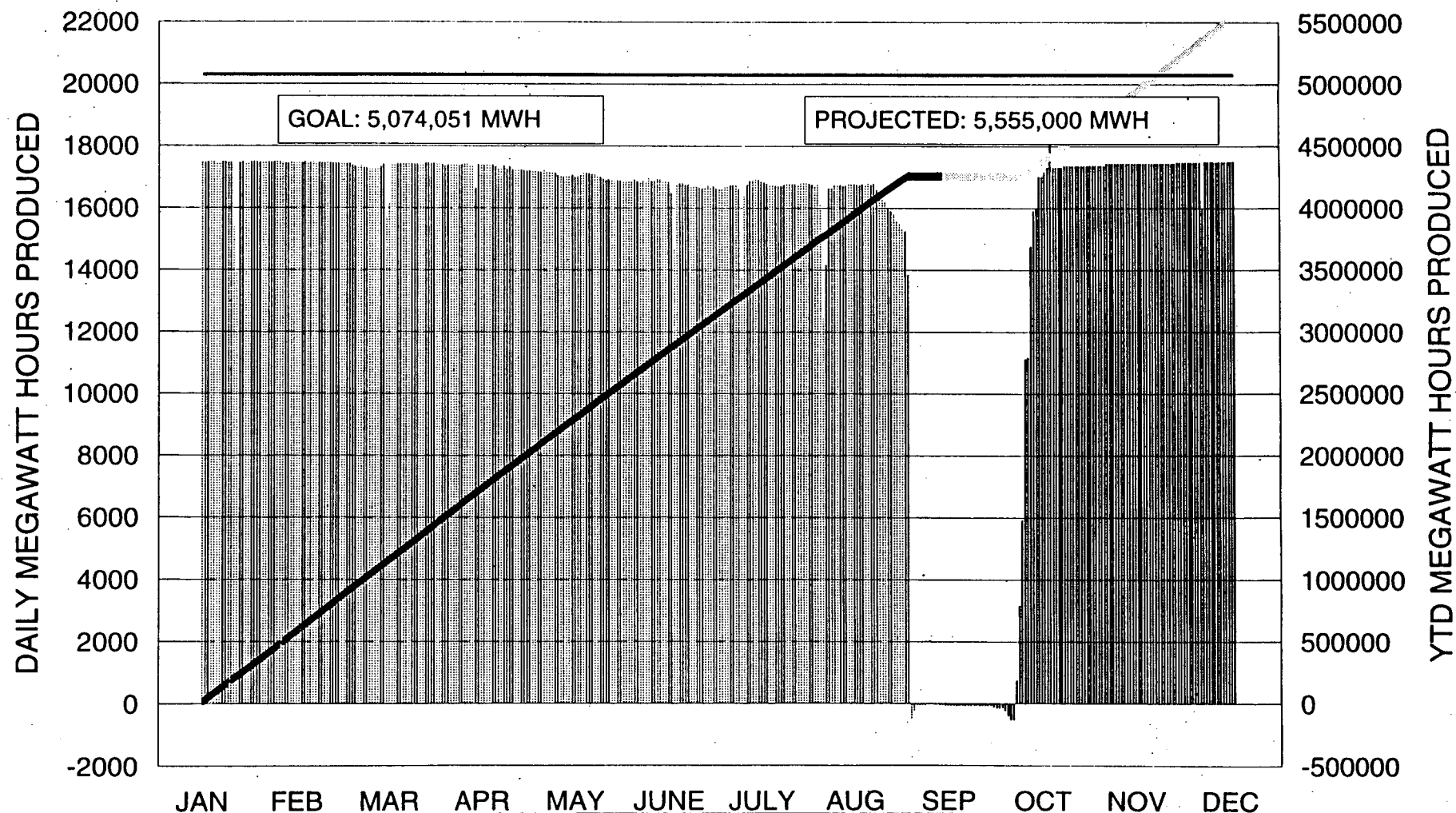
Focus Areas



- **Error Free Operation**
- **Implement Improved Technical Specifications**
- **Develop Future Shift Superintendents And Supervisors**
- **Work Control Coordination**

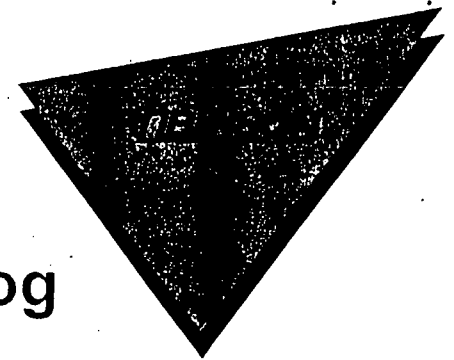
1996 NET GENERATION - ACTUAL AND PROJECTED

ACTUAL THROUGH SEPTEMBER 19 - 4,257,448 MWH



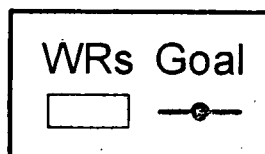
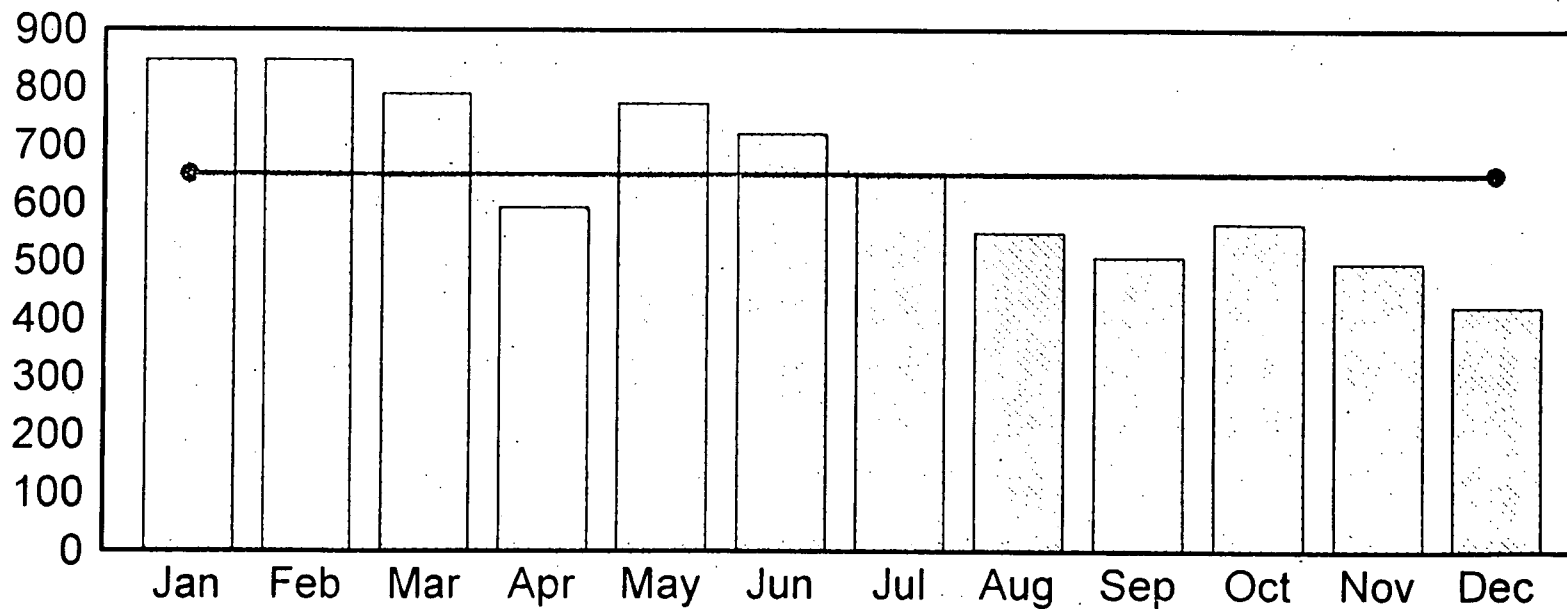
Maintenance

Non-Outage Powerblock Work Request Backlog



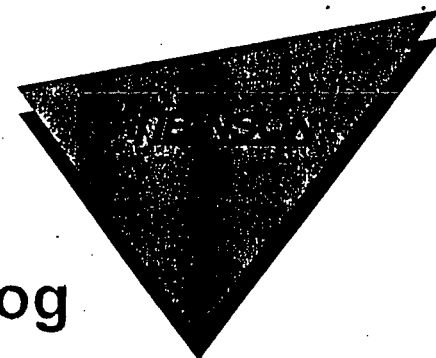
Reduction Plan 1995

Work Request (WRs)



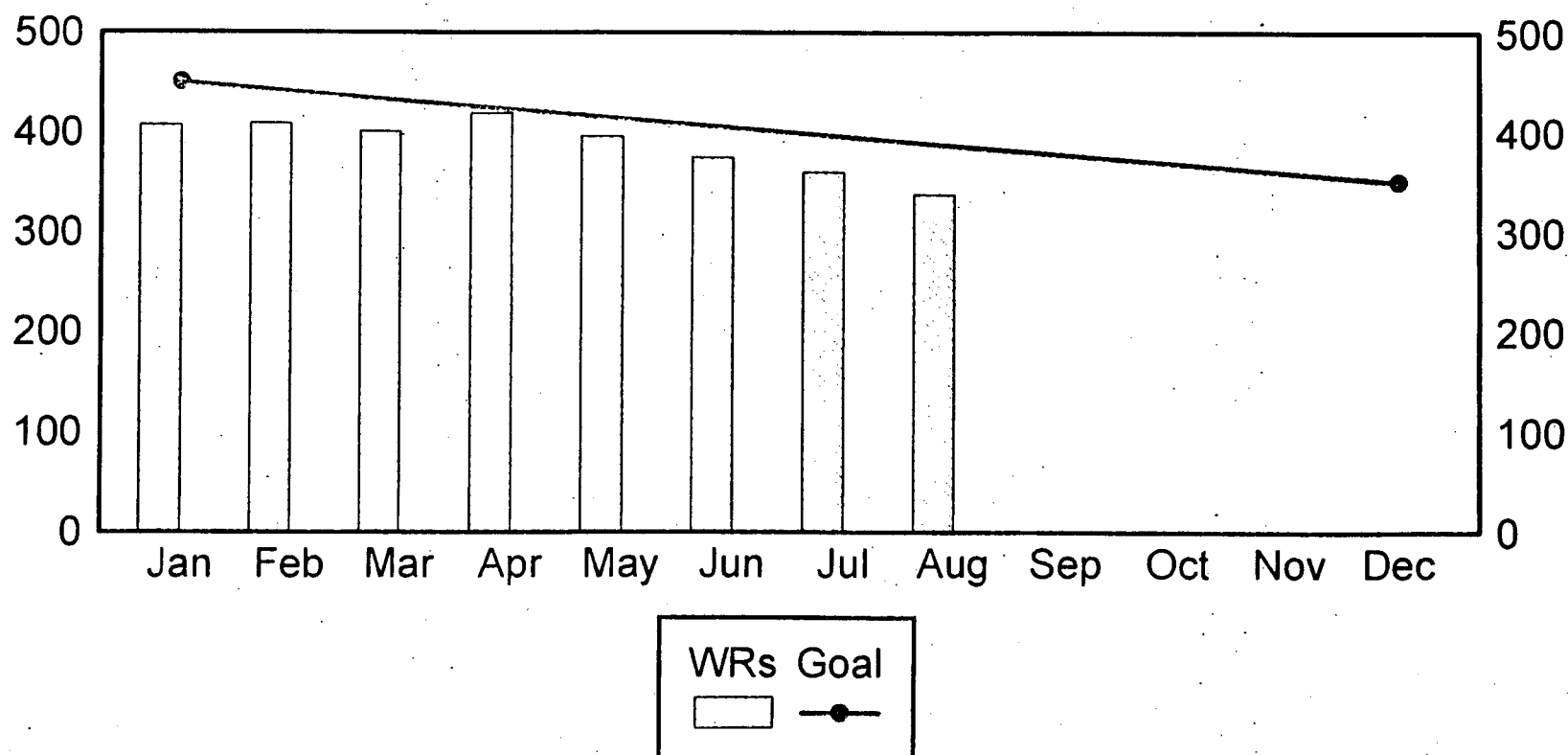
Maintenance

Non-Outage Powerblock Work Request Backlog



Reduction Plan 1996

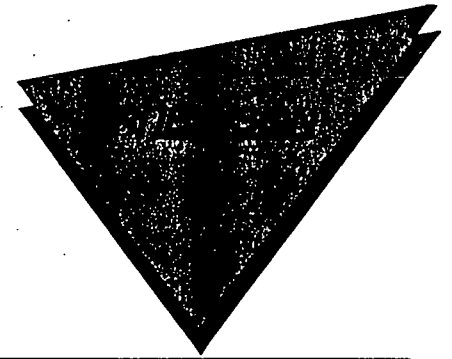
Work Requests (WRs)



Maintenance

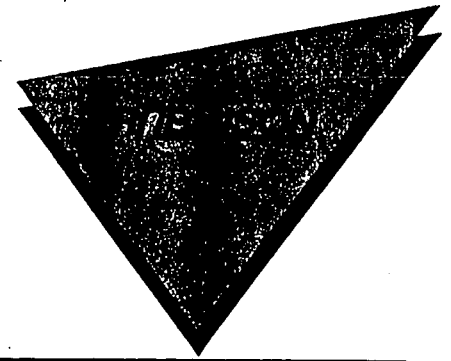
Results Areas

- **Procedural Improvements**
- **Contractor Control**
- **Self Assessment**



Maintenance

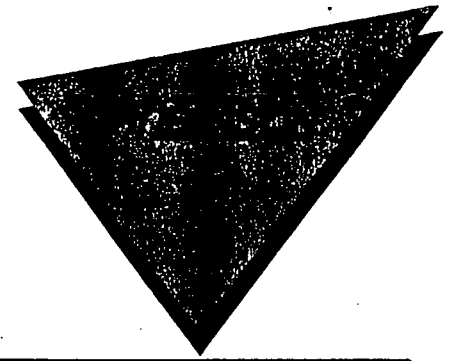
Procedural Improvements



- **Quality Of Procedures**
 - > 100 New
 - > 650 Revised
- **Strict Usage**
- **Pre-Job Briefs**
- **Engineering Involvement**

Maintenance

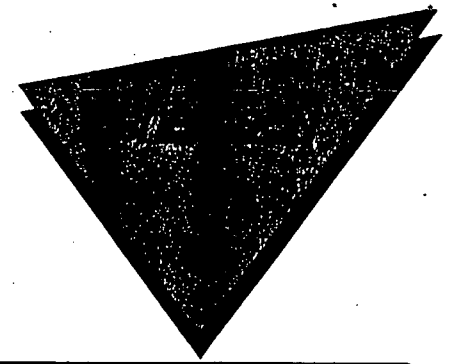
Contractor Control



- **Extensive Training**
 - **CP&L Supervisor**
 - **Contract Supervisor**
 - **Contract Labor**
- **Plant Management Review Of Training Programs**
- **NAS And Site Observations**

Maintenance

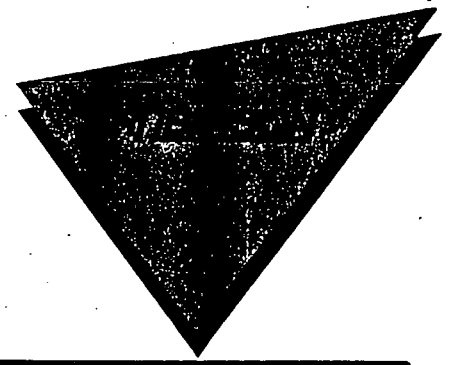
Maintenance Self Assessments



- **11 Maintenance Self Assessments To Date**
- **NAS Assistance**
 - Robinson - Maintenance, Special Processes, Corrective Action Program, Material, Training, Operations
 - Harris - Maintenance, Document Control
 - Brunswick - Maintenance, Training
- **Emphasis On Improvement Condition Reports**

Maintenance

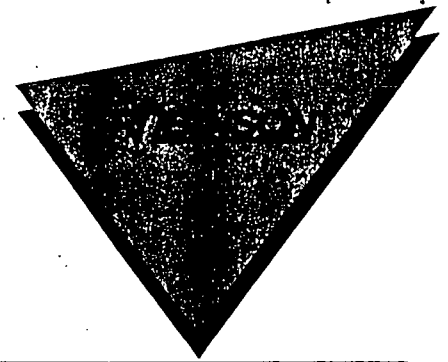
Personnel Development



- **Mechanical Maintenance Superintendent - August 1995**
- **I&C/Electrical Superintendent - February 1996**
- **Maintenance Manager - June 1996**
- **I&C Supervisor - SRO Certification - July 1996**
- **Training Instructor Rotation - June 1997**

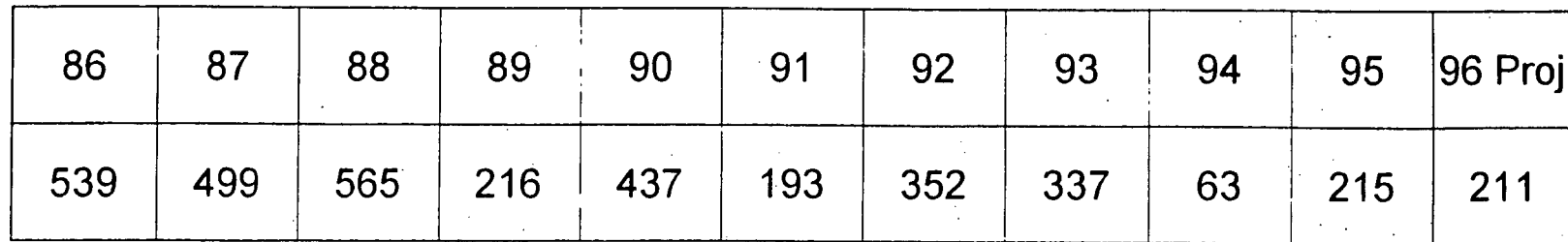
Maintenance

Focus Areas



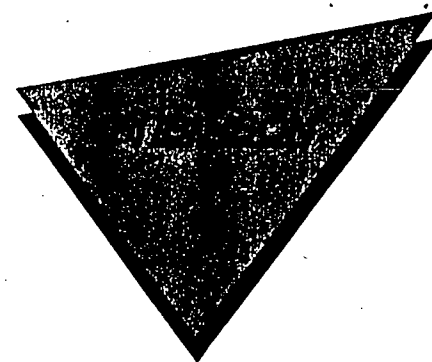
- **Simplify Administrative Processes**
- **Implement Improved Technical Specifications**
- **Predictive / Preventive Maintenance Program**
- **Work Control Coordination**

Person-Rem

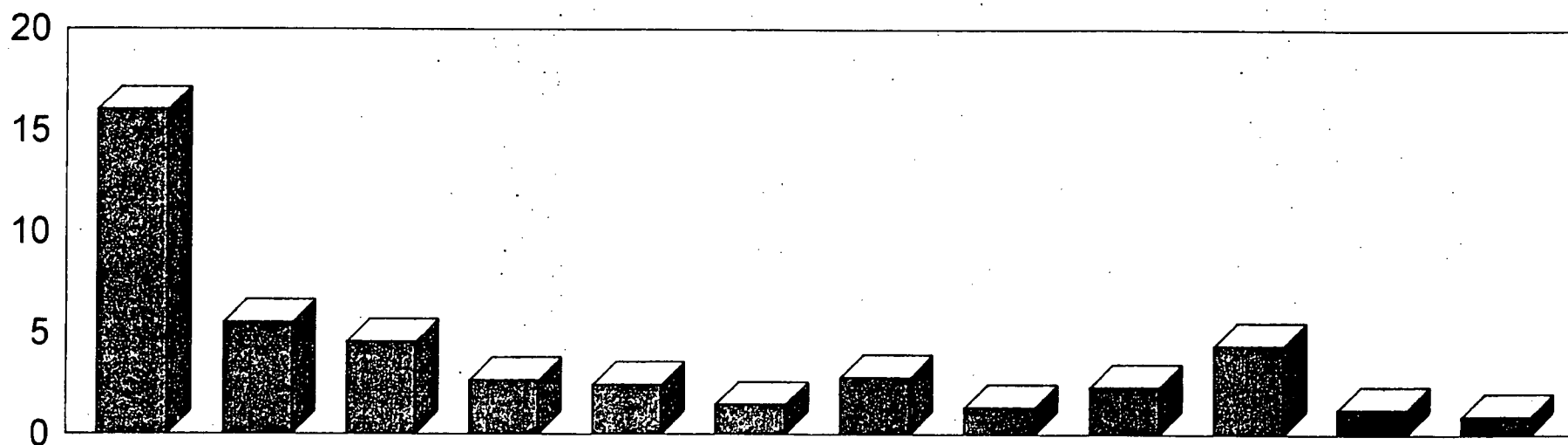


Health Physics And Chemistry

Contaminated Square Footage



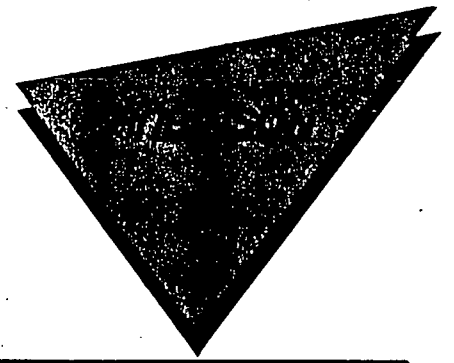
Sq. Ft. (Thousands)



1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
16.000	5.500	4.574	2.665	2.447	1.462	2.820	1.340	2.332	4.389	1.254	0.918

Health Physics And Chemistry

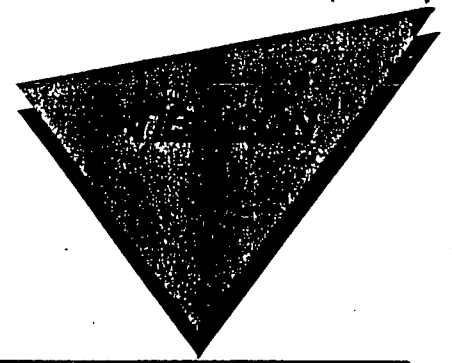
Results



- **CPI = 1.12**
- **RCS Cleanup > 1000 Curies**
- **Zero Fuel Defects**
- **Radwaste Minimization**
- **Low Liquid Releases**

Health Physics And Chemistry

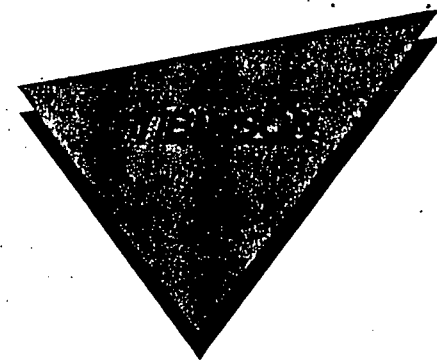
Results



- **Self Assessments**
 - 40 Internal
 - 10 NAS/Corp.
 - 49/54 Personnel Participated
- **Advanced Radiation Worker Program**
- **Leak Containment**
- **ALARA Committee**

Health Physics And Chemistry

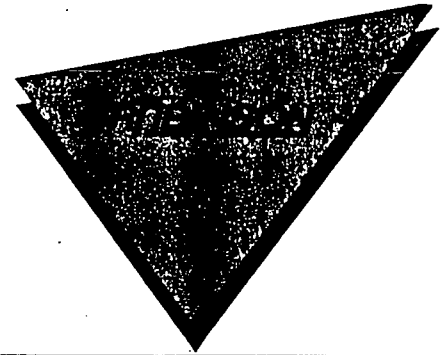
Personnel Development



- **Manager, Environmental And Radiation Control - SRO Certification**
- **Radiation Control Superintendent - NAS Rotation**
- **> 50% National Registry Of Radiation Protection Technologist**
- **V C Summer Outage**

Health Physics And Chemistry

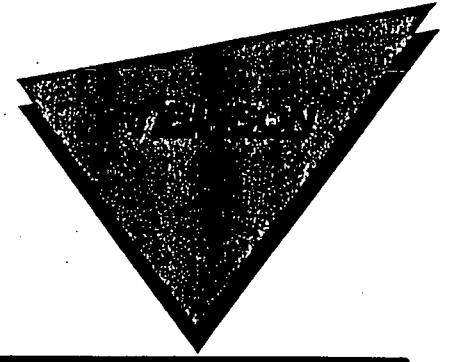
Focus Areas



- **Source Term Reduction**
- **Advanced Radiation Worker Implementation**
- **Best Practices For Steam Generator Water Chemistry**

Emergency Preparedness

Results

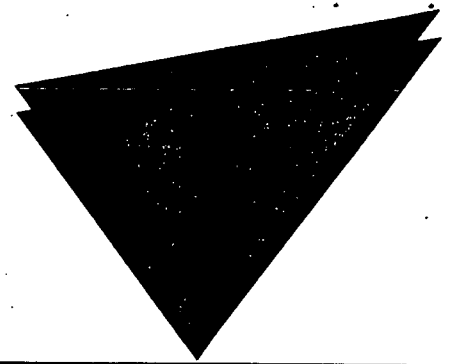


- **Relationship With State And Counties**
 - **Hurricane Preparations**
- **Four Emergency Response Teams**
- **Fully Effective 1995 Annual Drill**
- **New Emergency Preparedness Manager With Operations And NAS Background**

Emergency Preparedness

Initiatives

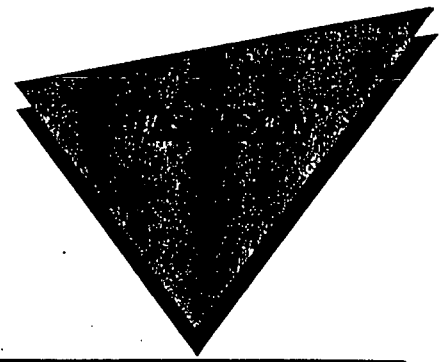
- **Quarterly Team Drills**
- **Procedure Upgrade**
- **Updated Emergency Action Levels (EALs)**



Emergency Preparedness

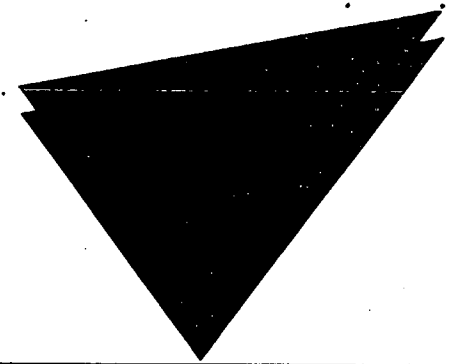
Focus Areas

- Siren Reliability
- Maintain Team Composition
- Enhance Training



Security

Results

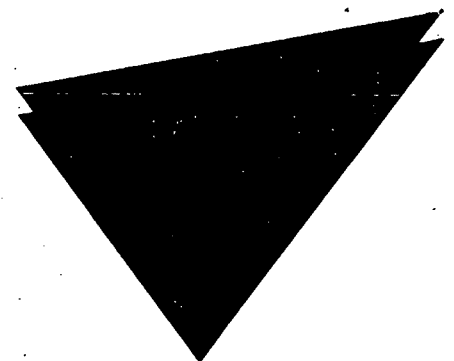


- **Dedicated And Experienced CP&L Staff**
 - **Cooperation, Teamwork, And Enthusiasm Of Contract Security Force**
 - **Management Support Of The Security Organization- e.g., Firing Range, Security Computers, Weapons**
 - **Use Of Challenging Unannounced Security Drills/Exercises**
 - **Enhanced Security Education Of Plant Personnel**
-

Security

Performance Improvements Achieved

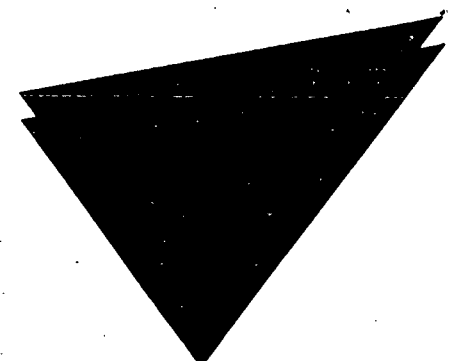
- Effective Protection And Handling Of Safeguards Information
- Experienced Professional CP&L Staff In Place
- Enhanced Security Force Training
- Thorough And Self-Critical Self Assessments
- Increased Use Of The Corrective Action Program



Security

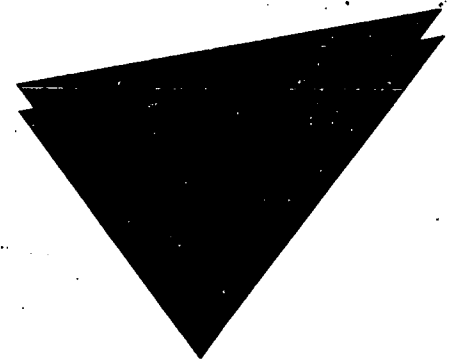
Performance Improvements Achieved (Cont'd)

- **Effective Physical Search Program**
- **Consistent Use Of OE Information And Sharing Of "Lessons Learned"**
- **Validation Of Security Force Performance By NAS (120 Day Follow-Up To March, 1996 Assessment)**



Security

Focus Areas



- **Effective Self-Assessments**
- **Broaden The Use Of The Corrective Action Program**
- **Enhance Training**



Summary



- **The Robinson Plant Of Today Is A Different Plant Than The Plant Rated SALP 2**
- **We Are Delivering Results (Not Promises) In**
 - Safety
 - Production
 - Costs
 - Human Performance
- **Our Staff "Has Seen The Cliff." We**
 - Understand The Competitive Need For Continual Improvement
 - Use Self Assessment To Drive Our Improvement
 - Seek Excellence As Our Strategy To Deal With The Competitive Environment
 - Are Focused On The Future, Not The Past

Summary



- **The Success Of The Robinson Plant Is Determined By Its People**
- **The Robinson People Have Achieved Significantly Improved Results During This SALP Period**
- **However: We Are Not Satisfied**
We Are On A Mission To Achieve And Sustain World Class Performance

Robinson Self-Assessment Digest

MARCH, 1996

Self assessment is the proven path to World Class Performance because it allows those familiar and involved with a process or product to identify, analyze, and fix potential problems before they impact plant performance. This Digest is published periodically, and distributed to all supervisors, to spotlight some discoveries by the Robinson Team during self-assessments. By each of us sharing this information with our respective work groups, everyone at Robinson can learn from the results and identify opportunities for self-assessment in their own organizations. The descriptions that follow are brief — if something catches your eye or raises questions, contact the individuals listed to find out the details in order to benefit from their lessons learned.

Where they looked ... and what they found

Topic: Operations-Maintenance Interface (December 11-31, 1995; Mike Heath)

Summary: The assessment found that, with the exception of closure of Post-Maintenance Testing (PMT), the interface between Operations and Maintenance was good and improving. Strengths were noted in the review of upcoming work by Operations and Maintenance, and in improved communications between the two units. One Finding was noted in the return of PMTR sheets to the Work Control Center (CR 96-00183).

Topic: Station Blackout Program (January 3-12, 1996; Frank Modlin)

Summary: The assessment concluded that there is reasonable assurance that the Plant can cope with a postulated Station Blackout Event. The assessment identified no Strengths and eight Areas for Improvement. Two of these were identified as potential compliance issues, five as design/technical issues, and one as a program implementation issue. Overall this appeared to be an excellent self-assessment with value-added findings.

Topic: Conduct of Auxiliary Operator (AO) Rounds (February 20-21, 1996; David Blakeney)

Summary: The purpose of this self-assessment was to review the effectiveness of Operations Unit AO rounds. The assessment identified no strengths. Findings included less than adequate oversight of AO rounds by Shift Management and less than effective management of shift resources resulting in unnecessary interruptions of AOs during rounds.

Training Opportunities

No additional classroom training is currently scheduled. Additional sessions will be scheduled if there is enough need and interest. Please contact Anna Siegfried at extension 1632. "On-The-Job Training" in self-assessment through participation in NAS assessments is continuing. To inquire about serving as a peer on a NAS assessment, please contact Karen McLendon at extension 1395.

Upcoming Assessments

<u>Assessment</u>	<u>Group</u>	<u>Due Date</u>
Repeats of NAS Issues and NAS CAP Effectiveness	NAS	3/14/96
Effectiveness of QC Inspection Data Trending	NAS	3/14/96
Corrective Action Program	Training	3/15/96
Document Control and Safeguards Information	Security	3/29/96
Outage Readiness	Outage & Scheduling	3/29/96
SOER/OEF	Maintenance	3/29/96
Measuring and Test Equipment	Maintenance	3/29/96
Operations Unit Human Performance	Operations	3/29/96
Management of Commodity Agreements	M&CS	3/29/96
Operating Experience In-Processing	OEA	3/29/96
Regulatory Affairs Corrective Action Program	OEA	3/29/96
INPO Responsibilities	Licensing/Reg Programs	3/29/96
Procedure Changes Effectiveness	Licensing/Reg Programs	3/29/96
Reactor Protection System SSFI	RESS	3/29/96
ESP Training and Qualification	RESS	3/29/96
Lubrication Program	RESS	3/29/96
Effectiveness of Corrective Actions to Identify/Update Design Documents	RESS	3/29/96

SUGGESTIONS FOR IMPROVING THIS DIGEST SHOULD BE SUBMITTED TO JIM FLETCHER (PES) OR DAN STODDARD

Robinson Self-Assessment Digest

APRIL, 1996

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Where they looked ... and what they found

Instructor Certification Program (January 24-26, 1996; Tommy Williams)

Summary: The assessment determined that the Instructor Initial and Continuing Training Programs were effective. A *strength* was identified in the use of rotational instructors in maintenance, radiation control, and Engineering Support Personnel training. A Radiation Control laboratory exercise was also cited as a *strength*. *Findings* were identified in the areas of instructor self-study materials, documentation of contract instructor qualification, and storage of training waivers. Several items for management consideration were also identified during the assessment.

Implementation of SOER Recommendations (February 20-27, 1996; Phil Odom)

Summary: The purpose of this assessment was to ensure the findings of the 1994 NAS SOER Assessment and the 1994 INPO Evaluation had been adequately addressed. The assessment found that the SOER recommendations reviewed were adequately addressed. The database of SOER recommendations and responses was identified as a *strength*. *Findings* were identified in the close-out of some PM concerns and failure to properly reference SOER recommendations in plant procedures as required by AP-004, "Procedure Control."

Peer Evaluation of North Anna Power Station (February 26-28, 1996; Koda Smith)

Summary: This assessment was conducted as part of a *benchmarking visit* by Operations Shift 1. The team developed several recommendations for implementation at Robinson. These included: improved human performance indicators, controlled distribution of procedures on the LAN, an Operations pre-outage preparation procedure, computerized logs, and the use of "Shift Orders." Several other improvement ideas were also identified for further consideration.

Identification and Updating of Affected Design Documents (February 13-21, 1996; Don Dyksterhouse)

Summary: The primary purpose of this assessment was to review the effectiveness of corrective actions for a 1994 INPO finding regarding insufficient or untimely document updates. The assessment concluded that significant improvement has been made by RESS since the INPO finding. NRCS training provided by Document Services and proactive review of work requests by the EDBS Coordinator were identified as *strengths*. Three *findings* were identified, including: taking corrective actions different than those specified in response to the INPO finding, untimely updates of design documents and databases, and failure to update EDBS and NRCS for Non-Technical change ESRs.

Control and Disposition of Abandoned Equipment (March 3-27, 1996; Carol Oliver)

Summary: This assessment identified the absence of definitions and methodologies for the control and disposition of abandoned equipment. The assessment also noted that there is equipment on the control board which has been rendered non-functional by previous modifications. Finally, the assessment concluded that improvement is needed in the documentation and labelling of equipment considered as "abandoned."

Upcoming Assessments

<u>Assessment</u>	<u>Group</u>	<u>Due Date</u>
ERO Training and Qualification	Reg. Affairs	4/12/96
Site Support Services Section CAP	Document Services	4/15/96
Fire Protection Training Program	Training	4/22/96
Procedure Revision Process (AP-022 Compliance)	Maintenance	4/26/96
Incorporation of OE into Operations Training	Training	4/28/96
QSR Training	Training	4/30/96
Procedure Revision Process (AP-022 Compliance)	Outage & Scheduling	4/30/96
Implementation of SOER Recommendations	M&CS	4/30/96
Document Control/Safeguards Information	Security	4/30/96
Service Water System	RESS	4/30/96

SUGGESTIONS FOR IMPROVING THIS DIGEST SHOULD BE SUBMITTED TO JIM FLETCHER (PES) OR DAN STODDARD (RA)

Robinson Self-Assessment Digest

MAY, 1996

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Where they looked ... and what they found

Quality Receipt Inspection Process (January 31, 1996; Dale Lambert)

Summary: The purpose of this assessment was to ensure procedural requirements applicable to the Quality Receipt Inspection Process were being met. *Strengths* identified during the assessment included the Inspectors' level of procedure awareness, knowledge, and compliance; Inspectors' initiative in resolving discrepancies at the point of receipt; and Inspectors' interface with customers. *Findings* included lack of a formal desiccant program at the plant and missing or inadequate documentation for 5 of 40 Purchase Orders reviewed.

PLP-032 Safety Reviews (January - February, 1996; Keith Jensen)

Summary: This assessment was conducted to determine the overall effectiveness of the RESS organization in conducting 10CFR50.59 Safety Evaluations. The assessment also evaluated the effectiveness of the current Qualified Safety Reviewer (QSR) training. *Strengths* were identified in the relocation of administrative requirements and implementation of the screening process with Revision 6 of PLP-032, "10CFR50.59 Reviews of Changes, Tests, and Experiments." *Findings* were identified in the quality of 10CFR50.59 evaluations in RESS and in the training and requalification of QSRs.

H. B. Robinson Lubrication Program (March 19-21, 1996; Ray Jenny)

Summary: The assessment concluded that the Lubrication Program provides a useful tool to the plant, extending the life of important equipment. The assessment also concluded that the effectiveness of the program as a Predictive Maintenance tool is reduced due to oil sample inconsistencies and delays in obtaining sample results. The lack of administrative limits to initiate actions prior to obtaining out-of-specification results was also identified as a weakness. Maintenance of lubrication basis documents and oil analysis results were identified as *strengths*.

Maintenance Supervisor Selection and Development Program (March 18-22, 1996; C. W. Grant)

Summary: The assessment determined that the Maintenance Supervisor Selection and Development Program meets all INPO requirements and adequately supports safe and reliable plant operation. The selection process for temporary supervisors was identified as a *strength*. One *finding* was identified in that the procedural requirements for permanent and temporary supervisors are difficult to understand.

Operating Experience In-Processing (March 27-28, 1996; Phil Odom)

Summary: The purpose of this assessment was to verify that the primary sources of 1995 Industry Operating Experience (OE) information were satisfactorily entered into the OE Program at the plant. The assessment concluded that OE In-Processing is being satisfactorily performed in the Operating Experience Assessment Unit. No strengths were identified during the assessment. One *finding* identified that some items were not received or entered into the Operating Experience tracking database. None of these items had a significant impact on Robinson.

ESP Continuing Training (March 11-28, 1996; Marty Foerster)

Summary: The purpose of this assessment was to evaluate the performance and compliance of the Engineering Support Personnel (ESP) continuing Training Program. The assessment concluded that progress has been made in the Program. Management involvement and ownership in the Program was identified as a *strength*. The assessment identified *findings* in the areas of documentation of training, continuing training on SOER recommendations, the Dissemination of Information Process, and timeliness of post-training surveys.

Site Support Services Corrective Action Program (April 2-12, 1996; Bob Slone)

Summary: This assessment determined that the Corrective Action Program is being effectively implemented within the Site Support Services Section. No *strengths* and three *findings* were identified during the assessment. The *findings* included a lack of knowledge with respect to administration of the program on the part of some members of the section, inability to locate several completed Condition Reports (CRs) in the records vault, and lack of trending of Improvement CRs.

Measuring and Test Equipment (April 15-19, 1996; Lance Howle)

Summary: This assessment identified significant improvement in the reliability and performance of Measuring and Test Equipment (M&TE). *Strengths* included the use of computer tracking and reporting features, labeling of M&TE, the battery check program, and the calibration check and traveler card reconciliation program. *Findings* were identified in the areas of guidelines for maintenance of shop standards, labeling of four items of uncontrolled test equipment, the need for compartment partitions for storage cabinets, and the use of signs to delineate designated discipline work areas in the M&TE laboratory.

Refueling Outage 17 Readiness (March 10 - April 24, 1996; Rick Dayton)

Summary: The purpose of this assessment was to ensure Refueling Outage (RO) 17 preparations were on track to implement a successful outage. Overall, the assessment determined that outage preparations have greatly improved, particularly in the area of pre-outage milestones. Potential improvements for the remaining milestones include: additional management commitment, clarification of pre-outage milestone definitions, additional monitoring of milestone effectiveness, and better sequencing of milestone actions.

Robinson Self-Assessment Digest

JUNE, 1996

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Where they looked ... and what they found

Training Section Corrective Action Program (January 1 - March 15, 1996; Bill Mihalovits)

Summary: This assessment was conducted to determine the use of Corrective Action Program trend information and the effectiveness of corrective actions taken by the Training Section. The assessment identified the effectiveness of corrective actions taken by Training, and the availability of Condition Report (CR) information through the use of CAPS Access Queries as *strengths*. One *finding* was identified regarding the need for training on the CR process.

Safety System Functional Evaluation of the Reactor Protection System (RPS) (March 25 - April 12, 1996; George Attarian)

Summary: The purpose of this assessment was determine the operational readiness of the RPS, as well as the adequacy of Engineering and Maintenance activities affecting the RPS. System engineer oversight and the procedure governing setpoint accuracy calculations were considered *strengths*. The assessment identified five *findings* in the areas of conformance to safety/non-safety-related isolation requirements, design engineering "culture," sharing of common problems and supporting information, procedural controls for Hagan module refurbishment, and identification of vendor technical information applicable to reactor trip breakers.

Effectiveness of NAS in Promoting Improvements in RNP Self-Assessment (April 26 - May 9, 1996; Bob Reynolds)

Summary: This assessment consisted of surveys of RNP peers who had participated in NAS assessments and interviews with RNP managers to determine the effectiveness of NAS in promoting and improving self-assessment at Robinson. Peer participation on NAS assessments and NAS reviews of RESS self-assessment outlines were identified as *strengths*. One *finding* identified potential improvements based on the surveys and interviews.

Telecommunications Services (May 13, 1996; Ned Little)

Summary: The purpose of this assessment was to assess the efficiency in providing telecommunications services in support of the Robinson Plant. Tracking of service requests, use of the call record database for monthly phone usage reports, and customer service were identified as *strengths*. *Findings* included the adverse impact of telecommunications technician reporting relationships and rotation on continuity and ownership and housekeeping problems in the PBX room.

Regulatory and Programmatic Commitments (May 6 - 16, 1996; Renee Gainey)

Summary: The purpose of this assessment was to evaluate the accuracy of regulatory and programmatic

commitments and the effectiveness of NAS in meeting those commitments. The assessment determined that NAS is effective at meeting regulatory and programmatic commitments. No *strengths* were identified during the assessment. Timeliness of Independent Safety Review trend reports and improvements in administration of the NAS Commitment Matrix were identified as *findings*.

E&RC Training Programs (March 25 - May 20, 1996; Nancy Baker)

Summary: This assessment evaluated the effectiveness of the Radiation Control (RC) and Environmental and Chemistry (E&C) Training Programs. The assessment appeared to be very thorough and determined that, overall, the RC and E&C Training Programs meet the requirements of ACAD documents and plant procedures. *Strengths* identified during the assessment included the use of rotational instructors, hands-on training activities, participation of instructors in related outage activities, and improvements in Qualification Checkout Cards (QCCs). The assessment identified a number of *findings* in the areas of technician and supervisor input to training, correlation of tasks and training materials in the "Task-to-Training" matrices, quality of some QCCs, completion of some QCCs, and timeliness of transmitting student feedback forms to the instructors.

RESS Procedure Change Process (May 1 - 31, 1996; Reggie Pederson)

Summary: This assessment evaluated the procedure change process for RESS procedures, including both Site-Specific and Nuclear Generation Group (NGG) Common procedures. No *strengths* and three *findings* were identified by the assessment. Having both Site-Specific and NGG Common procedures concurrently effective, lack of understanding regarding the difference between formal and informal training, and the perception that the procedure change process is burdensome were identified as *findings*.

SOER Effectiveness Review (May 20 - 31, 1996; Bob Johnsen)

Summary: The purpose of this assessment was to evaluate the effectiveness of Significant Operating Experience Report (SOER) approved responses to ensure actions taken within the Outages and Scheduling Unit achieved the desired results. The assessment identified the training provided for Foreign Material Exclusion (FME) as a *strength*. Personnel who had attended the training were very knowledgeable of FME requirements. Lack of guidance for use of the FME Checklist by Maintenance Supervisors and potential for additional SOER information in the "Operating Experience for Plant Outages" book were identified as *findings*.

10CFR50.59 Program (May 28 - June 3, 1996; Ed Harris)

Summary: The purpose of this assessment was to determine whether the 10CFR50.59 Safety Evaluation Program conforms to the requirements of the Code of Federal Regulations by properly determining those changes, tests, and experiments that involve an unreviewed safety question. The information contained in the recent RESS real-time training on UFSAR updates regarding what information constitutes the Safety Analysis Report (SAR) and where information can be found was considered a *strength*. *Findings* included the lack of qualification requirements for personnel performing Safety Review Screens, lack of guidance for review of Quality Assurance Program changes, difficulty in obtaining information considered to be part of the SAR, and weaknesses in documentation of the bases for responses to screening criteria and unreviewed safety question determinations.

Robinson Self-Assessment Digest

JULY, 1996

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Where they looked ... and what they found

Maintenance Unit Compliance with AP-022, "Document Change Procedure" (April 22 - 26, 1996; John Russ)

Summary: This assessment was performed to determine if the Maintenance Support Sub-Unit is performing procedure development and revisions in accordance with the requirements of AP-022. There were no *strengths* identified during the assessment. Inattention to detail errors in completing Document Changes Forms (e.g., revision type and basis code not completed, incorrect review dates, etc.) and failure to obtain the required Appendix R screen for one Maintenance Surveillance Test revision were identified as *findings*.

Fire Protection Training Program (April 16 - 22, 1996; Howard Worrell)

Summary: The purpose of this assessment was to determine: if the Fire Protection Training Program meets the requirements of the Plant Operating Manual and state guidelines, if lesson materials meet plant needs, and if quarterly drills and training adequately reinforce fundamental skills. The assessment identified no *strengths* and five *findings*. Some of the *findings* included the need to: upgrade course material for Initial Fire Brigade Training, delete the RC support of the Fire Brigade course, and provide additional training for Fire Brigade Team Leaders (based on Team Leader feedback)

I&C/Electrical Training Programs (May 13 - 17, 1996; Mark Thomason)

Summary: The purpose of this self-assessment was to evaluate the effectiveness of the I&C and Plant Electrician Training Programs. The assessment determined that the programs contained appropriate training material, and that Continuing Training (CT) had improved significantly. The use of a rotational instructor was identified as a *strength*. The assessment identified *findings* in the areas of retrieval of completed Qualification Checkout Cards (QCCs), completion of a high percentage of QCCs by simulation rather than actual performance, understanding of training processes and procedures by Maintenance Supervision, Task-to-Training matrix accuracy, and the percentage of incumbent Technicians and Electricians who have attended Basic Systems Training.

Protected Area Illumination (May 20 - 24, 1996; Vic Makowski)

Summary: This assessment determined that outside protected area and external isolation zone lighting meets the standards prescribed by the USNRC and plant license commitments. No *strengths* were identified. *Findings* included: the need to determine and document if some areas within the turbine building are in compliance with applicable license commitments,

the use of a work-around to adjust the automatic high mast control devices (i.e., photocells) by placing tape over the window, calibration and check-out requirements of light meters, availability of back-up lighting devices, and use of desk-top guides for conducting lighting checks.

Operations Unit Human Performance (April 1 - May 24, 1996; Chuck Baucom)

Summary: The objective of this assessment was to broadly examine human performance within the Operations Unit. The assessment determined that overall Operations Unit performance was good. Implementation of routine shift operating crew self-assessments and performance improvement/error reduction plans was identified as a *strength*. The recurring problems with mispositioning events, for which broad-based corrective actions have recently been implemented, was identified as a *finding*. The assessment also included several good items for management consideration to support further improvements in human performance.

Maintenance Unit's Use of STAR (June 10 - 21, 1996; Dick Cady)

Summary: This assessment was performed based on reviews of Maintenance Condition Reports indicating that inattention to detail is a major contributor to Maintenance errors. The assessment determined that use of self-checking during field work was a *strength*. This was supported by good use of repeat-backs, frequent procedural reviews during task performance, and craft pre-job review of work packages. One *finding* identified that craft personnel are not applying the same level of attention to activities outside of actual hands-on work. This *finding* pointed out the need for supervisors to emphasize the use of STAR for activities performed in support of field work.

Solenoid Operated Valve Problem Identification and Resolution (June 11- 21, 1996; Chris Georgeson)

Summary: This assessment was performed in response to the problems identified with solenoid operated valves (SOVs) in the plant. The purpose of the assessment was to determine the appropriateness of actions being taken to resolve these problems. Management's focus on resolving the SOV maximum operating pressure differential concerns was identified as a *strength*. The assessment identified several *findings*. These included: past change management weaknesses resulting in lack of follow-through on an Operating Experience (OE) evaluation action, failure to initiate a Condition Report as required when an adverse condition was identified during an OE evaluation, less than adequate ownership of process SOVs by system engineers, and the need to re-evaluate three previously evaluated OE items.

Advanced Radiation Worker Program Implementation Effectiveness (June 10 - 12, 1996; Mark Bedenbaugh)

Summary: The purpose of this assessment was to evaluate the effectiveness of the Advanced Radiation Worker (ARW) program implementation at Robinson. ARW training was found to be a *strength*. Failure of RC supervision to complete ARW field observation forms was identified as a *finding*. The assessment also identified several areas where improvement was needed. These included: the ARW work planning process, mentorship between ARWs and HPs, knowledge of the ARW program, and expectations for performing ARW tasks.

Robinson Self-Assessment Digest

AUGUST, 1996

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Where they looked ... and what they found

NAS Training and Development (May 20 - 28, 1996; Pat Jenny)

Summary: This assessment was performed to evaluate the effectiveness of training and development within the Nuclear Assessment Section (NAS). The assessment identified the use of personnel development forms for NAS assessors as a *strength*. Lack of understanding of what constitutes continuing training and personnel development, and failure to have personnel development forms for QC personnel were identified as *findings*.

Mechanical Maintenance Training Program (May 28-31, 1996; C. W. Grant)

Summary: This assessment, conducted to determine the effectiveness of the mechanical maintenance training program, identified three *strengths*, and six *findings*. The *strengths* included: use of the mock-ups in the Technical Training Facility for self-directed real time training, addition of a rotational instructor, and identification of the five steps of the Systematic Approach to Training in the program procedure. Some of the *findings* included: the need to improve the sequencing and cross-referencing of the program procedure relative to ACAD 92-008, the lack of a lesson plan on Industrial Safety, the need for updates to the Task-To-Training and Qualification matrices, and the relatively low percentage (i.e., 35%) of mechanics and supervisors who have completed Basic Systems Training.

Clearance Process (June 17 - 19, 1996; David Cook)

Summary: The purpose of this assessment was to evaluate the effectiveness of the clearance process and methods of implementation, and to determine if beneficial improvements could be identified to enhance the process. The assessment found that the clearance process is being effectively administered with due regard for personnel and equipment safety. *Strengths* identified during the assessment included: shift turnovers regarding the status of major plant equipment, inclusion of clearance request forms with Maintenance work packages, and aids developed to assist in the use of new clearance software. *Findings* were identified regarding: use of the clearance field for work requests in AMMS, limited use of the remote sign-in feature of the clearance software, the need to transfer draft and active clearances from the old to the new database, and problems with the use of the new PTR-Plus software.

Inservice Testing Program (June 1 - 28, 1996; Augie Cardillo)

Summary: The purpose of this assessment was to determine if the Plant's Inservice Testing (IST) program complies with regulatory requirements, has adequate administrative procedures, and is effectively implemented. The IST component database, a thorough pre-test briefing by Operations and Engineering personnel for a Service Water System OST, and the evaluation of "Out of Tolerance" test instrumentation were identified as *strengths*. *Findings* included: failure to include some safety-related relief and power-operated valves in the program, inadequate justification for deferral of some testing to cold shutdown, difficulty in establishing test conditions for one surveillance test, lack of timely evaluation and corrective action for components on increased test frequency, lack of supporting documentation for grouping of relief valves for testing, and failure to periodically distribute reports of test data and failures.

Emergency Response Organization Performance (June 27-30, 1996; Tee Lucas)

Summary: The purpose of this assessment was to determine if the Emergency Response Organization (ERO) staffing and performance meets management expectations and adequately supports protection of the health and safety of the public. No *strengths* or *findings* were identified during the assessment. The assessment found that ERO staffing and performance meet management expectations and that protection of the health and safety of the public is of foremost importance in the minds of the ERO and the local offsite agencies. As exercises are conducted, challenges, problems, and negative comments are satisfied through continuing training and other appropriate methods in a timely manner.

Administrative Process Knowledge and Compliance (July 22-26, 1996; Larry Lynch)

Summary: The purpose of this assessment was to evaluate the knowledge of Maintenance personnel on the requirements contained in administrative procedures and their compliance with those procedures. The assessment determined that supervisors are knowledgeable of administrative requirements and procedures. The assessment identified two *findings*. Maintenance craft personnel are not applying the same level of attention to administrative procedure requirements as to corrective maintenance procedures. Additionally, Maintenance supervisors need to emphasize that the use of administrative procedures is as important as the use of corrective maintenance procedures.

Environmental Qualification Program (July 29 - August 7, 1996; Peter Yandow)

Summary: The purpose of this assessment was to determine the effectiveness and adequacy of the plant Environmental Qualification (EQ) program. The strong sense of personal responsibility by EQ personnel and the thoroughness and quality of the program procedure (PLP-034, "Environmental Qualification of Electrical Equipment Program") were identified as *strengths*. *Findings* were identified in the areas of: maintenance of EQ master list documents, controls for EQ maintenance activities, completeness of EQ data packages, EQ preventative maintenance scheduling, consistency of EQ program documents and databases, site awareness of EQ requirements, control of Limitorque T-drains, and control of vendor reports for new equipment.

Refueling Outage 17

- **Major Equipment Work**

- **Boric Acid Piping Replacement**
- **A & B Condensate Pump Rebuilds**
- **A & C Circulating Water Pump Rebuilds**
- **A & B Heater Drain Pump Rebuilds**
- **High Pressure Turbine Inspection And Repairs**
- **Turbine Governor Valves Rebuild**
- **A RCP Seal Replacement**
- **Sludge Lance A, B, & C S/G**
- **Eddy Current "A" S/G**
- **Multiple Secondary Valve Repairs**

Refueling Outage 17

- **Manpower**

- **432 RNP Staff In Outage Jobs**
- **78 RNP Shared Resources**
- **259 CP&L Shared Resources**
- **6 South Carolina Electric & Gas Shared Resources**
- **179 Becon**
- **109 ABB**
- **54 Westinghouse**
- **199 Misc. Specialty Contractors**

1316 Total (FTE's)

Refueling Outage 17

- **Critical Path**

- **Shut-Down And Cool-Down Reactor**
- **Core Off Load**
- **OST-257-RHR Test**
- **Empty Vessel Maintenance**
- **RCS Flood And Fuel Re-assembly**
- **Testing (OST 103 & 351)**
- **Unit Startup To On Line**

- **Near Critical Path**

- **High Pressure Turbine And Governor Valve Work**