

Meeting Summary

Date: May 31, 1985

Place: Fcrt St. Vrain site, Platteville, Colorado

Prinical

Attendees: NRC: R. D. Martin  
E. H. Johnson  
G. Lainas  
P. Wagner  
J. Taylor

PSC: R. Walker  
O. Lee  
L. Brey  
J. Gahm  
L. Singleton

Summary: The NRC briefed the SALP report orally. Copies of the slides used are attached. The licensee also made a presentation of the performance enhancement program; a copy of the material is attached.

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PDR ADOCK 05000267  
G PDR

UNITED STATES NUCLEAR REGULATORY COMMISSION  
SYSTEMATIC ASSESSMENT OF LICENSEE PERFORMANCE

PUBLIC SERVICE COMPANY OF COLORADO  
FORT ST. VRAIN NUCLEAR GENERATING STATION

OCTOBER 1, 1983 - FEBRUARY 28, 1985

SALP PROGRAM OBJECTIVES

IMPROVE LICENSEE PERFORMANCE

PROVIDE A BASIS FOR ALLOCATION OF  
NRC RESOURCES

IMPROVE NRC REGULATORY PROGRAM

PERFORMANCE ANALYSIS AREAS FOR OPERATING REACTORS

PLANT OPERATIONS

RADIOLOGICAL CONTROLS

MAINTENANCE

SURVEILLANCE

FIRE PROTECTION

EMERGENCY PREPAREDNESS

SECURITY AND SAFEGUARDS

REFUELING

LICENSING ACTIVITIES

TRAINING

QUALITY PROGRAMS AND ADMINISTRATIVE  
CONTROLS AFFECTING QUALITY

DESIGN, DESIGN CHANGES, AND  
MODIFICATIONS

FUNCTIONAL AREA PERFORMANCE CATEGORY

CATEGORY 1

REDUCED NRC ATTENTION MAY BE APPROPRIATE. LICENSEE MANAGEMENT ATTENTION AND INVOLVEMENT ARE AGGRESSIVE AND ORIENTED TOWARD NUCLEAR SAFETY; LICENSEE RESOURCES ARE AMPLE AND EFFECTIVELY USED SO THAT A HIGH LEVEL OF PERFORMANCE WITH RESPECT TO OPERATIONAL SAFETY OR CONSTRUCTION IS BEING ACHIEVED.

## CATEGORY 2

NRC ATTENTION SHOULD BE MAINTAINED AT NORMAL LEVELS. LICENSEE MANAGEMENT ATTENTION AND INVOLVEMENT ARE EVIDENT AND ARE CONCERNED WITH NUCLEAR SAFETY; LICENSEE RESOURCES ARE ADEQUATE AND ARE REASONABLY EFFECTIVE SO THAT SATISFACTORY PERFORMANCE WITH RESPECT TO OPERATIONAL SAFETY OR CONSTRUCTION IS BEING ACHIEVED.

### CATEGORY 3

BOTH NRC AND LICENSEE ATTENTION SHOULD BE INCREASED. LICENSEE MANAGEMENT ATTENTION OR INVOLVEMENT IS ACCEPTABLE AND CONSIDERS NUCLEAR SAFETY, BUT WEAKNESSES ARE EVIDENT; LICENSEE RESOURCES APPEAR TO BE STRAINED OR NOT EFFECTIVELY USED SO THAT MINIMALLY SATISFACTORY PERFORMANCE WITH RESPECT TO OPERATIONAL SAFETY OR CONSTRUCTION IS BEING ACHIEVED.

TREND

IMPROVED: LICENSEE PERFORMANCE HAS GENERALLY IMPROVED OVER THE COURSE OF THE SALP ASSESSMENT PERIOD.

SAME: LICENSEE PERFORMANCE HAS REMAINED ESSENTIALLY CONSTANT OVER THE COURSE OF THE SALP ASSESSMENT PERIOD.

DECLINED: LICENSEE PERFORMANCE HAS GENERALLY DECLINED OVER THE COURSE OF THE SALP ASSESSMENT PERIOD.



## EVALUATION CRITERIA

1. MANAGEMENT INVOLVEMENT AND CONTROL IN ASSURING QUALITY.
2. APPROACH TO RESOLUTION OF TECHNICAL ISSUES FROM A SAFETY STANDPOINT.
3. RESPONSIVENESS TO NRC INITIATIVES.
4. ENFORCEMENT HISTORY.
5. REPORTING AND ANALYSIS OF REPORTABLE EVENTS.
6. STAFFING (INCLUDING MANAGEMENT).
7. TRAINING EFFECTIVENESS AND QUALIFICATION.

STRENGTHS

MANAGEMENT ATTENTION TO UPGRADING FSV

STRONG ALARA CONTROLS

WEAKNESSES

MANAGEMENT CONTROLS IN FUNCTIONAL AREAS OF:

OPERATIONS

MAINTENANCE

LICENSING ACTIVITIES

QUALITY ASSURANCE AND ADMINISTRATIVE CONTROLS  
AFFECTING QUALITY

DESIGN, DESIGN CHANGES, AND MODIFICATIONS

LESS FORMAL MODE OF OPERATION THAN IS COMMON  
AT OTHER NUCLEAR POWER PLANTS

IMPLEMENTATION OF PROGRAM REQUIREMENTS IN  
QUALITY ASSURANCE AND DESIGN CONTROL

PLANT OPERATIONS

CATEGORY 3 (SAME)

INCREASED AND VIGOROUS MANAGEMENT ATTENTION IS REQUIRED

EMPHASIS ON REDUCING PROCEDURAL VIOLATIONS

INCREASE MONITORING OF PLANT OPERATIONS

CONTINUE EFFORTS FOR IMPROVING TECHNICAL  
SPECIFICATIONS AND OPERATING PROCEDURES

RADIOLOGICAL CONTROLS

CATEGORY 1 (IMPROVED)

ASSURE RPM IS NOT OVERLOADED

REVIEW CHARCOAL CARTRIDGE MEASUREMENTS

UPDATE TRANSPORTATION PROCEDURES

ASSURE UNPLANNED/UNMONITORED RELEASES DO NOT OCCUR

MAINTENANCE

CATEGORY 3 (DECLINED)

MANAGEMENT ATTENTION ON WEAK AREAS

STRENGTHEN OVERALL MANAGEMENT CONTROLS

SURVEILLANCE

CATEGORY 2 (SAME)

ENSURE ACCURACY OF SURVEILLANCE PROCEDURES

PURSUE TS UPGRADE PROGRAM

FIRE PROTECTION

CATEGORY 2 (IMPROVED)

EMPHASIZE HOUSEKEEPING PRACTICES

CONTINUE INVOLVEMENT IN APPENDIX R UPGRADES



EMERGENCY PREPAREDNESS

CATEGORY 2 (SAME)

ENSURE MANAGEMENT CHANGES SOLVE WEAKNESSES NOTED  
DURING EARLY PART OF SALP PERIOD

SECURITY & SAFEGUARDS

CATEGORY 2 (DECLINED)

AGGRESSIVE APPROACH IN RESOLVING SECURITY ISSUES

REFUELING

CATEGORY 1 (SAME)

PRIOR PLANNING FOR NEXT REFUELING FOR FUEL EXAMINATIONS  
AND PRIOR AGREEMENT WITH NRC

LICENSING ACTIVITIES

CATEGORY 3 (SAME)

EVALUATE NUCLEAR DEPARTMENT- STAFFING LWR EXPERIENCE  
WOULD BE DESIRABLE

STAY INFORMED OF NRC INITIATIVES FOR OTHER REACTORS  
AND HOW THEY WOULD AFFECT FSV

DESIGNATE AN INDIVIDUAL WITH RESPONSIBILITY  
FOR COMPLETE, TIMELY, AND CORRECT RESPONSES TO NRC

TRAINING

CATEGORY 2 (SAME)

CONTINUE TO PURSUE INPO ACCREDITATION

EMPHASIZE PROCEDURAL COMPLIANCE IN TRAINING PROGRAM

PREPARE TRAINING PROGRAM ON REVISED TS AND  
OPERATING PROCEDURES

DESIGN, DESIGN CHANGES, AND MODIFICATIONS

CATEGORY 3 (DECLINED)

IMPROVE MODIFICATION CONTROLS

IMPROVE INTERDEPARTMENTAL COORDINATION

IMPROVE CN PRODUCTION

IMPROVE UNDERSTANDING OF 10 CFR 50.59

QUALITY PROGRAMS AND ADMINISTRATIVE  
CONTROLS AFFECTING QUALITY

CATEGORY 3 (DECLINED)

PROVIDE INCREASED MANAGEMENT OVERSIGHT OF  
NUCLEAR ACTIVITIES

ENHANCE QA DEPARTMENT INDEPENDENCE AND  
CAPABILITY TO EFFECT TIMELY CORRECTIVE ACTION

TIMELY REVIEW AND IMPLEMENTATION OF CONTRACTOR  
RECOMMENDATIONS

IMPROVE QUALITY OF INTERDEPARTMENTAL COMMUNICATIONS

INCREASE AUDIT/MONITORING TO IDENTIFY AND CORRECT  
WEAK AREAS



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Public Service  
Company of Colorado  
P.O. Box 840  
Denver, CO 80201-0840

JUL - 3 1985

OSCAR R. LEE  
VICE PRESIDENT

June 25, 1985  
Fort St. Vrain  
Unit No. 1  
P-85216

Regional Administrator  
Region IV  
U.S. Nuclear Regulatory Commission  
611 Ryan Plaza Drive, Suite 1000  
Arlington, TX 76011

Attention: Mr. Eric H. Johnson

Docket No. 50-267

SUBJECT: Response to Systematic Assessment  
of Licensee Performance

REFERENCE: NRC Letter from Mr. R. D. Martin  
to Mr. O. R. Lee dated  
May 7, 1985 (G-85171)

Dear Mr. Johnson:

This letter formally transmits our response to the Systematic Assessment of Licensee Performance (SALP) report for the period October 1, 1984 through February 28, 1985. At our meeting at Fort St. Vrain on May 29, 1985, we provided each NRC attendee a binder which summarizes our response and describes the Performance Enhancement Program (PEP) which was initiated in early April, 1985. It is our view that the programs defined in the PEP and other recent organizational changes address those areas requiring improvement per the SALP evaluation.

Based upon the SALP report and several other recent audits and evaluations, we have accepted that changes in our operations are necessary to strengthen our performance. We have already taken corrective action in most areas and have made several organizational changes. In addition, seventy-nine new personnel have been approved for the nuclear organization.

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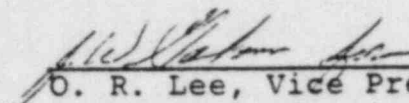


Enclosed is the Nuclear Performance Enhancement Program that was provided at the SALP meeting. It includes an outline of our SALP meeting discussions, organizational changes, the PEP Schedule, key materials from our PEP Project Manager's Binder, and activities in progress division-by-division.

At the SALP meeting, PSC agreed to provide the NRC with quarterly updates, as desired, on our Performance Enhancement Program activities. The first status report covering the period of April and May 1985 is being provided by separate correspondence.

We trust that this information more than adequately responds to the SALP findings.

Sincerely,

  
O. R. Lee, Vice President  
Electric Production

smc

PUBLIC SERVICE COMPANY OF COLORADO  
SYSTEMATIC ASSESSMENT OF LICENSEE PERFORMANCE

MAY 29, 1985

AGENDA

- |  |                               |
|--|-------------------------------|
| A. DISCUSSION OF FINDINGS  | NUCLEAR REGULATORY COMMISSION |
| B. OVERVIEW OF PSC POSITION                                      | R. F. WALKER, PRESIDENT       |
| C. ORGANIZATIONAL CHANGES AND<br>PERFORMANCE ENHANCEMENT PROGRAM | O. R. LEE, VICE PRESIDENT     |

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- II. Nuclear Organization Charts
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- III. Performance Enhancement Program Schedule
  - \* Bar Chart Schedule
- IV. PEP Manager's Binders - Key Materials
  - \* Mission Statement and Introduction
  - \* Performance Enhancement Program Manual
  - \* Performance Enhancement Program Organization and Key Individuals
  - \* Project Manager's Responsibility
  - \* Project Status Report Format
  - \* Specific Project Manager Instructions and Guidelines
- V. Divisional Activities
  - A. Quality Assurance Division
  - B. Nuclear Production Division
  - C. Nuclear Licensing and Fuels Division
  - D. Nuclear Engineering Division

PUBLIC SERVICE COMPANY OF COLORADO  
FORT ST. VRAIN

SYSTEMATIC ASSESSMENT OF LICENSEE  
PERFORMANCE

DISCUSSION OUTLINE

MAY 29, 1985

### Overview of PSC Position

- \* SALP represents a summary assessment over a seventeen month period, ending February 28, 1985.
- \* At the end of this period, we have initiated many changes that obviously would not have impacted our performance assessment evaluation.
- \* These changes are responsive to SALP findings, the NRC Audit Report, and the Management Assessment Report.
- \* We have accepted that changes in our operation are necessary.
- \* The cornerstone of our change is The Performance Enhancement Program.
- \* We have made improvements in our organization.

## Organizational Changes

- \* You may refer to Section II, Nuclear Organization Charts for details of our organization and the additional personnel being added.
- \* The key point is that the changes have been identified and are being implemented (or have been in the last six months).
- \* Mr. Oscar Lee now reports to R. F. Walker, President and Chief Executive Officer.
- \* A Nuclear Licensing and Fuels Division has been established. This group is the focal point for all NRC interface matters and licensing issues. Regular bi-weekly meetings with the NRC staff are being held.
- \* Management of the divisions has been strengthened through a reorganization that capitalizes on individual's strengths.
- \* A General Manager for the Fossil Production Divisions was created to consolidate this function under one person.
- \* Many other divisional organization changes have or are being made. These are described in more detail in Section V, Divisional Activities.

### Additional Personnel

- \* A deliberate and conservative approach was taken in approving this substantial increase.
- \* They will enhance the capabilities of all divisions.
- \* A major commitment has been made to training in general and achieving full INPO accreditation for the Nuclear Production staff.
- \* Key Licensing personnel are being obtained that have light water reactor experience to assist in relating regulations to our HTGR.
- \* Plant Engineering staff is being added to increase attention to preventive maintenance and engineering analysis of plant equipment.
- \* Design Engineering staff is being increased to provide more effective control and coordination of change and modifications as well as provide a more effective response time for plant support.
- \* A Master Planning and Scheduling function will assist Management in prioritizing and directing the nuclear activities.
- \* Quality Assurance staff is increased to provide greater coverage to audits, training and inspections.
- \* Greater detail of these additions are in Section II, Nuclear Organization Charts.
- \* Naturally, it will take time for this organization to be brought on board and become an integral, productive part of our organization.

## Performance Enhancement Program

- \* A program of this magnitude and scope is a new approach for Public Service Company.
- \* Our approach to managing this effort is also new.
- \* A special consulting organization has been established to specifically monitor and guide our progress and identify problems.
- \* Individual Project Managers have been assigned to lead each project.
- \* The Project Managers can task persons in other divisions.
- \* A Matrix organization has been established with these Project Managers.
- \* Each Project Manager has been issued a binder to use to organize his project and lay out the ground rules for this important program. Key materials from this binder are included in Section IV, PEP Project Manager's Binder.
- \* Progress is reported against each project at least monthly.
- \* Quarterly status reports will be provided to the NRC, if desired.
- \* There are six major projects with 34 sub-projects.
- \* All six of these projects are described in more detail in the text in Section IV, PEP Project Managers Binder - Key Materials.
- \* All 34 sub-projects are shown in Section III, PEP Schedule. It shows the Project Manager and the planned timetable. The entire program is scheduled to be finished in late 1986.
- \* It is a dynamic program to which new projects will be added.
- \* Project I deals with organizational issues such as establishing the Performance Enhancement Program, defining organizational responsibilities, missions, charters, and the location of our staff.



Performance Enhancement Program (Continued)

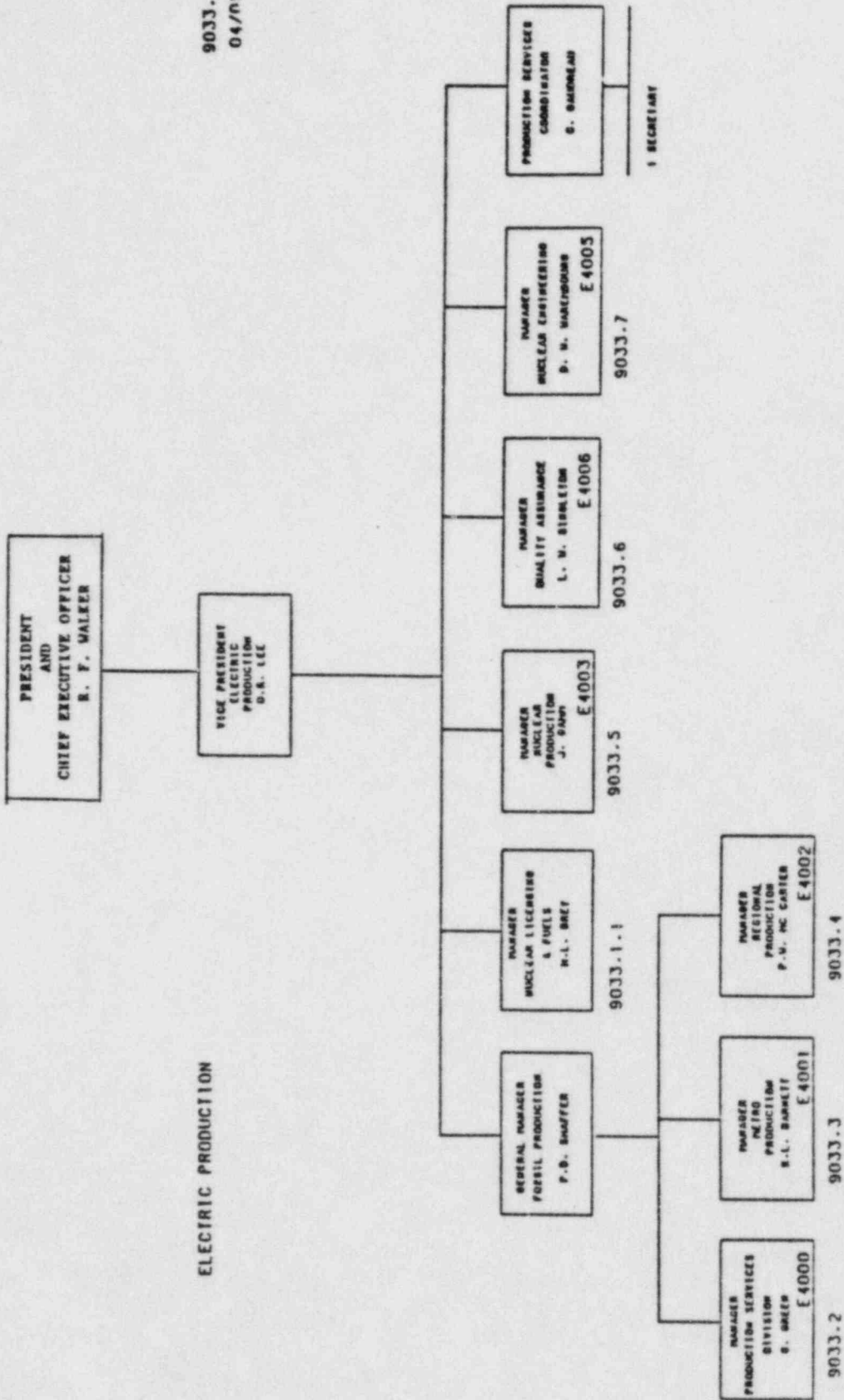
- \* Project II establishes a Master Planning and Scheduling organization to assist in prioritizing our workload. Divisional planning and scheduling methods will identify realistic resource requirements for major projects.
- \* Project III will establish a preventive maintenance planning and scheduling organization to prioritize the work and issue to maintenance personnel do-able job packets. In addition, the engineering analysis and feedback procedures will be established.
- \* Project IV deals with a substantial upgrade in procedures and policies throughout our organization.
- \* Project V will improve the training in all divisions. A key objective is INPO accreditation.
- \* Project VI will strengthen our conduct of operations at the plant.
- \* We're excited about the potential for major improvements.

## II. Organization Charts

This section contains the current organization charts for the Electric Production organization and a more detailed list of the additional personnel being added by division.

ELECTRIC PRODUCTION

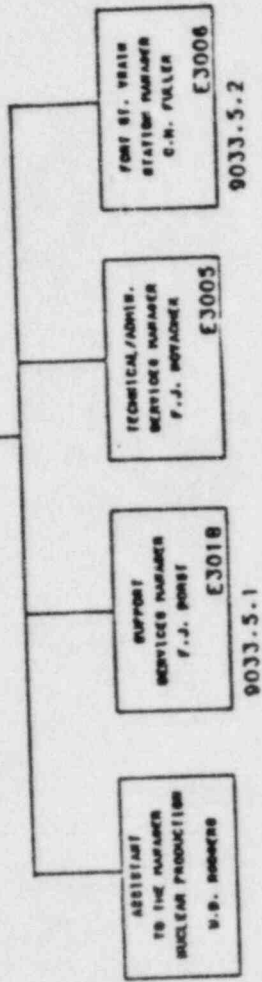
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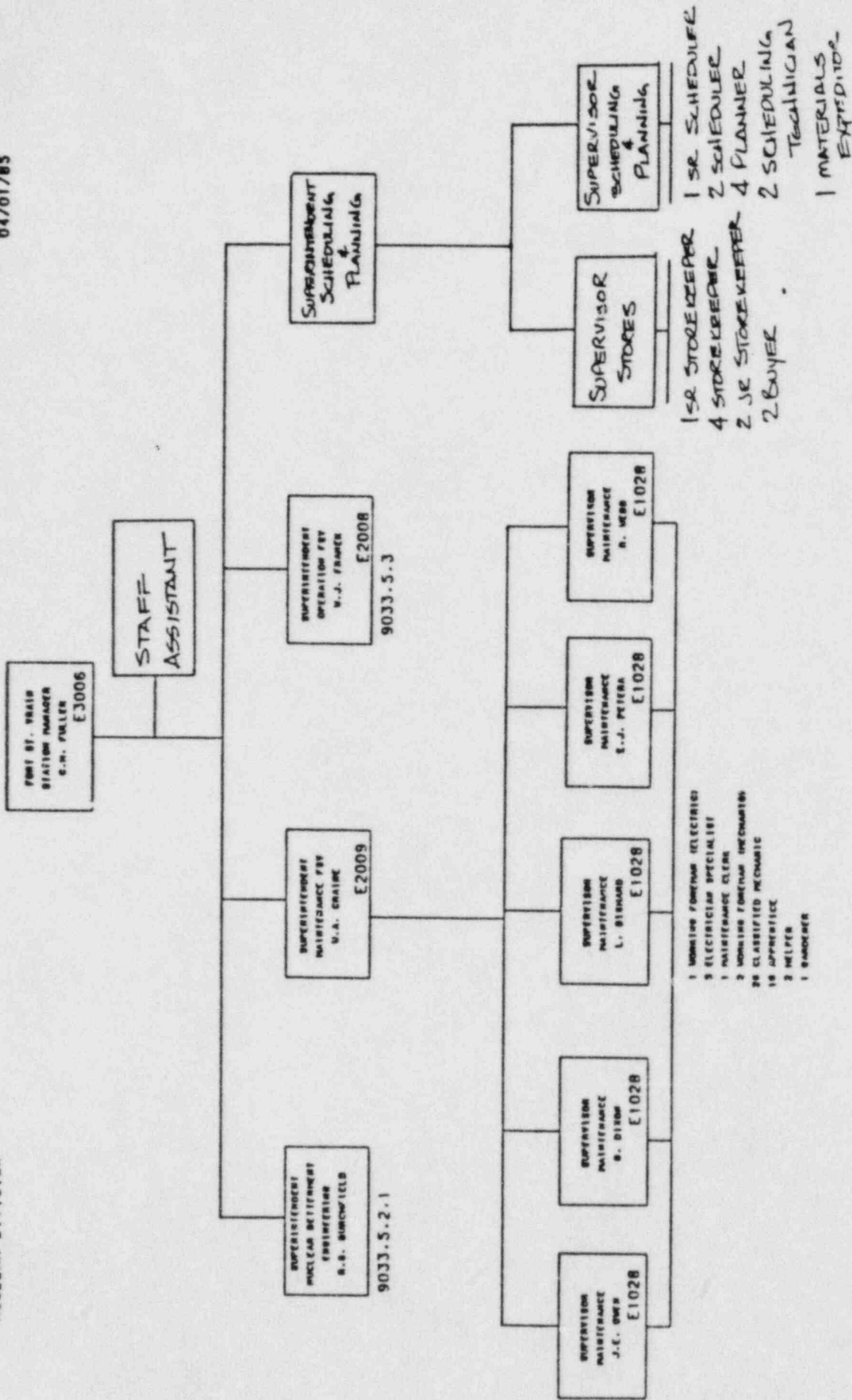


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MANAGER  
NUCLEAR PRODUCTION  
J. S. BARN  
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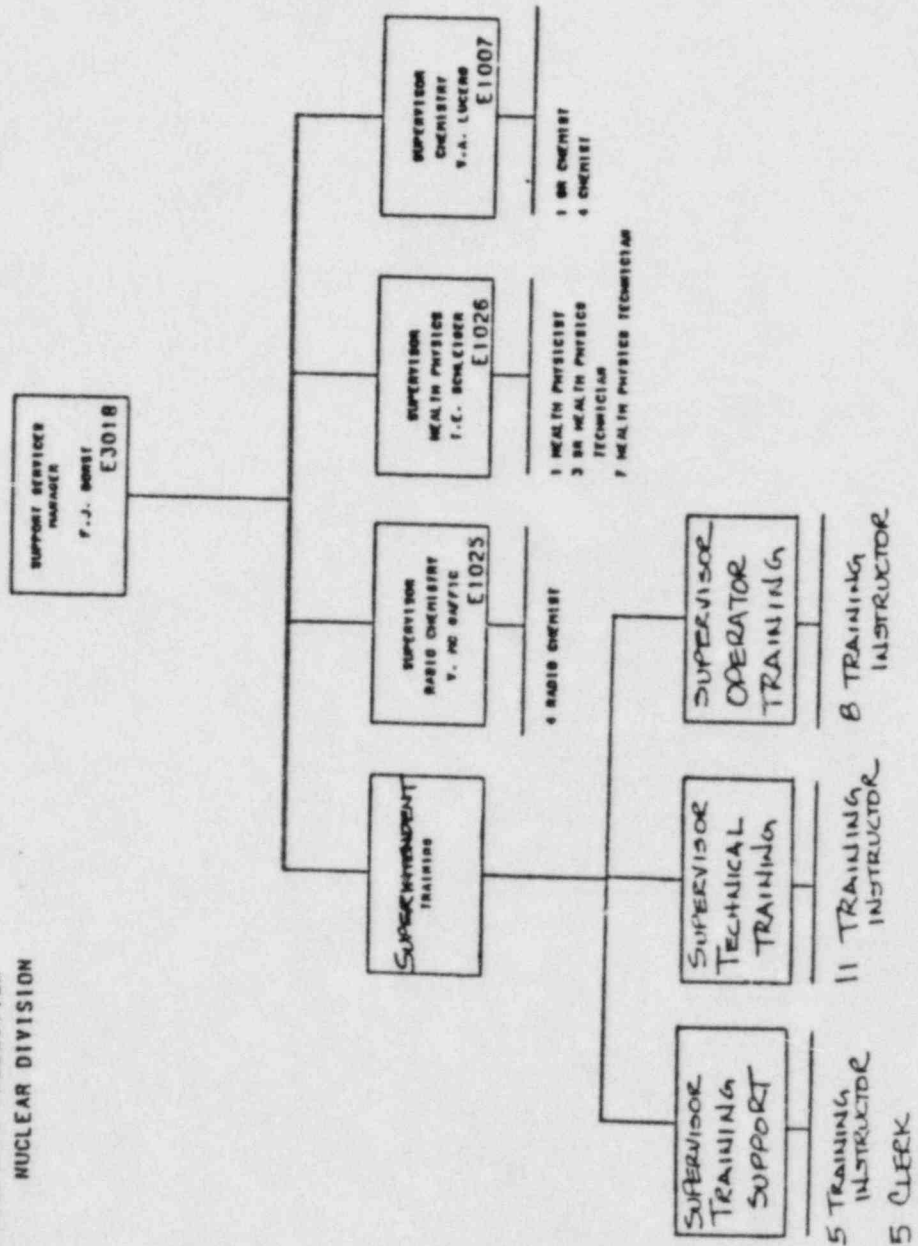
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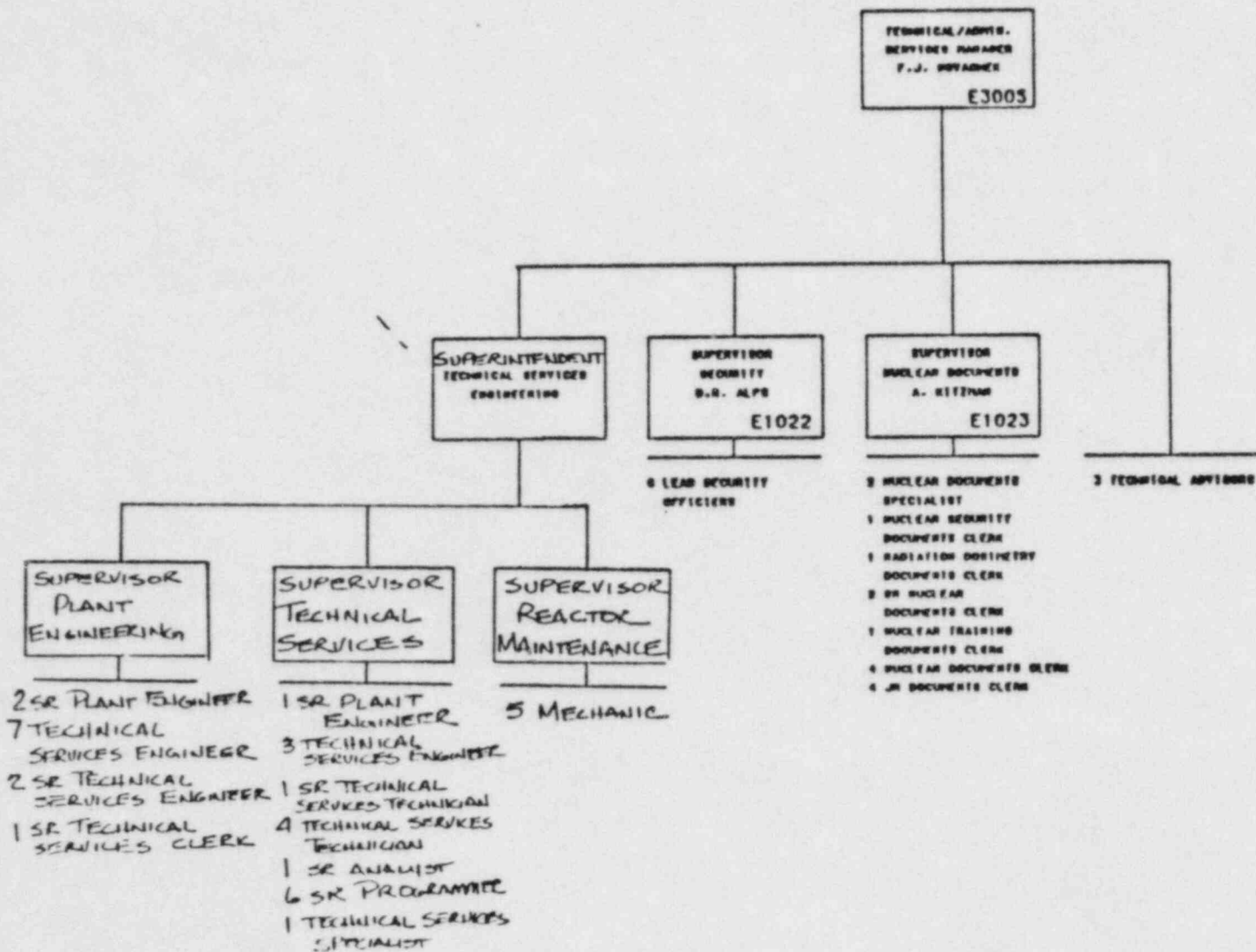
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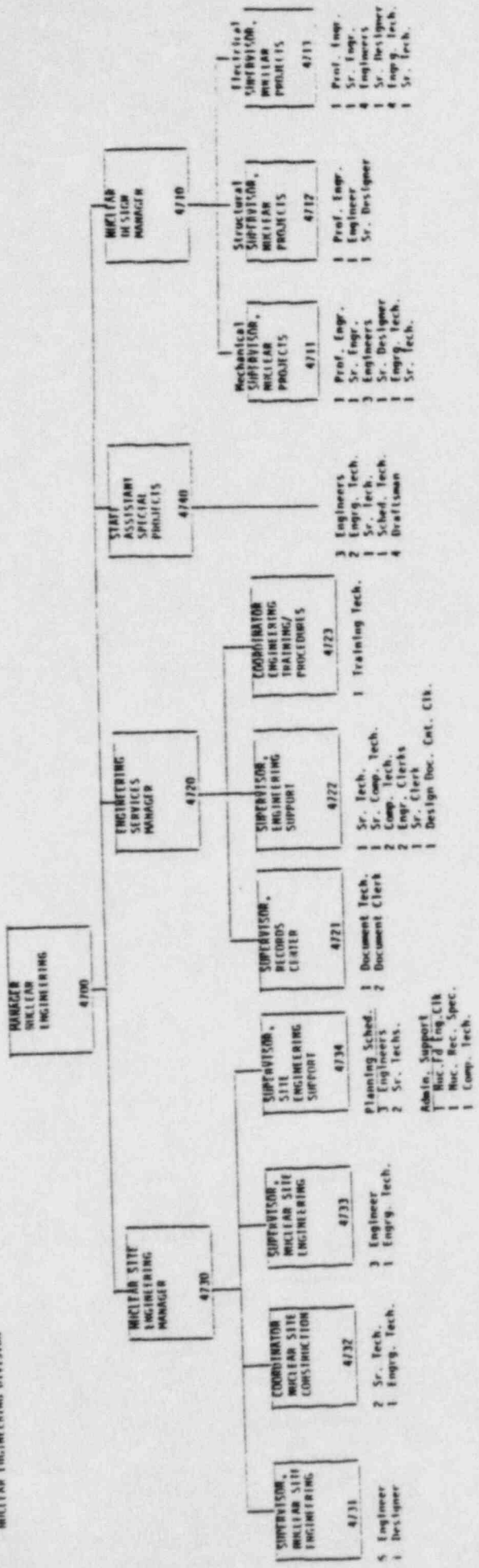


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NUCLEAR DIVISION

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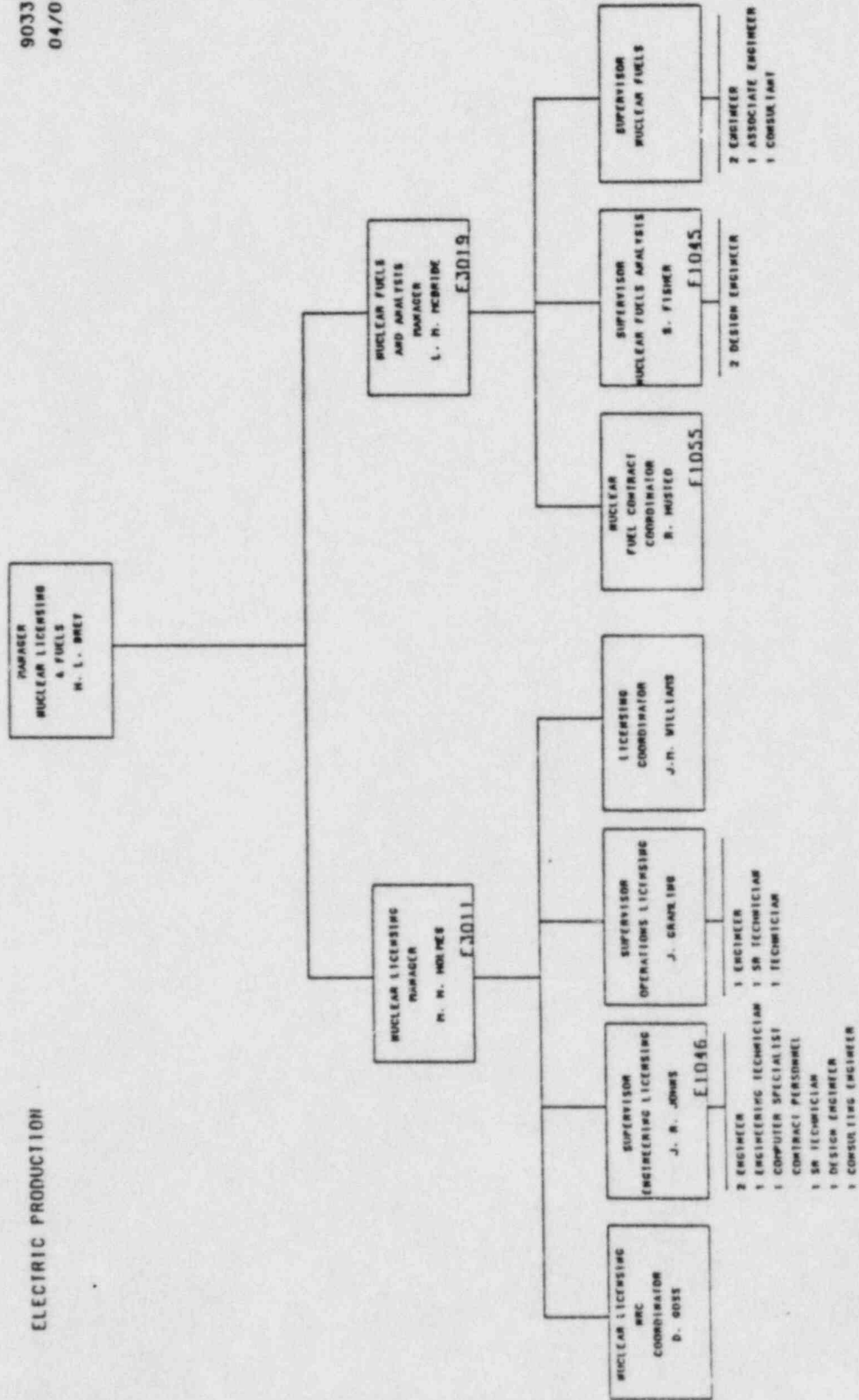


ORGANIZATION CHART  
NUCLEAR ENGINEERING DIVISION

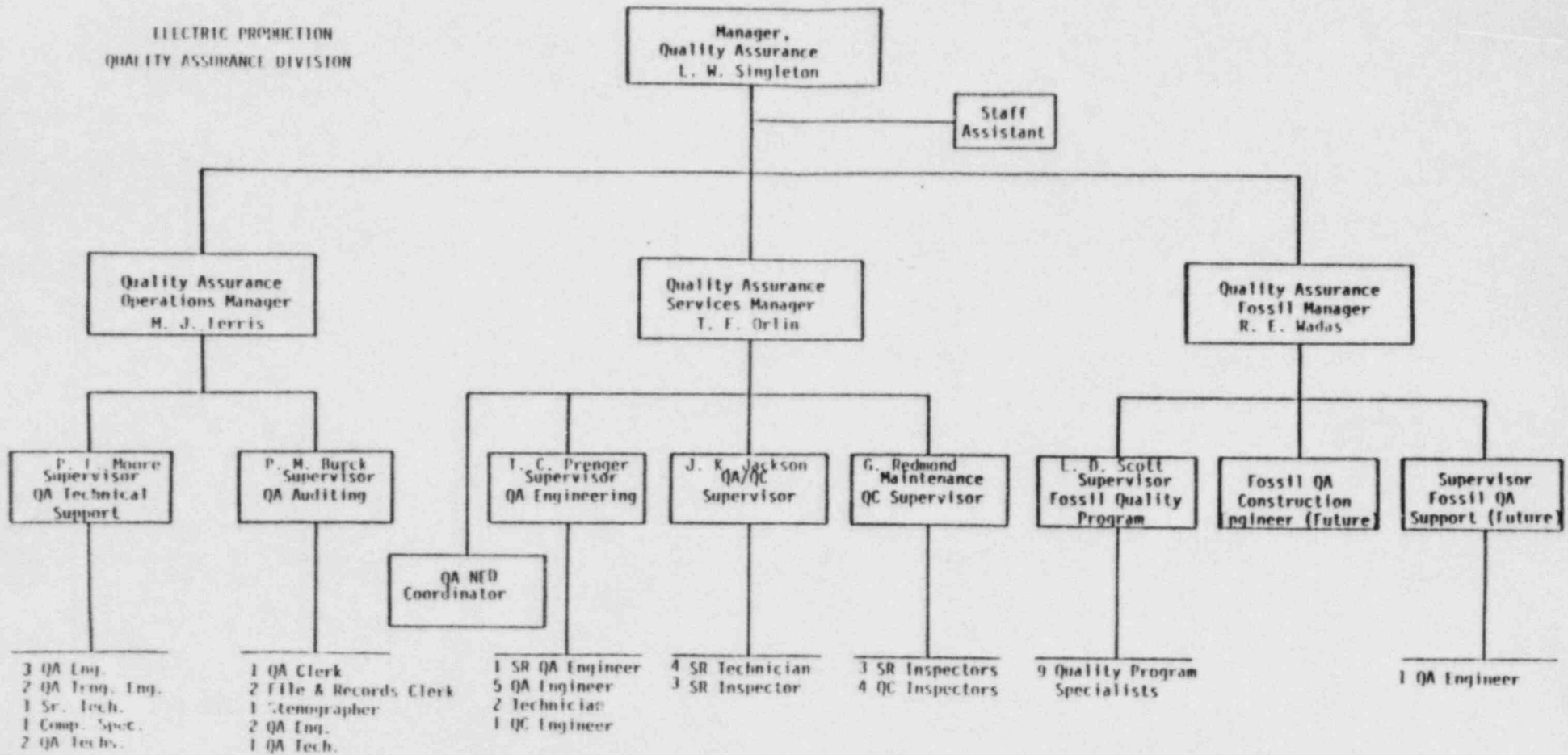




ELECTRIC PRODUCTION



ELECTRIC PRODUCTION  
QUALITY ASSURANCE DIVISION



## Summary of Additional Personnel

### Nuclear Production Division

- 12 - Training personnel to meet INPO Accreditation requirements.
- 9 - Engineers and Technical Services personnel to help maintain and develop an effective preventive maintenance and failure trending program.
- 19 - Operations personnel to meet goals in the areas of Scheduling, Planning and Stores.
- 5 - Programmers and Clerical personnel to support existing staff in these areas.

### Nuclear Engineering Division

- 4 - Engineering Services Group Personnel to reduce time engineers spend on administrative/clerical activities.
- 7 - Engineers and Technicians to provide an overall planning and scheduling function and coordinate NED Diamond Hill and NED Site work with plant operational needs and the overall Priority System.
- 6 - Supervisor Engineering Personnel to help in backlog of the Nuclear Design groups and the Construction Group.
- 2 - Engineering supervisors to decrease backlog and coordinate site projects.

### Nuclear Licensing and Fuels Division

- 4 - Clerical personnel to support licensing activities.
- 3 - Licensing Engineering Personnel to provide direction and guidance in the resolution of complex licensing issues that arise and also to prepare the Technical Specification changes and preparation and independent review of licensing correspondence.
- 2 - Nuclear Licensing Specialist personnel for procedure review and preparation of written safety evaluations and environmental evaluations.
- 1 - Nuclear Licensing NRC Coordinator to support the enhanced NRC Commitment Control activities.

### Quality Assurance Division

- 3 - Quality Assurance Operations Department personnel to develop, implement, and maintain a Quality Assurance Division Training program commensurate with commitments contained in FSAR Appendix B.
- 2 - Quality Assurance Engineering personnel to administer and implement the Vendor Evaluation Program, Quality Control Training, and accreditation, Inspection Planning and Scheduling, and Quality Engineering functions.

### Outside Consulting Assistance

- \* Industrial Engineers for plant maintenance and scheduling activities.
- \* Management Consultants for Master Planning and Scheduling.
- \* Nuclear Engineers for developing Change Notices and Controlled Work Procedures.
- \* Management Consultants for evaluation of work force location studies.
- \* Scheduling Consultants for divisional planning and scheduling activities.
- \* Training Consultants for development of divisional and departmental training functions.
- \* Maintenance Engineers for development of Preventive Maintenance programs.

### III Performance Enhancement Program Schedule

The following schedule summarizes the Performance Enhancement Program sub-projects. It reflects the status as of April 30, 1985. A revised schedule will be prepared at the end of May.

PUBLIC SERVICE COMPANY OF COLORADO  
PERFORMANCE ENHANCEMENT PROGRAM  
SUMMARY SCHEDULE

PRO-JECT	NUS-REF.	DESCRIPTION	RESPONSIBLE	EST. MAN-DAYS	SCHEDULED		PROJECT TIMETABLE															
							START	COMPLETE	1985												1986	
									A	M	J	J	A	S	O	N	D	Q1	Q2	Q3	Q4	

**I. ORGANIZATIONAL CONCERNS**

1.1	E.2	Formalize Action Plan, Reorganization and Performance Enhancement Program	D. Picard		Apr 1	Jun 30	FFFFFFFFFFXXXX
1.2	A.1	Document Charters, Missions and Function Statements	D. Picard		Apr 1	May 31	FFFXXXXX
		Part 1, Develop Charters	D. Picard		Jun 1	Jun 28	XXXX
1.3	A.9	Document Policy on Communication and Staff Meetings	H. Zachary		Apr 1	May 17	FFFFXX
1.4	E.1	Evaluate Staffing Levels	C. Gaudreau		Apr 1	Apr 26	FFFF
1.5	E.6	Complete Nuclear Production Organizational Changes	J. Gahn		May 1	Jul 25	XXXXXXXXXX
1.6	E.3	Evaluate Engineering and Licensing and Fuels at Fort St. Vrain	D. Warembourg		Apr 15	Aug 30	FFFXXXXXXXX-----

Legend	
XXX	- Scheduled Timetable
XXXO	- Scheduled Timetable with undefined completion date established at a later time.
FFXX	- Finished work within this schedule.
XXXX	- Extended schedule beyond original timetable.
XXX---	- Schedule has float time to meet original schedule. Either project starts or finishes later than earlier planned.

**II. MASTER PLANNING AND SCHEDULING**

11.1	A.2	Establish Nuclear Master Planning and Scheduling Function	D. Picard		Apr 1	Aug 30	FFFXXXXXXXXXXXXXXXXXX
11.2	A.4	Develop Annual and Long-Range Schedules	C. Fuller		Apr 1	Jun 14	FFXXXXXXXX
		Part 1, Initial Schedule			Dependent-11.3		0XX(EST)XXO
		Part 2, Complete Schedule					
11.3	A.2	Implement Planning and Scheduling Methods & Procedures	D. Picard		Apr 15	Jun 14	FXXXXXXXXXEE
		Part 1, Initial Definition			Jul 1	Determined	XXXXXXXXXX(EST)XXXXXXXXO
		Part 2, Implementation			In Part 1		

**III. ESTABLISH PREVENTIVE MAINTENANCE PLANNING AND SCHEDULING**

111.1	B.2	Establish Maintenance Planning Group	D. Miller		Apr 1	Sep 27	FFFFXXXXXXXXXXXXXXXXXX
111.2	B.3	Define Maintenance Planning and Scheduling Function	D. Miller		Apr 1	Jun 30	FFFFXXXXXXXX
		Part 1, Initial Definition			Jul 1	Determined	XXXXXXXXXX(EST)XXXXXXXXO
		Part 2, Implementation			In Part 1		









#### IV Performance Enhancement Program Project Manager's Binder

The following materials are excerpts from this binder. The sections describe the program's organization and structure and the responsibilities of each project manager in the program. This binder was issued to each project manager on April 26, 1985 during key organizational meetings held at Diamond Hill and Fort St. Vrain. These materials are provided for information purposes.

PERFORMANCE ENHANCEMENT PROGRAM  
FOR  
PUBLIC SERVICE COMPANY OF COLORADO  
FORT ST. VRAIN - NUCLEAR GENERATING STATION

PERFORMANCE ENHANCEMENT PROGRAM PROJECT MANAGER BINDER

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PERFORMANCE ENHANCEMENT PROGRAM

PROJECT MANAGER BINDER

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- \* III. Performance Enhancement Program Organization and Key Individuals
- \* IV. Project Manager's Responsibility
- \* V. Project Status Report Format
- \* VI. Specific Project Manager Instructions and Guidelines

B. MONTHLY PEP STATUS REPORTS

C. PROJECT SECTIONS

- I. Project Description and Definition
- II. Project Status Reports
- III. Project Documentation
- IV. Project Correspondence
- V. Project Notes and Miscellaneous Material

\* Included in this Section

## A. PERFORMANCE ENHANCEMENT PROGRAM

### I. INTRODUCTION

In PSC's March 29, 1985, response to the NRC, we amplified an Action Plan that pertained to addressing several management and operational concerns at Fort St. Vrain.

Attached to that response were additional details describing six overall projects (and associated sub-projects) that have been defined as the initial start-up of the Performance Enhancement Program (PEP). Each sub-project (from hereon is referred to as a project) is identified with the person responsible and the targeted completion dates. A summary bar chart schedule was prepared to summarize the projects.

Performance to this schedule will be monitored as part of the Master Planning and Scheduling function that is being established.

The Performance Enhancement Program has been established to identify, monitor, and coordinate several projects that are specifically designed to increase the overall conduct of operations at Fort St. Vrain.

The Mission of this program is as follows:

"To assign and complete activities that will improve the overall quality, management and operation of the Public Service Nuclear Organization in a controlled, timely manner. Progress will be monitored by the PEP Manager/Master Planning and Scheduling function. The function will provide Senior Management the ability to make proper decisions for allocation of resources and the prioritization of commitments at the appropriate time and in the proper manner."

The Performance Enhancement Program will start with six overall initial projects which encompass PSC concerns, NRC concerns, the recommendations from the Management Assessment Report, and corrective actions that were already underway.

The six initial projects are as follows:

PROJECT I - ORGANIZATIONAL CONCERNS

The purpose of this project is to address the concerns raised in the Management Assessment Report and Section 4 of the NRC's letter of October 16, 1984 pertaining to the management of the PSC Nuclear Organization.

The actions taken, or in progress, to resolve organizational concerns include restructuring the Electric Production organization to enhance the span of control of the Vice President, Electric Production; establishment of a Performance Enhancement Program for the Nuclear Organizations; development of organizational charters to include mission and function statements concurrent with updating of related procedures, policies and guidelines; development of a policy to formalize the transfer of information and communication throughout the nuclear organization; and identification and augmentation of additional resource and manpower requirements for the nuclear organizations.

Additionally, an analysis will be undertaken to determine the feasibility of relocating the Nuclear Engineering Division and the Licensing and Fuel Division to the Fort St. Vrain site.

PROJECT II - MASTER PLANNING AND SCHEDULING

This project will establish a Master Planning and Scheduling function within the Nuclear organization. The function's purpose will be to provide senior management attention to major project activities and provide a mechanism to prioritize planned projects, allocate resources, and monitor status and schedule of each project. The function will coordinate the activities of the four nuclear divisions to insure adequate resources are assigned and available to scheduled projects in addition to normal workloads of non-project tasks. An overall schedule of projects and events will be defined covering the short and long-term (two to three years).

PROJECT III - ESTABLISH PREVENTIVE MAINTENANCE  
PLANNING AND SCHEDULING

This project will take the existing preventive maintenance program and incorporate a planning and scheduling function. The function will adapt current procedures and computer systems to specifically define maintenance activities, in relation to estimated manpower requirements by skill, required equipment, tools, and materials. Maintenance tasks will be scheduled based upon engineered frequencies and upon available resources. Priorities will be set and evaluated by plant management. Scheduling of maintenance will insure that a significant amount of time is still made available for emergency or unplanned maintenance. Scheduling will also consider the needs of planned outage or construction activities. This program will interface with the Master Planning and Scheduling function, as appropriate for major preventive maintenance programs.

PROJECT IV - UPGRADE NUCLEAR POLICIES AND PROCEDURES

This project involves six sub-projects, and addresses the development of or revisions to procedures affecting the Nuclear organization.

This includes design change/modification procedures and attendant safety evaluations as well as prioritizing implementation tasks; implementation of a commitment control program and attendant procedures; documentation of policies and procedures used in determining commitments; a review of essential regulatory documents to define items PSC must address; an upgrade program for operating, maintenance, and modification procedures; and the review and revision of exclusion list documents involved in the procurement process.

PROJECT V - IMPROVE MANAGEMENT AND NUCLEAR DIVISION  
PERSONNEL TRAINING

Public Service Company of Colorado recognizes the need for highly trained and well qualified management and technical personnel in order to safely and efficiently operate the Fort St. Vrain Nuclear Generating Station. In order to provide this resource, PSC is implementing new training programs and improving existing programs. In concert with our Corporate Training and Development Department, PSC is upgrading the management skills

program to provide an individualized program for each participant by assessing strengths and weaknesses and applying tailor-made improvement programs. PSC is assessing the current level of involvement of the Nuclear Organization staff in various industry groups, with the goals to improve their understanding of common industry problems and solutions and increase their awareness of events external to Public Service Company of Colorado.

Training in each of the four Divisions supporting Fort St. Vrain - Nuclear Production, Quality Assurance, Nuclear Engineering, and Nuclear Licensing and Fuels - will be strengthened greatly. Public Service Company of Colorado has committed to achieve INPO accreditation of the training programs, primarily in the Nuclear Production Division. PSC is firmly committed to a comprehensive training program for all personnel associated with Fort St. Vrain. Significant progress has been made toward INPO accreditation. Consistency in the training programs within the Nuclear Production Division is being accomplished by consolidating the program under the Support Service Manager at Fort St. Vrain.

#### PROJECT VI - PLANT CONDUCT OF OPERATIONS

This project will address specific improvements within the Nuclear Production Division to improve its conduct of operations. These activities were not identified by the Management Assessment Report, but are based upon NRC concerns and concerns of PSC operations management. The purpose of these activities is to correct the root causes of various NRC observations, most importantly in the area of failure to follow defined procedures. Also, an evaluation of the adequacy of existing facilities will be completed and a plant signage program implemented.

During the implementation of the Performance Enhancement Program, these six major projects will be expanded, with additional projects added to insure that Fort St. Vrain achieves a consistent standard of excellence that will be of benefit to our employees, customers, and shareholders.

You have been selected to participate in this program as a Project Manager. Your selection was based on your management skills of coordinating all aspects of a particular project. You were not selected to accomplish each project single handedly. You have been given the



responsibility and authority to task others to provide input to you in order to successfully complete your project. The success or failure of your project, the Performance Enhancement Program, and even the future of Fort St. Vrain lies with the ability of each Project Manager to communicate and manage his project in an effective and efficient manner.

## II. PERFORMANCE ENHANCEMENT PROGRAM MANUAL

The management of the Nuclear Organization, including all Division Managers, the Master Planning and Scheduling Function, and Corporate Staff are at your service to assist you in whatever areas you desire. This manual is but a start in that direction. Please use it, correct it, keep it up-to-date, and question it where appropriate.

This manual is divided into several sections. The first section pertains to the details of the PEP and your role as a Project Manager. The second section is for you to keep a current status of the program's progress as a whole and how your particular project(s) fits into the program. The third section relates directly to your particular project(s). Each project section is further divided into five subsections. They are as follows:

### 1. Project Description and Definition:

This section contains all the information you, or anyone, needs to know about the project. What it is, goals and objectives, schedules, project team organization, specific task identifications, resource allocations, key contact individuals, and any other project specific information you deem appropriate.

### 2. Project Status Reports:

On at least a monthly basis, you will provide status reports on the progress of your project. Copies of each report should be kept here for record keeping.

### 3. Project Documentation:

All drafts and/or final documents prepared for submission for the project should have a copy placed in this section. Where the documents may be voluminous, a control schedule may be used to monitor and control submissions.

### 4. Project Correspondence:

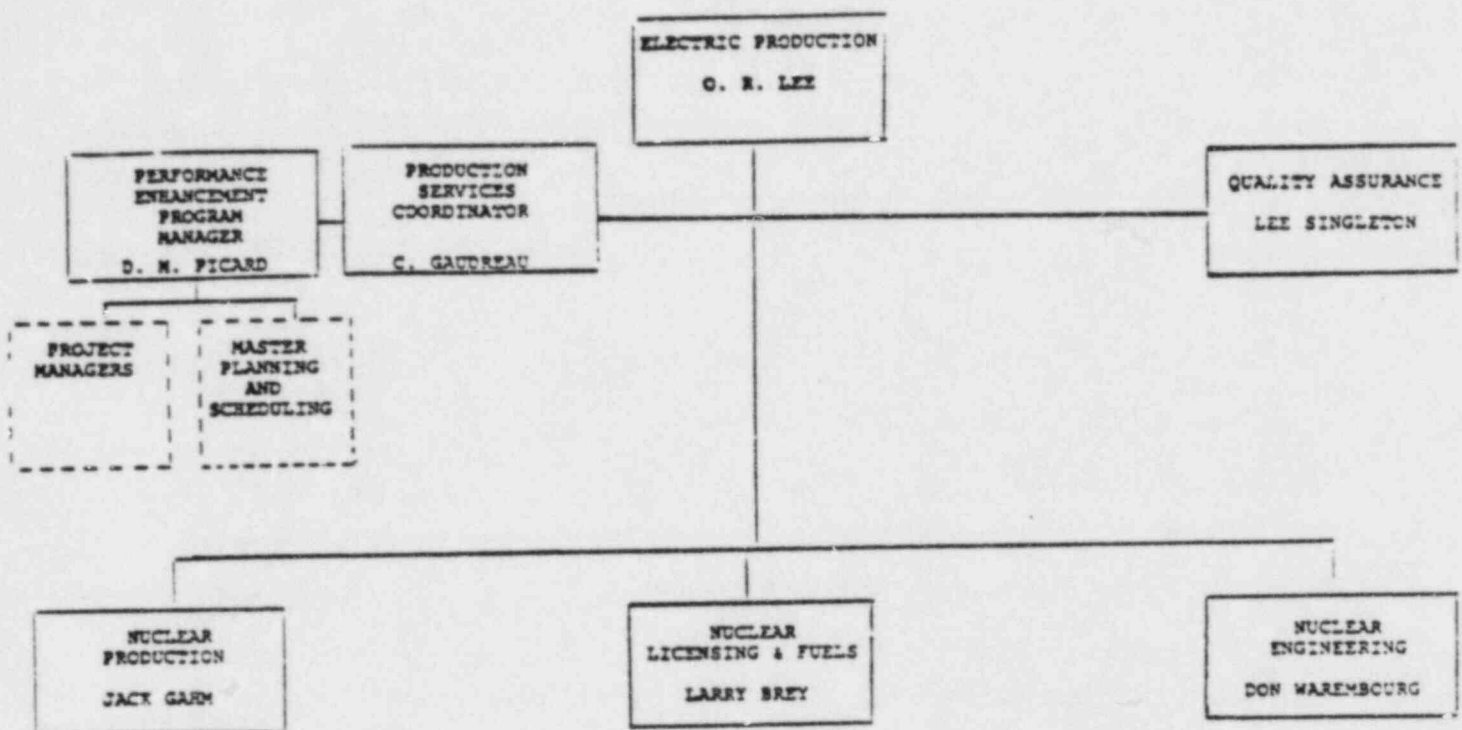
All letters, memos, and notes to file should be chronologically filed in this section. This would also include telephone conversation record sheets.

5. Notes and Miscellaneous Materials:

Photographs, sketches, random thoughts, or anything else pertaining to the project would be found here.

### III. PEP ORGANIZATION AND KEY INDIVIDUALS

As a Project Manager, you will be working in a functional capacity directly for Oscar Lee, who is responsible for the PEP. This is a matrix organization and does not effect your normal managerial/supervisory relationship. Mr. Lee will be assisted in his PEP management role by Doug Picard, PEP Manager and Carrie Gaudreau, Production Services Coordinator. These functions were specifically established to assist you in the management of your project. Your responsibilities and authority are described further in the following section (A.IV.).



PERFORMANCE ENHANCEMENT PROGRAM

KEY INDIVIDUALS

O. R. Lee

LOCATION

Diamond Hill

Telephone

571-7105

DIVISION MANAGERS

Larry Brey  
Don Warembourg  
Jack Gahm  
Lee Singleton

Diamond Hill  
Diamond Hill  
Fort St. Vrain  
Fort St. Vrain

571-8404  
571-7214  
785-1200  
785-1350

CONSULTANTS/SUPPORT

Carrie Gaudreau  
Jan Stufflebeam  
Doug Picard  
Mike Zachary  
Dave Miller  
Don Kelly  
John Wogge  
Dave Goss

Diamond Hill  
Diamond Hill  
VZM  
VZM  
VZM  
VZM  
Stoller  
Diamond Hill

571-7107  
571-7108  
571-7107/08  
571-7107/08  
785-1364  
785-1364  
571-7795

PROJECT MANAGERS

Carrie Gaudreau  
Jack Gahm  
Don Warembourg  
Chuck Fuller  
Frank Novachek  
Jack Reesy  
Mike Holmes  
Lee Singleton  
Larry Brey  
Ted Borst  
Doug Picard  
Mike Zachary  
Martin McNulty

Diamond Hill  
Fort St. Vrain  
Diamond Hill  
Fort St. Vrain  
Fort St. Vrain  
Diamond Hill  
Diamond Hill  
Fort St. Vrain  
Diamond Hill  
Fort St. Vrain  
Diamond Hill  
Diamond Hill  
Headquarters

571-7107  
785-1200  
571-7214  
785-1202  
785-1201  
571-8406  
571-8409  
785-1350  
571-8404  
785-1203  
571-7107/08  
571-7107/08  
571-3265

## PERFORMANCE ENHANCEMENT PROGRAM

### PROJECT MANAGER RESPONSIBILITIES

Essentially, a Project Manager is responsible for completing his/her project on schedule, within the proper scope, and in a quality manner. The PEP Manager/Master Planning and Scheduling function will assist you in the planning, scheduling and monitoring of yours and other PEP projects. Each Project Manager must follow some proven project management techniques. Key ones applicable to this program are described below.

#### 1. Development of Project Work Plans and Schedules

Prior to any work on the project, a work plan should be prepared. The plan should define the desired deliverables (the end product such as procedures, policies, documents, etc), the detailed step-by-step work tasks (or activities), manpower estimates (man-days of "doing" time), persons and/or skills required for each task, and the sequence in which the tasks (prerequisites and interdependancies) will be completed. Based upon the resources available, the overall project schedule can be prepared. Key milestones and their deliverables are identified and then tracked by both the Project Manager and the PEP Manager/Master Planning and Scheduling function. It is the responsibility of the Project Manager to communicate the status of his project.

#### 2. Control of Deliverables

The Project Manager should carefully identify and monitor the preparation of deliverables or end products. Depending upon the scope of work, control schedules should be prepared. For example, for Project III.3 - Develop Preventive Maintenance Engineering Program, a detail schedule of the procedures being developed (or revised) should be prepared. It would show the procedure, the estimated manpower, person responsible for the procedure and the status (e.g., preliminary draft, technical review completed). The control schedule would be constantly updated by the Project Manager. It is the responsibility of the Project Manager to insure the deliverable is in the highest state of quality and is

accurate. This includes scheduling for independent reviews, graphics, printing, etc.

3. Obtaining Resources for Project Tasks

The Project Manager is responsible for getting the proper manpower, equipment, and materials to complete all project tasks. In some cases, these resources will be from other divisions or departments and the Project Manager will have to work through the proper division or department head in order to obtain the desired resources. Should a problem surface at this point, the PEP Manager/Master Planning and Scheduling function will be involved to work out priorities and line management will obtain additional divisional resources as required.

4. Revising Project Work Plans

Any changes to the project scope or tasks should be reflected in current work plans. Additionally, modified or deleted tasks (with justification) should be included in an updated Work Plan. The revisions affecting the overall schedule and milestones should be then provided to the Master Planning and Scheduling function.

5. Report Project Status

The Project Manager must report the status of the project on a monthly basis in writing. Status reports will be submitted as deemed necessary by the Project Manager and the PEP Manager/Master Planning and Scheduling function, but not less than at the end of each month. The format identified in Section A.V. should be utilized. Additionally, progress should be indicated on the Current Schedule computer printout by activity showing for each percent complete, change in duration, additional activities representing delay items, or modified prerequisites.

The first status report is due Tuesday, April 30, 1985 and the second on Wednesday, May 15, 1985.

## PERFORMANCE ENHANCEMENT PROGRAM

### VI. SPECIFIC GUIDELINES AND INSTRUCTIONS

#### 1. Project Description:

Review for accuracy and completeness. Insure that the project is a real one and has a priority for completion. Understand fully what the end product or deliverable will be, what form it should be in, and when is it required.

#### 2. Project Work Plans:

Review for accuracy in terms of completeness and that all key activities have been identified. When scheduling individual work plan activities insure that prerequisites are identified and that each activity has a duration in terms of elapsed working days (or weeks).

#### 3. Project Schedule:

This relates closely to Item 2 above but clarifies that durations of individual activities should not be keyed directly to man-day estimates but should allow for the fact that an individual may not be able to concentrate all of his efforts at one time. For example: Writing a procedure may take 2 man-days of effort spread out over a 10 working day period. You should then use 10 working days as the duration of the activity.

Also, insure each deliverable has an identifiable milestone. The activities should be reviewed and milestones identified.

#### 4. Project Status Report:

Submit "Project Status Report" on a periodic basis (minimum once/month) with "Current Schedule" marked up in red to reflect changes in duration, percent complete, and/or activity description. The "Project Status Report" should be filled out showing work completed (by task, ID number/name, when and by whom), the planned activities for immediate work to be accomplished, and any problems encountered. Problems encountered may range from a lack of resources, changed priorities, incomplete prerequisites or any item that will affect your ability to meet the

schedule. Revised work plans should also be submitted  
at this time.



PERFORMANCE ENHANCEMENT PROGRAM

V. PROJECT STATUS REPORT

PROJECT:

PROJECT MANAGER:

Date:

Status As Of:

Work Completed Since Last Report:  
(Attach Work Plan Updates)

Planned Activities:

Problems Encountered:

## V Divisional Activities

The following describe in more detail the work under way in each of the Nuclear Divisions. The division materials describe in more detail the organization changes, specific involvement (and accomplishments) in the Performance Enhancement Program (PEP) and other pertinent activities underway prior to forming the PEP.

- A. Quality Assurance Division
- B. Nuclear Production Division
- C. Nuclear Licensing and Fuel Division
- D. Nuclear Engineering Division

## A. Quality Assurance Division

### I. Organizational Changes

- \* Major organization changes include transfer of the Maintenance Quality Control Unit to the Quality Assurance Division to provide further independence in performing Quality Control functions and transfer of the Records Center Administration to the Nuclear Engineering Division.
- \* Six new positions were created within Quality Assurance Division during this period.
- \* The additional personnel will support the upgraded Quality Assurance Division training program which reflects the latest INPO and industry guidelines and standards, provide an improved Quality Assurance indoctrination and training program to personnel within the Nuclear Project, and support the maintenance planning and engineering functions. These preceding functions are delineated in the PEP.

### II. Performance Enhancement Program Activities include:

- \* Upgrading and improving the Quality Assurance Division's training program and Quality Assurance indoctrination and training program for Nuclear Project personnel with emphasis on INPO accreditation guidelines and criteria.
- \* Revising the Quality Assurance Division's Charter to provide detailed mission and function statements.
- \* Establishing a Quality Assurance function to identify manpower requirements and priorities to schedule division activities.
- \* Reviewing the Exclusion List at Fort St. Vrain governing material access to the site. This will be evaluated, and incorporated into the Fort St. Vrain Administration Procedures Manual as appropriate. In addition, the consultant's recommendations on procurement will be reviewed, and procedures will be revised as necessary.

### III. Other Activities in Progress

- \* The Quality Assurance Division has emphasized that time will be devoted to procedure review and training to eliminate root causes for failure to follow procedures.
- \* In order to provide the independence necessary to effectively implement the Quality Assurance Program, all Section Q Administrative Procedures, except Q-0 and Q-1, will be authorized solely under the signature of the Manager, Quality Assurance Division.
- \* A revision to the Administrative Procedures Manual Q-16, Corrective Action System, has been prepared to address a CAR escalation system.
- \* A review of Quality Assurance receiving inspection procedures will be made and procedures will be provided or revised, as needed, to address inspection requirements.
- \* To provide additional emphasis on and enhance the Maintenance Quality Control Program, an evaluation will be undertaken.
- \* The Quality Assurance Operations Department will further expand the monitoring activities to supplement the areas that are presently covered by the Quality Assurance Audit Program and the Nuclear Facility Safety Committee Audits.
- \* A review of safety related procedures and changes to verify conformance to applicable quality requirements was started in the Quality Assurance Division in January, 1985.
- \* The procedures needed for the review by the Quality Assurance organization of the content and adequacy of the Technical Specification Procedures has been issued.
- \* The review of the Technical Specification Surveillance Requirement (SR) Test Procedures, excluding the Environmental Surveillance Requirements (ESR's), will begin in conjunction with the implementation phase of the SR Test Program.

## B. Nuclear Production Division

### I. Organizational Changes

- \* The Management of the Nuclear Production Division has been strengthened through a reorganization that redistributes areas of responsibility and capitalizes on individual's strengths.
- \* The reorganization change required the addition of 45 technical, training, maintenance, operations, and clerical personnel.
- \* The Support Services Department was created on September 1, 1984. The Water Chemistry and Training Units were moved into this department from the operations area. In taking this action, the span of control of the Station Manager was tightened, which has allowed him to concentrate his attention on the operation and maintenance of the facility.
- \* A Scheduling, Planning, and stores organization has been expanded to implement and provide increased attention to the areas of long term planning/ preventive/ predictive maintenance and outage scheduling, and material control.
- \* The Technical Services organization is being expanded to improve management oversight and control and implement a comprehensive preventive/predictive maintenance and failure trending program.
- \* The Training organization is being expanded to accomplish the requirements of INPO accreditation and more importantly, provide the needed performance based training to ensure that plant personnel are well qualified to perform their assigned tasks.
- \* Responsibility for fuel handling activities has been moved to the Technical/Administrative Services Department. This will allow for better coordination with preventive maintenance, spent fuel shipping, and core management programs.

### II. Nuclear Performance Enhancement Program Activities

- \* A Division Charter has been written which delineates responsibilities and eliminates confusion and redundancy.
- \* A comprehensive preventive/predictive maintenance program is being developed to control and monitor maintenance activities associated with equipment essential for reliable plant operation.

- \* A Planning and Scheduling organization is being implemented, and procedures are being developed to coordinate preventive/predictive maintenance and long term outage activities.
- \* All Division procedures are being reviewed using the INPO Good Practice for adequacy, content, human factors, and format, in order to prevent further problems with procedural compliance. Special attention is being given to Systems Operating Procedures, Maintenance Procedures, and Results Procedures.
- \* Initial and continuing training programs are being developed to meet Public Service Company of Colorado's commitment to the NRC through Resource Committee (NUMARC) to have all training programs ready for accreditation by the Institute for Nuclear Power Operations (INPO) by December 31, 1986.
- \* Management visibility and involvement is being increased through establishment of a plant tour procedure and a comprehensive housekeeping program.
- \* Aggressive actions are being taken to improve Conduct of Operations in the areas of Procedural adequacy and compliance, management responsibilities, operator aids and plant signage, work planning, shift turnover, training, independent verification, Station Service Request(SSR) backlog reduction, and corrective actions, and Controlled Work Procedure (CWP) control improvement. Integration of these components into a comprehensive program will provide positive steps to improve the day-to-day operation of the plant.
- \* A preliminary Facilities Planning report has been completed which addresses the adequacy of the plant facilities based on the current plant staff level and anticipated future growth.
- \* A Comprehensive Water Chemistry get well program is being implemented to correct deficiencies noted in previous NRC, INPO, and PSC QA audits. A total of 1126 person days is projected to be necessary to complete this program.

### III. Other Activities in Progress

- \* Communications within the Division are being improved through the implementation of weekly staff meetings at all levels. These meetings provide the opportunity to communicate policies, goals and objectives, discuss current work activities, and receive feedback from the performance level. All meetings are documented for follow up of open items and future reference.
  
- \* Several program changes are being implemented to improve our Emergency Response Capabilities in the areas of facility upgrade, training improvements, and the utilization of "dress rehearsal" exercises. An extensive advertising and door-to-door personal contact campaign has been initiated to improve the effectiveness of the Early Warning Alert System.

## C. Nuclear Licensing and Fuels

### I. Organizational Changes

- \* In September, 1984, a Licensing Department was established to serve as a central focal point for all NRC interface matters.
- \* In March, 1985 a new division (Nuclear Licensing and Fuels) was created to handle licensing issues.
- \* In November, 1984, a Nuclear Licensing Operations Unit was established at the Fort St. Vrain site to address site licensing issues.
- \* Executive Management approval has been given to the addition of nine additional personnel to the Licensing organization.
- \* Temporary personnel are being used to backfit and input selected NRC/PSC correspondence into a computerized licensing document/correspondence data base.

### II. Performance Enhancement Program Activities

- \* A systematic review of NRC documents will be undertaken, utilizing personnel with light water reactor backgrounds.
- \* An improved system for controlling NRC commitments will be developed.
- \* Improvements will be made in the review and input of "P" correspondence into a computer data base.
- \* The licensing review and safety basis for new Technical Specifications will be improved.
- \* Improved safety analysis reports for new and revised procedures and tests will be prepared.
- \* A training program for Nuclear Licensing and Fuels personnel is being established.

### III. Other Activities in Progress

- \* All Fort St. Vrain Technical Specifications have been reviewed and substantial revisions have been submitted to NRC in order to upgrade and standardize them with the Nuclear power industry.
- \* In addition to daily telephone contact, bi-weekly face-to-face meetings between the Nuclear Licensing and Fuels Division Manager and the NRC were initiated in April 1985.



## D. Nuclear Engineering Division

### I. Organizational Changes

- \* Additional personnel to monitor contractor activities to better coordinate operations maintenance/construction interface.
- \* Establish a second engineering group with Site Engineering to provide better response to plant activities for design or technical support.
- \* Establish a Divisional Planning and Scheduling function to provide coordination of design efforts with plant operation, maintenance, and outage activities.
- \* Establish a training/procedures group to provide training and retraining with the objective of procedural adherence, and to review, revise and issue procedures to effect better overall procedure control.
- \* Establish a Special Projects Department to reduce the engineering backlog of work, provide direct assistance to the Engineering Division Manager, and technical support for activities needing immediate attention.
- \* Overall, the organizational changes required the addition of 21 technical, training, and clerical personnel.

### II. Performance Enhancement Program Activities

- \* Provide management control, through a Planning/Scheduling function, to coordinate the design, material delivery, and construction activities to be responsive to Plant needs for operation, maintenance, planned and unplanned outages.
- \* Establish a Priority System to all modification work to permit better allocation of resources to accomplish modification activities.
- \* To provide orientation, training, and procedure review, a group is being established with the charter to provide the required procedure training, technical training as appropriate, and procedure review with the objective of improving procedure adherence.

- \* A Task Force has been established to review and simplify the modification process, to eliminate redundancies, and improve overall implementation and response to Plant needs.
- \* Establish a schedule whereby all Nuclear Engineering Procedures will be reviewed and revised to assure procedural compliance with regulations, consistency, eliminate redundancies, simplification where possible all in the interest of improving response and procedural adherence.
- \* An overall study is being performed by a consultant to determine if consolidation of all Nuclear activities at the Fort St. Vrain site is warranted.
- \* Charter/Mission Statements have been established for each Division, Department, and Unit to better define areas of responsibility and authority to eliminate redundancies and duplication of efforts, and to enhance communication and coordination of activities.