U.S. NUCLEAR REGULATORY COMMISSION

REGION V

Report Nos:	50-275/94-09 and 50-323/94-09
Docket Nos:	50-275 and 50-323
License Nos:	DPR-80 and DPR-82
Licensee:	Pacific Gas and Electric Company Nuclear Power Generation, B14A 77 Beale Street, Room 1451 P. O. Box 770000 San Francisco, California 94177
Facility Name:	Diablo Canyon Units 1 and 2
Meeting at:	Region V Office, Walnut Creek, California
Meeting Conducted:	March 3, 1994
Prepared by:	D. E. Corporandy, Project Inspector
Approved by:	D. F. Kirsch 3/25/94 D. Kirsch, Chief Date Signed Reactor Projects Branch 1

Meeting Summary:

This management meeting discussed the following:

- Recent procedure adherence issues at Diablo Canyon
- Assessment of the licensee's Nuclear Quality Services organization formed in June of 1993
- Lessons learned from the licensee's experience with the NRC's Notice of Enforcement Discretion (NOED) process
- Refueling outage plans for the Unit 1 refueling outage scheduled to begin March 12, 1994

DETAILS

1. Meeting Participants

Pacific Gas and Electric Company

G. Rueger, Senior Vice President and General Manager, Nuclear Power Generation Business Unit
W. Fujimoto, Vice President, Nuclear Technical Services
J. Townsend, Vice President and Plant Manager, Diablo Canyon Operations
J. Sexton, Manager, Nuclear Regulatory Services
B. Giffin, Manager, Maintenance Services
R. Powers, Manager, Nuclear Quality Services
M. Angus, Manager, Nuclear Engineering Services
D. Miklush, Manager, Operations Services
R. Curb, Manager, Nuclear Construction Services
T. Bennett, Unit 1 Outage Manager
T. Grebel, Supervisor, Regulatory Compliance

Nuclear Regulatory Commission

K. Perkins, Acting Regional Administrator
S. Richards, Acting Director, Division of Reactor Safety and Projects
D. Kirsch, Technical Assistant
R. Huey, Enforcement Officer
P. Johnson, Chief, Reactor Projects Section 1
G. Cook, Public Affairs Officer
M. Miller, Diablo Canyon Senior Resident Inspector
S. Peterson, Diablo Canyon Project Manager, NRR
D. Corporandy, Project Inspector

California Public Utilities Commission

D. Barnhardt, Senior Utilities Engineer

2. Background

On March 3, 1994, an open meeting was held at the NRC Region V office in Walnut Creek, California, between representatives of the Pacific Gas and Electric Company (PG&E) and the NRC. The purpose of this meeting was to discuss the following:

- recent procedure adherence issues at Diablo Canyon,
- assessment of the licensee's recently formed Nuclear Quality Services organization,
- lessons learned from the licensee's experience with the Notice of Enforcement Discretion (NOED) process, and
- refueling outage plans for the Unit 1 refueling outage scheduled to begin March 12, 1994.

3. Meeting Discussions

The meeting convened at 9:30 a.m. Mr. Perkins opened the meeting by congratulating the licensee on making the NRC's "good performer" list. He expressed his interest in discussing the status of the licensee's recently formed Nuclear Quality Services group, as well as the other issues on the meeting agenda. The management meeting proceeded along the lines as presented by the licensee in the enclosed presentation slides (Enclosure 3). Highlights of the management meeting follow:

Procedure Adherence Issues

Mr. Rueger noted that although the overall number of errors at Diablo Canyon had decreased over the last few years, a large percentage of the remaining errors involved a lack of procedure adherence. Ms. Miller offered that the NRC resident inspectors were recently identifying more problems in the field than in the previous few years. Mr. Miklush attributed many of the problems to a lack of attention to detail and suggested that additional emphasis at the first line supervisor level was warranted. Mr. Huey emphasized the importance of the first line supervisor in clearly communicating expectations, and Mr. Kirsch pointed out that managers should be responsible for making sure that first line supervisors get the message.

Review of Nuclear Quality Services Organization

Mr. Richards asked if the licensee anticipated any reductions in the Nuclear Quality Services (NQS) organization. Mr. Powers responded that the NQS organization would decrease from its current level of 179 persons to about 150 persons over the next couple of years and that the most significant decrease would be in the Quality Control (QC) group. Mr. Kirsch observed that NQS affects the performance of the licensee's organization and emphasized the importance of maintaining quality. Mr. Powers noted that a 150 person NQS staff would still be on par with the staff size in other top performing nuclear utilities.

Mr. Powers opined that the NQS organization was doing a better job of helping the licensee to self identify issues. When challenged as to his basis for the claim, Mr. Powers responded that his opinion was based on his experience and other independent sources such as the results of a recent audit by the Western Regional Joint Quality Assurance Group.

Mr. Richards explained that the NRC sees the NQS function as an important one which includes elevating problems to the attention of senior management. Mr. Rueger agreed and stated that he expects to be apprised of significant problems.

Mr. Powers envisioned the NQS organization as having a threefold role: (1) to find problems, (2) to play the devil's advocate, and (3) to provide quality insurance (i.e. to act as the licensee's conscience, to be intrusive in identifying problems, and to make sure that problem resolutions are carried to completion). Mr. Powers felt that his

organization could further improve in carrying out its role as quality insurer.

Mr. Kirsch noted that Mr. Louis Carson of the NRC had recently identified several findings in the quality assurance area pertaining to services provided to the Diablo Canyon plant by PG&E's Technical and Ecological Services (TES) branch, a non-nuclear branch of the organization. There was concern that services provided to the licensee's nuclear plant by the TES branch were not being performed under the same quality assurance measures required of the licensee's nuclear organization. Mr. Rueger emphasized that he had called the Vice President of TES to stress the importance of maintaining quality services from the perspective of PG&E's nuclear generation organization. He also made a call to Mr. Powers to question why NQS had not identified the issues raised in Mr. Carson's inspection.

Notice of Enforcement Discretion (NOED) Lessons Learned

Mr. Miklush detailed actions the licensee had taken to improve their input to the enforcement discretion process and discussed a new administrative procedure which the licensee had recently issued to address the NOED process.

Unit 1 Refueling Outage Plans

Mr. Bennett presented the licensee's plans for the Unit 1 refueling outage scheduled to begin March 12, 1994. Installation of the new EAGLE 21 reactor protection system, which will replace the existing Westinghouse 7100 system, was discussed. Mr. Johnson questioned if the new voltage inverter system to be included with the installation of the EAGLE 21 reactor protection system would be more reliable than the inverter system it replaced. Mr. Townsend promised to get back to the NRC with an answer.

4. Adjournment

Mr. Perkins thanked the licensee participants for their participation, and adjourned the meeting at 12:30 p.m.

ENCLOSURE 3

COPY OF LICENSEE'S PRESENTATION MATERIALS

Procedure Adherence

B. W. Giffin
Manager - Maintenance Services

PG&E

BWG

CONTINUOUS IMPROVEMENT TEAM

- Process
- Membership
- Issues
- Corrective actions
- Schedule

PROCESS

- Re-emphasized management expectations
- Select team members
- Provide ground rules
- Monitor progress

PG&E POLICY

"It is the policy of NPG that the use of, and adherence to, approved written procedures for the accomplishment of work activities is a necessary ingredient to consistently achieving the goal of performing such work in a safe, professional and efficient manner."

PG&E

MEMBERSHIP

- Team consists of 30 members

- Members include representatives from maintenance, operations, engineering, I&C, chemistry, training, radiation protection, quality services, and human performance

ISSUES

Root Causes

- Procedure revision process
- Understanding of management expectations
- Procedure quality and detail

PG&E

CORRECTIVE ACTIONS
LONG TERM

- Revise tech specs to have SRO review required only for operational procedures
- Revise tech specs to delete PSRC review of selected procedures
- Revise tech specs to modify qualifications for review and approval
- Revise and improve older procedures

PG&E

BWG11A

SCHEDULE

- Training is ongoing
- Procedural changes have been approved and will be effective March 8, 1994
- Long range actions mid 1994

PG&E

Assessment

of

Nuclear Quality Services

R. P. Powers
Manager - Nuclear Quality Services

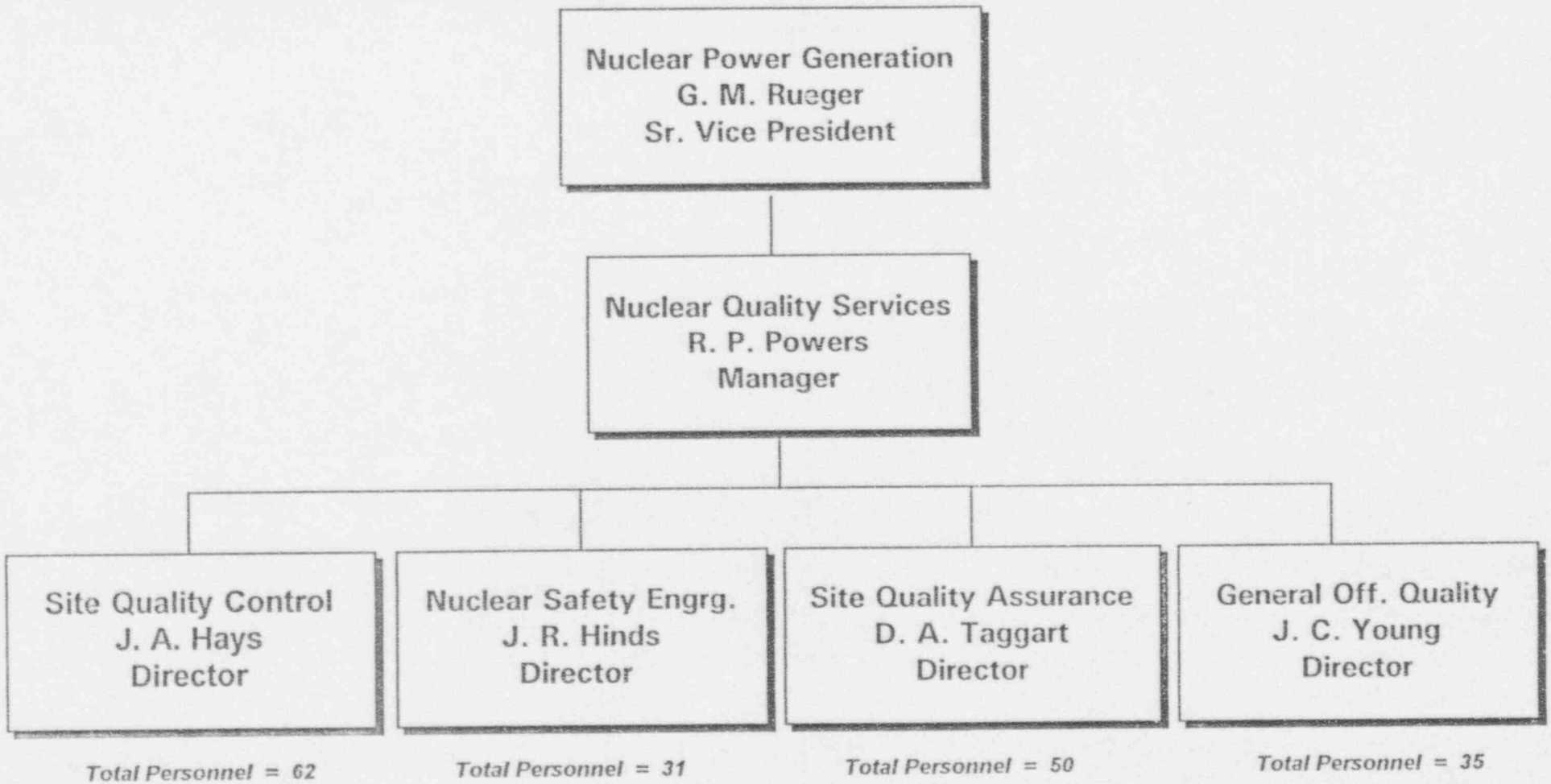
BACKGROUND

- Previous quality organization
  - Excellent performance rating overall for DCPP
  - Quality organization structure considered good but could improve

- Evaluation of organizational structure
  - Utilized management team to assess DCPP
  - NRC perspective was included in the assessment

- Goals of reorganization
  - Plant focus
  - Locate manager at site
  - Better organization coordination

NQS ORGANIZATION



– *Total NQS Personnel = 179*

EVALUATION OF THE REORGANIZATION

- Site emphasis -- relocation
- Infusion of new thinking and experience
- Improved access and communication with NPG Management on safety-related issues
- Improved resource coordination and teamwork within NQS organization
  - Resource efficiencies
  - Better analysis of issues

EVALUATION OF THE REORGANIZATION

- Consolidated oversight and QA, QC in one department
  - Reliability engineering
  - OSRG
  - OEA
  - Assimilated construction, plant, and engineering QC
- Strong presence still remains in SF to monitor vendor and engineering activities

EVALUATION OF STRENGTHS

Technical depth of staff

- 11 senior reactor operators/reactor operators
- 16 professional engineers
- Engineering or specialized degrees
  - Chemistry
  - Mechanical
  - Electrical
  - Metallurgy
- Specialized experience
  - Navy
  - Experience from other utilities
  - Representation from NPG line organizations

PG&E

EVALUATION OF STRENGTHS

Depth and content of NQS inspections, audits and analyses is good

- Surveillance reports
  - Recurring problem surveillance
  - ASW/CCW surveillance
- Audit reports
  - SSFAR
  - SSOMI
  - MQA
- QC inspections
- Root cause analysis
- Supplier assessments

EVALUATION OF STRENGTHS

- NQS is improving products
  - Corrective action improvement forum
  - Quality Performance Assessment report (new trend report)
  - Revamping of OEA program
  - Consolidated and improved corrective action program
  - New root cause procedure and training on the performance of root cause analysis

AREAS TARGETED FOR CONTINUED IMPROVEMENT

- Communicating big picture issues and getting action on findings:
  - SSFAR -- issue ownership improved
  - MOV 8703 pressure binding
  - Reduced QE determination time
- Better coordination -- inter-section meetings and planning
- Better analysis of trends, patterns and root cause

AREAS TARGETED FOR CONTINUED IMPROVEMENT

- Improving face-to-face communication with line organizations

- Learning to deal more effectively with "gray" issues:
  - NQS policy issued - timely movement on operability questions
  - Scheduled weekly meeting to surface quality problems with higher significance

PG&E

CONCLUSIONS

- NQS is good at providing thorough analysis, audits, and inspections

- NQS is getting better at communicating "big picture" issues and getting timely action on findings -- continued improvement in this area is a strategic issue for the department

Notice of Enforcement Discretion

D. B. Miklush
Manager - Operations Services

PG&E

DBM1

ENFORCEMENT DISCRETION IMPROVEMENT ACTIONS TAKEN

- New administrative procedure
- Operations policy
- Other utilities enforcement discretion requests reviewed to ensure PG&E documentation is comparable
- Plant management understanding of NRC enforcement discretion policy improved

ENFORCEMENT DISCRETION OPERATION POLICY

- Requires notification of Operations Management
  - TS action statement $\leq$ 72 hours entered without clear course of action to restore equipment
  - TS action statement time is $\leq$ 12 hours
- Provides NRC inspection manual guidance on enforcement discretion

ENFORCEMENT DISCRETION ADMINISTRATIVE PROCEDURE

- Incorporates NRC Inspection Manual 8/93 guidance
- Formalizes process including required internal reviews and submittal information requirements
- Requires notification of NRC Resident Inspector
- Requires PG&E management team notification of potential enforcement discretion issues

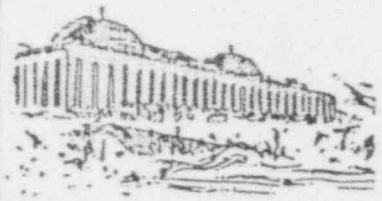
1R6 Refueling Outage

Tom Bennett
Director - Outage Management

OUT

1R6 OVERVIEW

- Schedule
- Major modifications
- Unique activities
- Control of pre-outage activities

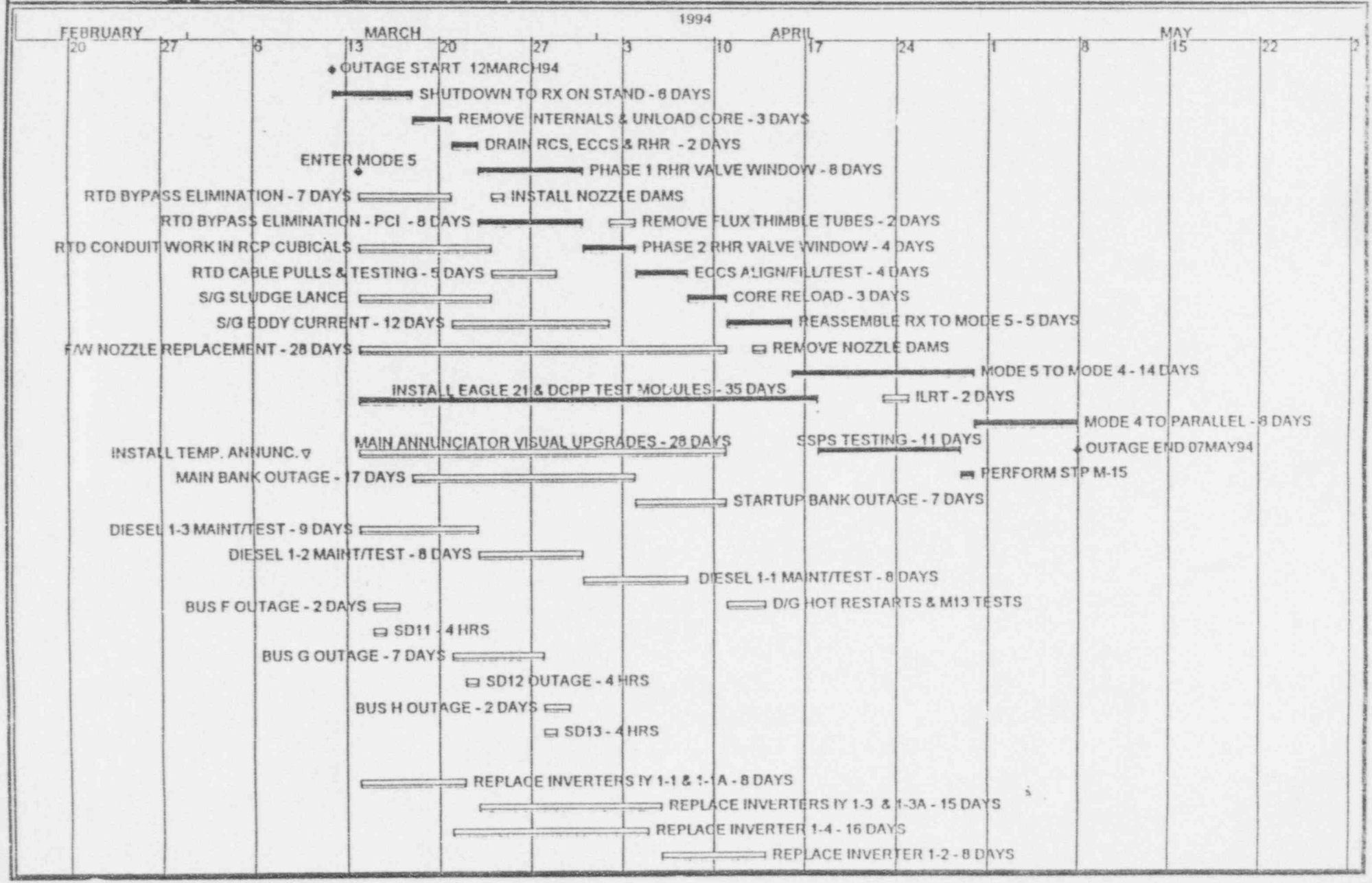


1R6 OUTAGE SCHEDULE

SCHEDULED FOR 57 DAYS

Date: 21JAN94

REV. 7



1R6 MAJOR MODIFICATIONS

- Main annunciator upgrade
- Replace Hagan Racks - Eagle 21
- Upgrade 120v vital inverters
- RTD manifold elimination
- Feedwater regulating bypass piping replacement
- Main transformer bushing replacement
- Low pressure turbine inspection and maintenance

PG&E

1R6 UNIQUE ACTIVITIES

- Condensate polishing system computer
- Reactor cavity seal replacement
- Main feedwater nozzle and thermal sleeve modification
- Safety injection accumulator inspection
- ILRT
- Flux thimble tube replacement
- Steam Generator Maintenance

CONTROL OF PRE-OUTAGE ACTIVITIES

- On-line maintenance scheduling (AD1.ID4)
  - Mode one integrated daily schedule (MOIDS)
  - Meet every Tuesday and Friday
  - Composition-shift supervisor, operations representative on loan to work planning, senior schedulers, construction support clearance coordinators, shift technical advisors (STA's), radiation protection and system engineers
  - Work controlled by a work order (in shop and in field)

PG&E