UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-4005

June 17, 2004

Gregory M. Rueger, Senior Vice
President, Generation and Chief Nuclear Officer
Pacific Gas and Electric Company
Diablo Canyon Power Plant
P.O. Box 3
Avila Beach, California 93424

SUBJECT: MEETING SUMMARY FOR END-OF-CYCLE PERFORMANCE ASSESSMENT FOR DIABLO CANYON POWER PLANT

Dear Mr. Rueger:

This refers to the Category 1 public meeting conducted at the Pacific Gas and Electric Company's Community Center in San Luis Obispo, California, on June 10, 2004. The meeting attendance list and a copy of the slides presented during the meeting are enclosed.

In accordance with Section 2.390 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and its enclosure will be available electronically for public inspection in the NRC's Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams/index.html (the Public Electronic Reading Room).

Should you have any questions concerning this matter, we will be pleased to discuss them with you.

Sincerely,

William B. Jones, Chief
Project Branch E
Division of Reactor Projects

Dockets: 50-275
50-323
License : DPR-80
DPR-82

Enclosures:
1. Attendance List
2. NRC Presentation Slides
3. Pacific Gas and Electric Presentation Slides

cc w/enclosures:
David H. Oatley, Vice President
and General Manager
Diablo Canyon Power Plant
P.O. Box 56
Avila Beach, CA 93424

Lawrence F. Womack
Vice President, Nuclear Services
Diablo Canyon Power Plant
P.O. Box 56
Avila Beach, CA 93424

James R. Becker, Vice President
Diablo Canyon Operations and
Station Director, Pacific Gas and
Electric Company
Diablo Canyon Power Plant
P.O. Box 3
Avila Beach, CA 93424

Sierra Club San Lucia Chapter
c/o Henriette Groot
1000 Montecito Road
Cayucos, CA 93430

Nancy Culver
San Luis Obispo Mothers for Peace
P.O. Box 164
Pismo Beach, CA 93448

Chairman
San Luis Obispo County Board of
Supervisors
Room 370
County Government Center
San Luis Obispo, CA 93408

Truman Burns\Robert Kinosian
California Public Utilities Commission
505 Van Ness Ave., Rm. 4102
San Francisco, CA 94102-3298

Diablo Canyon Independent Safety Committee
Robert R. Wellington, Esq.
Legal Counsel
857 Cass Street, Suite D
Monterey, CA 93940

Ed Bailey, Chief
Radiologic Health Branch
State Department of Health Services
P.O. Box 997414 (MS 7610)
Sacramento, CA 95899-7414

Richard F. Locke, Esq.
Pacific Gas and Electric Company
P.O. Box 7442
San Francisco, CA 94120

City Editor
The Tribune
3825 South Higuera Street
P.O. Box 112
San Luis Obispo, CA 93406-0112

James D. Boyd, Commissioner
California Energy Commission
1516 Ninth Street (MS 34)
Sacramento, CA 95814

David Edge, County Administrative Officer
San Luis Obispo County Board of
Supervisors
Room 370
County Government Center
San Luis Obispo, CA 93408

Federal Emergency Management Agency
Region IX
Jeff Griffin, Regional Director
1111 Broadway
Suite 1200
Oakland, CA 94607

The Honorable Tony Ferrara
Mayor, City of Arroyo Grande
P.O. Box 550
Arroyo Grande, CA 93421

The Honorable Dee Santos
Mayor, City of Grover Beach
154 S. 8th Street
Grover Beach, CA 93483

The Honorable William Yates
Mayor, City of Morro Bay
595 Harbor Street
Morro Bay, CA 93442

The Honorable Dave Romero
Mayor, City of San Luis Obispo
990 Palm Street
San Luis Obispo, CA 93401

The Honorable Joe Crescione
Mayor, City of Pismo Beach
760 Mattie Road
Pismo Beach, CA 93449

Electronic distribution by RIV:
Regional Administrator **(EWM)**
DRP Director **(ATH)**
DRS Director **(DDC)**
Senior Resident Inspector **(DLP)**
Branch Chief, DRP/E **(WBJ)**
Senior Project Engineer, DRP/E **(VGG)**
Staff Chief, DRP/TSS **(PHH)**
RITS Coordinator **(NBH)**
Dan Merzke, Pilot Plant Program **(DXM2)**
RidsNrrDipmLipb

ADAMS: ☒ Yes ☐ No Initials: _____
☒ Publicly Available ☐ Non-Publicly Available ☐ Sensitive ☒ Non-Sensitive

R:_DC\2003\DC4-14-03 EOC MS.wpd

RIV/RE:DRP/TSS	RIV/DRP/E			
NHTaylor	WBJones			
6/17/04	6/17/04			

OFFICIAL RECORD COPY T=Telephone E=E-mail F=Fax

Enclosure 1

ATTENDANCE LIST
U.S. NUCLEAR REGULATORY COMMISSION
END OF CYCLE MEETING
PACIFIC GAS AND ELECTRIC VISITORS CENTER
JUNE 10, 2004

Name (Please Print)	Organization
TIM GUNTER	U.S. DOE
Steve Chesnut	DCPP
ROD CURB	PG&E
Paul Roller	PG&E
DON THOMPSON	SELF
Jacqueline Hinds	PG&E
Richard Fryer	Citizen
CAL GILLIES	PG&E
CHARLES DOUGHERTY	PG&E
BRUCE TERRELL	PG&E
Rochelle Becka	Mothers for Peace
Shelly Hagman	San Luis Obispo Tribune
Henrietta Groot	

ATTENDANCE LIST
U.S. NUCLEAR REGULATORY COMMISSION
END OF CYCLE MEETING
PACIFIC GAS AND ELECTRIC VISITORS CENTER
JUNE 10, 2004

Name (Please Print)	Organization
Beth Fryer	
Lance Sawyer	PG&E
Carolyn Neff	Pat San Luis
	Charles Oslach

Enclosure 2

ANNUAL ASSESSMENT MEETING WITH PACIFIC GAS AND ELECTRIC

Nuclear Regulatory Commission

Region IV

June 10, 2004

NRC Meeting Purpose

- Meeting with Licensee
- Inform Public of Plant Performance

NRC Meeting Guidelines

- Registration Table
- Feedback Forms
- Handouts
- Questions and Answers

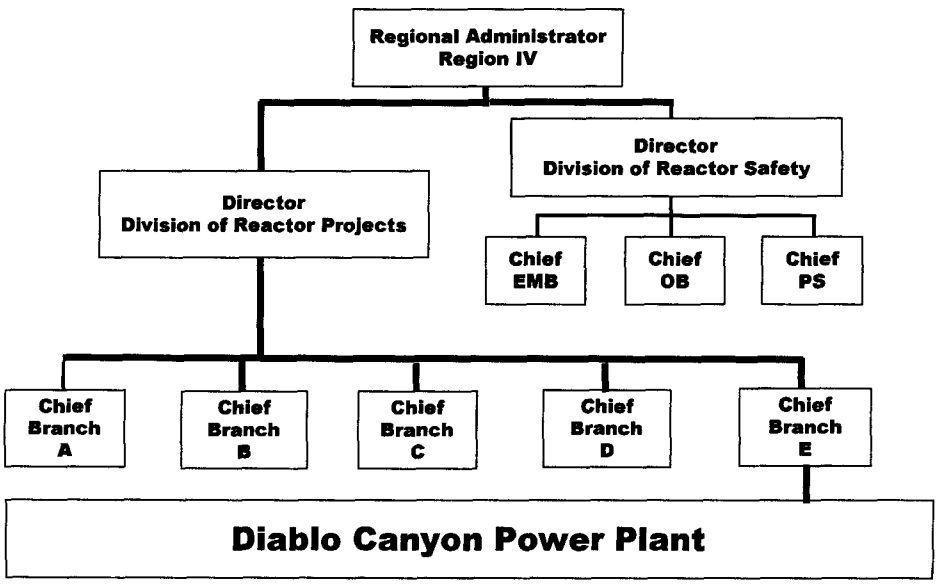
Meeting Agenda

- REGULATORY OVERSIGHT
- PLANT SAFETY PERFORMANCE SUMMARY
- ADDITIONAL FOCUS AREAS
- QUESTIONS AND ANSWERS

PG&E INTRODUCTIONS

5

Regional Organization



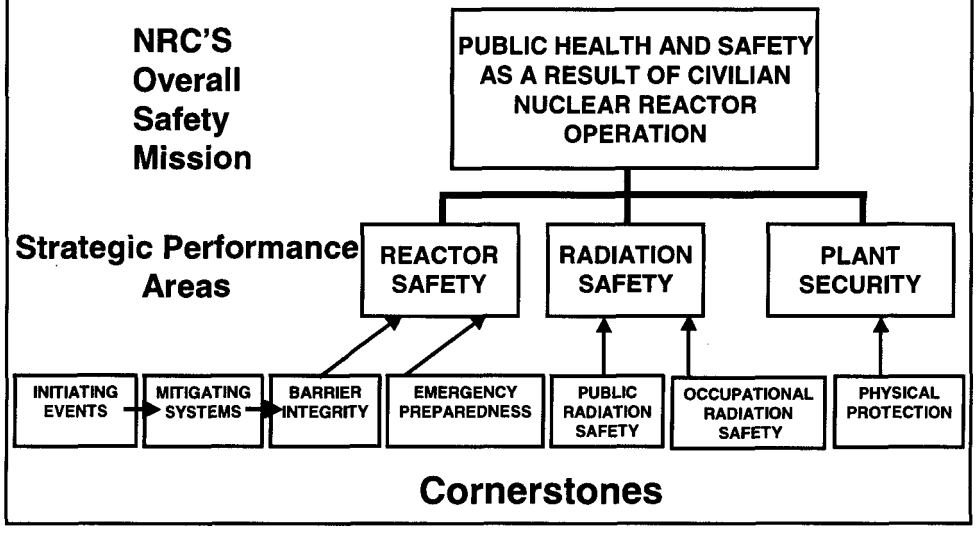
NRC PERFORMANCE GOALS

- Maintain public safety, protect the environment and promote common defense and security
- Enhance public confidence
- Improve:
  - Effectiveness
  - Efficiency
  - Realism of processes and decision making
- Reduce unnecessary regulatory burden

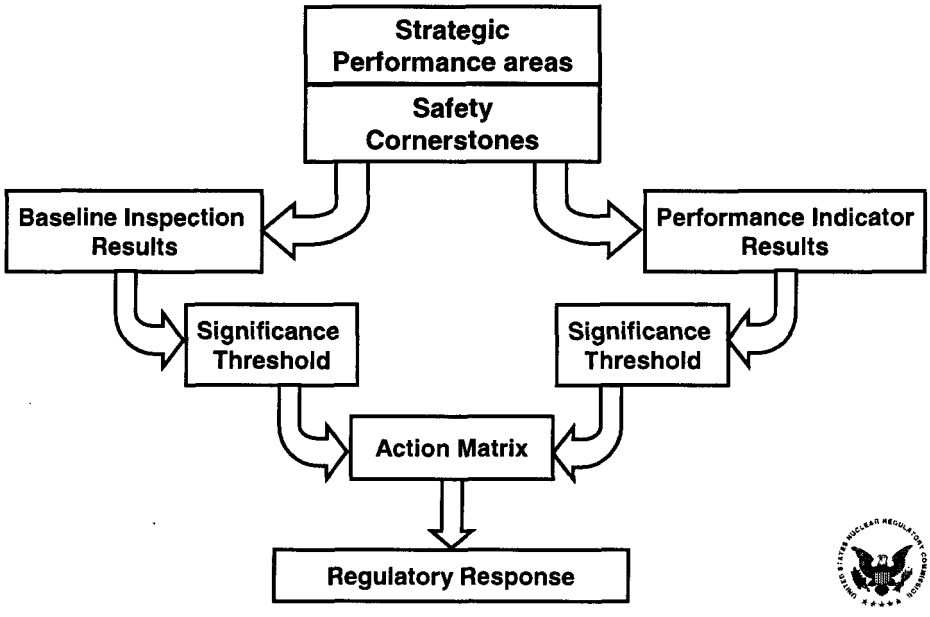
NRC Oversight Activities

- Provide assurance plants are:
  - Operating safely
  - Complying with regulations
- Based on a logical and sound framework
- Inspections focused on key safety areas
- Objective indicators of performance
- Assessment program triggers regulatory actions

Reactor Oversight Process



Reactor Oversight Process



Reactor Oversight Process

SAFETY SIGNIFICANCE

GREEN	- very low
WHITE	- low to moderate
YELLOW	- substantial
RED	- high

Crosscutting Areas

NRC'S Overall Safety Mission

PUBLIC HEALTH AND SAFETY AS A RESULT OF CIVILIAN NUCLEAR REACTOR OPERATION

Strategic Performance Areas

REACTOR SAFETY | RADIATION SAFETY | SECURITY

Crosscutting Areas

Human Performance | Corrective Action | Safety Conscious Work Environment

Baseline Inspection Program

- Gathers objective evidence of plant safety
- Conducted at all plants
- Focuses on safety-significant:
  - systems
  - components
  - activities
  - events

Baseline Inspection Program

- Inspection reports describe significant findings and non-compliance
- Inspection reports are publicly accessible

www.nrc.gov/reading-rm/adams/web-based.html

Event Follow-up and Supplemental Inspections

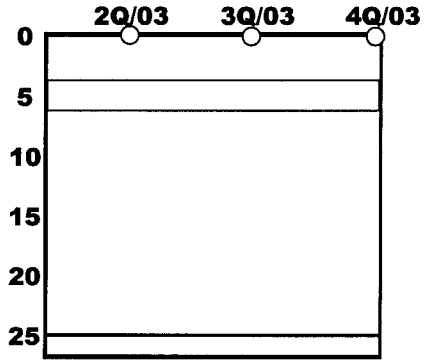
- Review events for significance
- Follow-up significant inspection findings
- Determine causes of performance declines
- Provide for graduated response

Performance Indicator Program

- Licensee monitors key safety parameters
- Data supplied to NRC quarterly
- Regulatory actions based on data

Performance Indicators

Unplanned Scrams per 7000 critical hours



Thresholds:

White >3.0,

Yellow >6.0,

Red >25.0

Unplanned scrams per 7000 critical hours	2Q/03	3Q/03	4Q/03
Actual scrams	0	0	0
Critical hours	2183	2208	2209
Indicator value	0	0	0

Performance Indicators

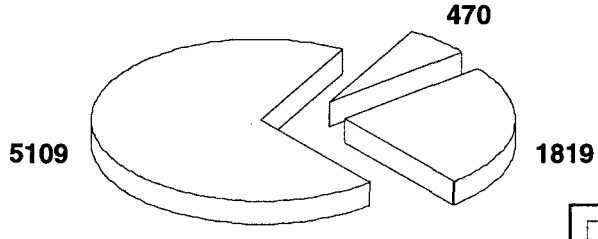
- **Performance indicator results and other assessment information available on the NRC's public web site:**

http://www.nrc.gov/NRR/OVERSIGHT/ASSESS/DIAB

Inspection Effort

- **Resident Inspectors**
  - Stationed at the plant
  - Prompt response capability
- **Regional Inspectors**
  - Specialized
  - Inspection Teams
- **Office of Nuclear Reactor Regulation**
  - Review license change requests

Overall NRC Effort



- ☐ Headquarters - 5109
- ☐ Regional - 470
- ☐ Resident - 1819

Total hours - 7398

20

Key Aspects of the Assessment Program

- Objective review of licensee performance
- "Action Matrix" to determine agency response in three areas:
  - Inspection
  - Management involvement
  - Regulatory actions
- Plant specific assessment letters
- Information on NRC public web site

ROP Action Matrix Summary for 2003

	Licensee Response	Regulatory	Degraded Cornerstone	Multiple/ Repetitive Degraded Cornerstone	Unacceptable Performance
Nationwide	74	23	2	3	0
Region IV	17	3	0	1	0

Plant Safety Performance Summary

Inspection Results

Two special inspections

NRC and Licensee identified inspection findings were of very low safety significance

All performance indicators were Green

No supplemental inspections necessary

Two substantive cross cutting issues

Special Inspection
Steam Generator Tube Leakage

- 18 tubes in two steam generators
- PG&E responded appropriately
- No findings of significance

25

Special Inspection
Battery Charger Failures

- Process of identifying, prioritizing, evaluating and correcting the problem was not effective
- Troubleshooting not effective at identifying and corrective cause of the failures
- Increase in failure rates not assessed
- Operability assessment did not address key aspects of charger degradation

26

Substantive Cross Cutting Issues

- **Problem Identification and Resolution**
  - **Extent of condition not fully addressed**
  - **Inadequate corrective action of long standing degraded conditions**
  - **Ineffective corrective action to address industry operating experience**

27

Substantive Cross Cutting Issues

- **Human Performance**
  - **Poor procedure quality/failure to follow procedure**
  - **Control of outage activities**
  - **Multiple findings in different cornerstones**

28

Performance Indicator Results

All performance indicators within the Licensee Control Band

National vs Regional Summary CY 2003

	Green	White	Yellow	Red
National Performance Indicator Results (CY 2003)	1828	15	0	0
Regional Performance Indicator Results (CY 2003)	376	2	0	0

	Green	White	Yellow	Red
National Total Inspection Findings (CY 2003)	760	16	2	3
Regional Total Inspection Findings (CY 2003)	177	2	0	0

Assessment Conclusion

Cornerstone objective fully met

Licensee effectively managed:

- **Reactor safety**
- **Radiation safety**
- **Plant security**

Diablo Canyon Plant was operated in a manner that protected the health and safety of the public

PG&E RESPONSE

Additional Focus Areas

- Security at Nuclear Power Plants
- Recent Industry Issues
- Seismic Issues

Security at Nuclear Power Plants

Nuclear Regulatory Commission:

- Has expanded involvement with FBI , law enforcement and other intelligence agencies
- Communicates frequently with Department of Homeland Security, DOD, FAA, FEMA, and others
- Continues to work in concert with:
  - Licensees
  - State and local officials

Security at Nuclear Power Plants

Threat Advisory and Protective Measures System:

- Communicates threats affecting NRC licensees
- Corresponds to color-coded Homeland Security Presidential Directive
- Identifies specific actions to be taken by NRC licensees for each threat level

Bulletins

- 2003-01 : Potential Impact of Debris Blockage on Emergency Sump Recirculation at Pressurized Water Reactors
- 2003-02 : Leakage from Reactor Pressure Vessel Lower Head Penetrations and Reactor Coolant Pressure Boundary Integrity
- 2003-04 : Rebaseline Data in Nuclear Materials Management & Safeguards System

Seismic Issues

December 22, 2003 San Simeon Earthquake

- **Three Phased NRC Response**
- **Emergency Sirens**
- **Special Report**
- **Ongoing NRC Activities**

37

Conclusions

- **Risk-Informed Programs**
- **Flexible/Predictable Response**
- **Assured Public Safety**

Contacting the NRC

Report an Emergency:

- (301) 816-5100 (collect)

Report a Safety Concern:

- (800) 695-7403 or
- Allegation@nrc.gov

- General Information or questions:
  - www.nrc.gov

Select "What we do" for Public Affairs

For additional information:

Regional Public Affairs Officer

- **Victor Dricks**
- **Phone: (817) 860 – 8128**

State Liason Officer

- **William (Bill) Maier**
- **Phone: (817) 860 - 8267**

Questions and Answers

40

Enclosure 3

Human Performance Improvements

Jim Becker,

Vice President - Diablo Canyon Operations & Station Director

Chuck Belmont,

Director - Nuclear Quality, Analysis & Licensing

PG&E

Human Performance (HP)

- Overall Conclusions
- Problem Analysis
- Actions Taken
- Results
- Next Steps

HP Overall Conclusions

- The HP crosscutting issue:
  - We took it very seriously,
  - We analyzed our issues using various methods,
  - We took aggressive actions
- HP has improved significantly in the last year to pre-2R11 levels
- DCPP results in the area of HP warrant closure of this crosscutting issue
- Continued improvement is our goal

HP Problem Analysis

- Performed analyses on HP issues (NRC, 2R11, WANO, etc.)
- Analyses included the following causes
  - Procedural Issues
  - Control of Work Activities
  - Personnel (verification activities)
  - Outage Schedule Changes
- Developed action plan utilizing above analyses as the basis for improvements

HP Problem Analysis

- INPO conducted an assist to review our action plan
  - INPO believes that our plan is comprehensive
  - INPO determined that we need a long term strategy for improvement

HP Actions Taken

- Procedural Issues
  - Improved procedure guidance and verification steps in maintenance
  - Raised standard for placekeeping in maintenance
  - Raised standard for use and adherence in operations
  - Improved the quality of some operating procedures

HP Actions Taken

- Control of Work Activities
  - Stronger control of contractor work
  - Management Observation Program enhanced to strengthen ownership by the managers
  - Improved procedure guidance and verification steps in maintenance

HP Actions Taken

- Personnel (verification activities)
  - In-house (Maintenance, Operations, Engineering) staff through HP center in 2003
  - Outage contractors through HP center prior to 1R12
  - Focused management observations on verification activities

HP Actions Taken

- Outage Schedule Changes
  - HP coordinators involved in emergent outage schedule changes
  - Additional training to outage supervision on HP

HP Actions Taken – Outage Performance

- Action plan improvements were focused on the 1R12 refueling outage
- Leadership strategy was to respond strongly to any adverse trends or incidents
- VP and Station Director met daily with key directors and HP personnel to discuss issues and develop actions

HP Actions Taken – Outage Performance

- Examples of 1R12 actions taken to address HP issues:
  - Prevent events tailboards geared to specific organizations
  - Reinforced HP behaviors through observations
  - Recognized good catches
  - HP coordinators involved in emergent schedule changes

HP Results

- No Safety-Significant Errors
- Errors are tracked at 3 levels
  - Level 1 e.g. valve internals installed incorrectly
  - Level 2 e.g. valve mispositioned with little consequence
  - Level 3 e.g. valve position not signed-off in procedure

HP Results

- One Level 1 error in the second-half of 2003
- Half the Level 1 errors year to date (3) vs. the first half of 2003 (6), 5 Level 1 errors in 2R11 vs. 3 in 1R12
- No Level 1 errors in Maintenance or Engineering in the last year
- Approximately 40% reduction in Level 2 error rate in 1R12 vs. 2R11
- More than 50% reduction in NCVs / findings with HP contribution in the last year

HP Results

- Challenges to HP
  - Earthquake Response
  - Storm Response
  - Outage Mid-Loop Operations

HP Next Steps

- Evaluate outage for lessons learned
- HP lessons learned entered into the corrective action program
- Revise the HP action plan for the remainder of 2004, and the long-term
- Continue procedure improvements
- HP center activities continue
- A follow-up INPO HP assist visit is scheduled to be performed on-site the week of July 12th

HP Overall Conclusions

- The HP crosscutting issue
  - We took it very seriously
  - We analyzed our issues using various methods
  - We took aggressive actions
- HP has improved significantly in the last year to pre-2R11 levels
- DCPP results in the area of HP warrant closure of this crosscutting issue
- Continued improvement is our goal

Vice President and General Manager
Diablo Canyon Power Plant

PG&E

Problem Identification and Resolution (PI&R)

- We agree with the NRC crosscutting issue in PI&R and take the issue very seriously
- We understand the importance of this program
- Problem has been analyzed and actions taken. We are beginning to see positive results

- Improvement actions subsequent to our battery charger failures
  - Enhanced the troubleshooting process
  - Developed equipment trending tool
- Issue expanded by NSOC, Quality Verification, and PG&E Senior Management.
  - Established a Corrective Action Review Board (CARB)
  - Assessed and are correcting, as needed, the quality of cause analysis and corrective actions over last two years

- We have lowered the threshold for operability determinations
- Troubleshooting has improved
- We have seen improved cause analyses, extent of cause, and extent of condition

PI&R Overall Conclusions

- We agree with the NRC crosscutting issue in PI&R and have been aggressive in its resolution.
- We will take whatever actions are necessary to resolve this issue quickly.