



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
612 EAST LAMAR BLVD, SUITE 400  
ARLINGTON, TEXAS 76011-4125

July 22, 2008

John T. Conway  
Senior Vice President &  
Chief Nuclear Officer  
Pacific Gas and Electric Company  
P.O. Box 3  
Mail Code 104/6/601  
Avila Beach, CA 93424

SUBJECT: DIABLO CANYON POWER PLANT, UNITS 1 AND 2 - NRC EXAMINATION  
REPORT 05000275/2008301; 05000323/2008301

Dear Mr. Conway:

On June 23, 2008, the U.S. Nuclear Regulatory Commission (NRC) completed an examination at Diablo Canyon Power Plant, Units 1 and 2. The enclosed report documents the examination findings, which were discussed on June 23, 2008, with Messrs. James Becker, James Welsch, David Burns, and other members of your staff.

The examination included the evaluation of 9 applicants for reactor operator licenses, 3 applicants for instant senior operator licenses, and 2 applicants for upgrade senior operator licenses. The written examinations and operating tests were developed using NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 9, Supplement 1. The license examiners determined that all 14 applicants satisfied the requirements of 10 CFR Part 55, and the appropriate licenses have been issued.

No findings of significance were identified during this examination.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC 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.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Ryan E. Lantz, Chief  
Operations Branch  
Division of Reactor Safety

Dockets: 50-275; 50-323

Licenses: DPR-80; DPR-82

Enclosure:

NRC Examination Report 05000275/2008301;  
05000323/2008301

cc w/enclosure:

Sierra Club San Lucia Chapter  
ATTN: Andrew Christie  
P.O. Box 15755  
San Luis Obispo, CA 93406

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

Chairman  
San Luis Obispo County  
Board of Supervisors  
1055 Monterey Street, Suite D430  
San Luis Obispo, CA 93408

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

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

Director, Radiological Health Branch  
State Department of Health Services  
P.O. Box 997414 (MS 7610)  
Sacramento, CA 95899-7414

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 31)  
Sacramento, CA 95814

James R. Becker, Site Vice President  
Diablo Canyon Power Plant  
P.O. Box 56  
Avila Beach, CA 93424

Jennifer Tang  
Field Representative  
United States Senator Barbara Boxer  
1700 Montgomery Street, Suite 240  
San Francisco, CA 94111

Chief, Radiological Emergency Preparedness Section  
National Preparedness Directorate  
Technological Hazards Division  
Department of Homeland Security  
1111 Broadway, Suite 1200  
Oakland, CA 94607-4052

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 DRS Deputy Director ([Troy.Pruett@nrc.gov](mailto:Troy.Pruett@nrc.gov))  
 Senior Resident Inspector ([Michael.Peck@nrc.gov](mailto:Michael.Peck@nrc.gov))  
 Branch Chief, DRP/B ([Vincent.Gaddy@nrc.gov](mailto:Vincent.Gaddy@nrc.gov))  
 Senior Project Engineer, DRP/B (Rick.Deese@nrc.gov)  
 Team Leader, DRP/TSS (Chuck.Paulk@nrc.gov)  
 RITS Coordinator (Marisa.Herrera@nrc.gov)

## Only inspection reports to the following:

DRS STA (Dale.Powers@nrc.gov)  
 J. Adams, OEDO RIV Coordinator ([John.Adams@nrc.gov](mailto:John.Adams@nrc.gov))  
 P. Lougheed, OEDO RIV Coordinator (Patricia.Lougheed@nrc.gov)  
 ROPreports  
 DC Site Secretary (Agnes.Chan@nrc.gov)

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**EXAMINATION REPORT**  
**U.S. NUCLEAR REGULATORY COMMISSION**  
**REGION IV**

Dockets: 50-275, 50-323  
Licenses: DPR-80; DPR-82  
Report : 05000275/2008301; 05000323/2008301  
Licensee: Pacific Gas and Electric Company  
Facility: Diablo Canyon Power Plant, Units 1 and 2  
Location: 7 ½ miles NW of Avila Beach  
Avila Beach, California  
Dates: June 13-23, 2008  
Inspectors: S. M. Garchow, Chief Examiner, Operations Branch  
Tom McKernon, Senior Operations Engineer  
Greg Werner, Senior Projects Engineer  
Richard Baldwin, Senior Operations Engineer, NRC Region II  
Approved By: Ryan E. Lantz, Chief  
Operations Branch  
Division of Reactor Safety

## SUMMARY OF FINDINGS

ER 05000275/2008301; 05000323/2008301; June 13 - 23, 2008; Diablo Canyon Power Plant, Units 1 and 2; Initial Operator Licensing Examination Report.

NRC examiners evaluated the competency of 9 applicants for reactor operator licenses, 3 applicants for instant senior operator licenses and 2 applicants for upgrade senior operator licenses at Diablo Canyon Power Plant, Units 1 and 2. The licensee developed the examinations using NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 9, Supplement 1. The written examination was administered by the licensee on June 13, 2008. NRC examiners administered the operating tests on June 16 - 23, 2008. The examiners determined that all 14 applicants satisfied the requirements of 10 CFR Part 55, and the appropriate licenses have been issued.

A. NRC-Identified and Self-Revealing Findings

No findings of significance were identified.

B. Licensee-Identified Violations

None.

## REPORT DETAILS

### 4. OTHER ACTIVITIES (OA)

#### 4OA5 Other Activities (Initial Operator License Examination)

##### .1 License Applications

###### a. Scope

The NRC examiners reviewed all 14 license applications submitted by the licensee to ensure the applications reflected that each applicant satisfied relevant license eligibility requirements. The applications were submitted on NRC Form 398, "Personal Qualification Statement," and NRC Form 396, "Certification of Medical Examination by Facility Licensee." The examiners also audited 5 of the license applications in detail to confirm that they accurately reflected the subject applicants' qualifications. This audit focused on the applicants' experience and on-the-job training, including control manipulations that provided significant reactivity changes.

###### b. Findings

No findings of significance were identified.

##### .2 Operator Knowledge and Performance

###### a. Examination Scope

On June 13, 2008, the licensee proctored the administration of the written examinations to all 14 applicants. The licensee staff graded the written examinations, analyzed the results, and presented their analysis to the NRC on June 16, 2008.

The NRC examination team administered the various portions of the operating test to all 14 applicants on June 16 - 23, 2008. The 9 applicants for reactor operator licenses participated in two or three dynamic simulator scenarios, a control room and facilities walkthrough test consisting of 11 system tasks, and an administrative test consisting of 4 administrative tasks. The 3 applicants seeking an instant senior operator license participated in two or three dynamic simulator scenarios, a control room and facilities walkthrough test consisting of 10 system tasks, and an administrative test consisting of 5 administrative tasks. The 2 applicants for upgrade senior operator licenses participated in two dynamic simulator scenarios, a control room and facilities walkthrough test consisting of 5 system tasks, and an administrative test consisting of 5 administrative tasks.

###### b. Findings

All 14 of the applicants passed all parts of the operating test. For the written examinations, the reactor operator applicants' average score was 92 percent and ranged from 87 to 97 percent; the senior operator applicants' average score was 93 percent and ranged from 91 to 98 percent. The overall written examination average

was 93 percent. The text of the examination questions may be accessed in ADAMS under the accession number noted in the attachment.

Chapter ES-403 and Form ES-403-1 of NUREG-1021 require the licensee to analyze the validity of any written examination questions that were missed by half or more of the applicants. The licensee conducted this performance analysis for five questions that met this criterion and submitted the analysis to the chief examiner. Based on this analysis, all five questions were valid and remedial training will be provided on each question. There were no examination changes recommended by the analysis.

.3 Initial Licensing Examination Development

a. Examination Scope

The licensee developed the examinations in accordance with NUREG-1021, Revision 9, Supplement 1. All licensee facility training and operations staff involved in examination preparation and validation were on a security agreement. The licensee submitted the outlines for the written examinations and operating tests on March 27, 2008. The NRC reviewed the outlines against the requirements and provided comments to the licensee. The licensee submitted the draft examination package on April 23, 2008. The NRC reviewed the draft examination package against the requirements and provided comments to the licensee on the examination on May 13, 2008. The NRC examination team conducted an onsite validation of the operating test and provided further comments during the week of May 19, 2008. The licensee satisfactorily completed comment resolution on May 23, 2008.

b. Findings

The NRC approved the initial examination outlines and advised the licensee to proceed with development of the written examinations and operating tests.

The examiners determined that the written examinations and operating tests initially submitted by the licensee were within the range of acceptability expected for a proposed examination.

No findings of significance were identified.

.4 Simulation Facility Performance

a. Examination Scope

The NRC examiners observed simulator performance with regard to plant fidelity during the examination validation and administration.

b. Findings

No findings of significance were identified.

.5 Examination Security

a. Examination Scope

The NRC examiners reviewed examination security for examination development during both the onsite preparation week and examination administration week for compliance with 10 CFR 55.49 and NUREG-1021. Plans for simulator security and applicant control were reviewed and discussed with licensee personnel.

b. Findings

No findings of significance were identified.

4OA6 Meetings, Including Exit

The chief examiner presented the examination results to Mr. Jim Becker, Diablo Canyon Power Plant Site Vice President, and other members of the licensee's management staff on June 23, 2008. The licensee acknowledged the findings presented.

The licensee did not identify any information or materials used during the examination as proprietary.

ATTACHMENT: SUPPLEMENTAL INFORMATION

## **SUPPLEMENTAL INFORMATION**

### **KEY POINTS OF CONTACT**

#### Licensee Personnel

S. Hackleman, Learning Services Supervisor  
O. Olner, Learning Services Operations Liaison  
D. Burns, Exam Supervisor

#### NRC Personnel

M. Peck, Senior Resident Inspector

### **ADAMS DOCUMENTS REFERENCED**

Accession No. ML081960066 – Final-Written Examination  
Accession No. ML081960110 – Final-Operating Test