

needs  
Bools

# PACIFIC GAS AND ELECTRIC COMPANY

PG&E +

77 BEALE STREET, SAN FRANCISCO, CALIFORNIA 94106  
P. O. BOX 7442, SAN FRANCISCO, CALIFORNIA 94120

TELEPHONE (415) 781-4211  
TELECOPIER (415) 543-7813

**ROBERT OHLBACH**  
VICE PRESIDENT AND GENERAL ATTORNEY

**CHARLES T. VAN DEUSEN**  
**PHILIP A. CRANE, JR.**  
**HENRY J. LaPLANTE**  
**JOHN B. GIBSON**  
**ARTHUR L. HILLMAN, JR.**  
**CHARLES W. THISSELL**  
**DANIEL E. GIBSON**  
**JACK F. FALLIN, JR.**  
**JOSEPH I. KELLY**  
ASSISTANT GENERAL COUNSEL

**GILBERT L. HARRICK**  
**GLENN WEST, JR.**  
**HOWARD V. GOLUB**  
**JAMES C. LOGSDON**  
**ROBERT L. BORDON**  
**PETER W. HANSCHEM**  
**RICHARD F. LOCKE**  
**DAVID L. LUDVIGSON**  
**WILLIAM H. EDWARDS**  
**F. RONALD LAUPHEIMER**  
**ROBERT R. RICKETT**  
**DAVID J. WILLIAMSON**  
**BRUCE R. WORTHINGTON**  
SENIOR COUNSEL

**EDWARD J. McDANNEY**  
**DAN GRAYSON LUSBOCK**  
**BERNARD J. DELLASANTA**  
**JOSHUA BAR-LEV**  
**JOSEPH S. ENGLERT, JR.**  
**ROBERT L. HARRIS**  
**DOUGLAS A. GOLESBY**  
**J. PETER SAUMGARTNER**  
**JOHN N. FRYE**  
**J. MICHAEL REIDENBACH**  
**IVOR E. SAMSON**  
**SHIRLEY A. WOOD**

**DAVID W. ANDERSON**  
**DIANA BERGHAUSEN**  
**LEIGH S. CASSIDY**  
**AUDREY DAINES**  
**DONALD D. ERICKSON**  
**PATRICK G. GOLDEN**  
**PAULA Y. HAYNES**  
**RICHARD C. JONES**  
**HARRY W. LONG, JR.**  
**JOHN R. LOW**  
**ROBERT S. McLENNAN**  
**RICHARD H. MOSS**  
**SHIRLEY A. SANDERSON**  
**JACK W. SHUCK**  
**KENNETH YANG**

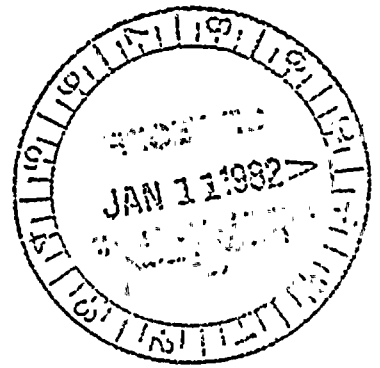
**IATHAN T. ANNAND**  
**STEVEN P. BURKE**  
**PAMELA CHAPPELLE**  
**GARY P. ENCINAS**  
**DAVID C. GILBERT**  
**STEVEN P. GREENWALD**  
**JUAN M. JAYO**  
**MERCK E. LIPSON**  
**JESSICA LORING**  
**A. KIRK MCKENZIE**  
**RICHARD L. MEISS**  
**ROGER J. PETERS**  
**JO ANN SHAFER**  
**LOUIS E. VINCENT**  
ATTORNEYS

January 8, 1982

Mr. Harold R. Denton, Director  
Office of Nuclear Reactor Regulation  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Mr. R. H. Engelken, Director  
Region V  
U. S. Nuclear Regulatory Commission  
1450 Maria Lane, Suite 210  
Walnut Creek, CA 94596

Re: Docket No. 50-275  
Diablo Canyon Unit 1  
License No. DPR-76



Dear Sirs:

In accordance with Commission Order CLI-81-30, enclosed is our semi-monthly Status Report dated January 8, 1982 for the Diablo Canyon seismic review. This report summarizes the progress of our technical work from December 22, 1981 through January 6, 1982. In addition, a report from our independent consultant, R. L. Cloud Associates, Inc., entitled "Progress Report of Seismic Service-Related Contracts Prior to June 1978, Diablo Canyon Nuclear Power Plant, Progress Report No. 5," is attached.

Sincerely,

*Philip A. Crane*

Enclosure (40)

cc (w/enc.): Mr. Frank J. Miraglia, Jr., Chief  
Licensing Branch No. 3  
Division of Licensing  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

~~A048~~  
3  
~~1/40~~

Service List

8201130475 820108  
PDR ADOCK 05000275  
R PDR

Bools  
S/11

PACIFIC GAS AND ELECTRIC COMPANY  
SEMI-MONTHLY STATUS REPORT  
DIABLO CANYON SEISMIC REVIEW PROGRAM  
JANUARY 8, 1982

Summary

This report summarizes the progress of our seismic review program from December 22, 1981 through the close of business on Wednesday, January 6, 1982.

The reviews of instrumentation, mechanical equipment and piping are complete and all resultant design revisions are issued. The conduit support analysis is scheduled to be complete by January 15, 1982, and the piping support review and redesign are scheduled to be complete by January 18, 1982.

We have reviewed the attached progress report by R. L. Cloud Associates, Inc. The incorporation of Error and Open Item Reports (EOI) has been initiated with this report. All items covered by EOIs will be reviewed by PGandE for appropriate action. The significance of items will be addressed in their final dispositions.

Technical Work Progress

Civil Engineering

Structures

Verified seismic loads for approximately 40% of the pipe supports attached to the annulus structure have been received from Mechanical Engineering. Confirmatory analysis of the annulus structure for equipment seismic reaction loads is in progress and will be completed after the remaining piping support loads are finalized.

Conduit Supports

Approximately 90% of the electrical conduit supports have been reviewed and found to be qualified for the revised annulus spectra. The analysis is scheduled to be complete by January 15, 1982.

...8201130475

Mechanical Engineering

Mechanical Equipment

The review of mechanical equipment and mountings is complete. One of the 95 containment fan cooler attachment welds to the steel concrete embedments requires modification. This is scheduled to be complete by January 20, 1982. All other mechanical equipment and mountings are qualified as-built.

Instrumentation

The instrumentation review is complete. Field modifications are scheduled to be complete by January 20, 1982.

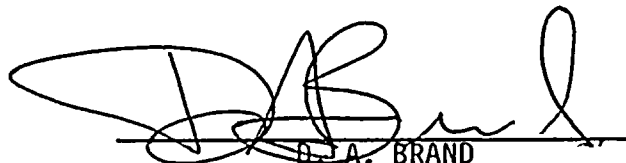
Piping

All piping; valves and equipment nozzles have been requalified to the revised annulus spectra.

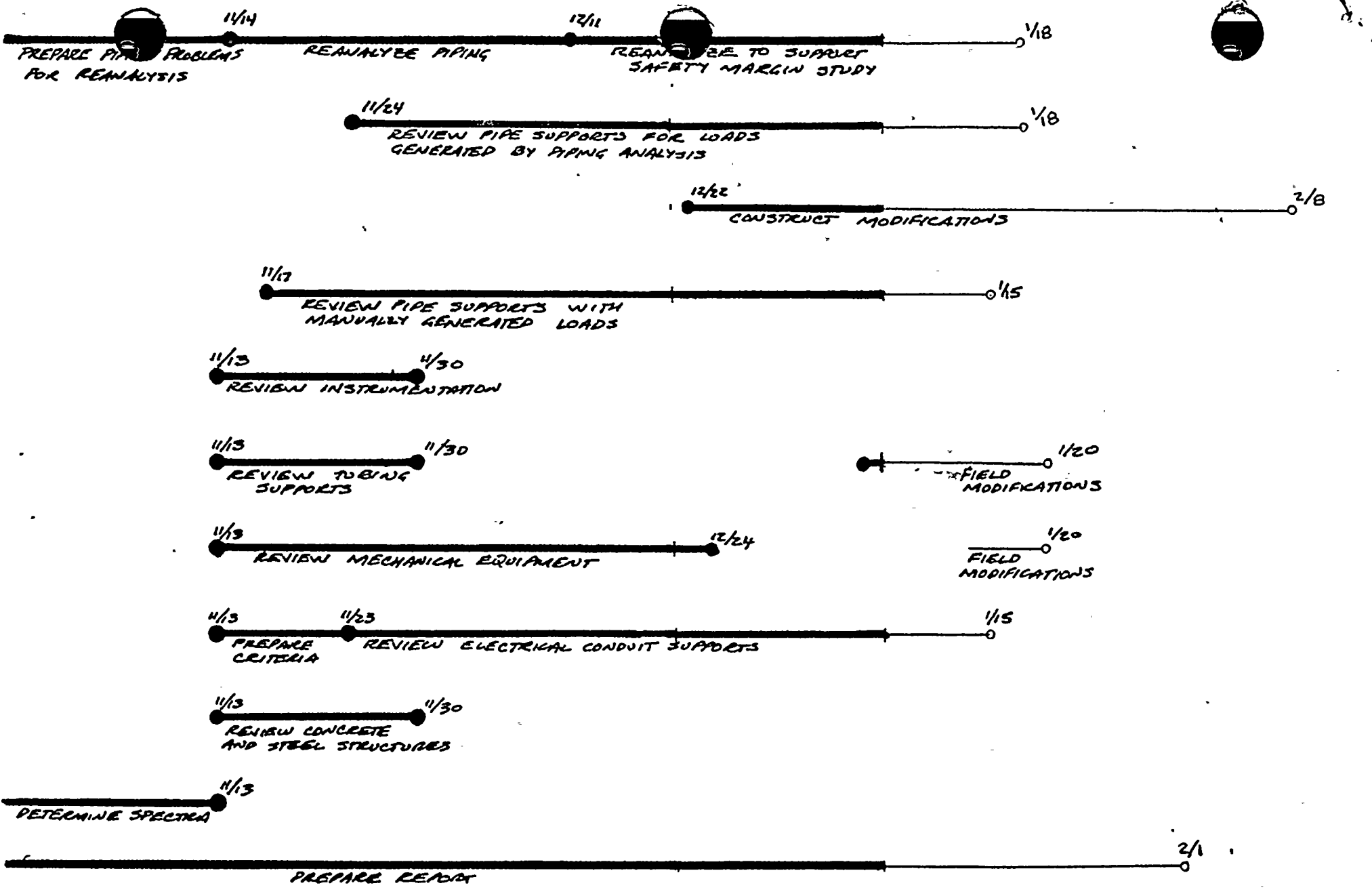
The review of supports associated with piping analyses is approximately 80% complete. Four hundred and fifty-six have been qualified as-built and fifty-two require modification. Review and redesign of supports are scheduled to be complete by January 18, 1982.

Review and qualification of pipe supports with manually calculated loads which are subjected to higher loads due to the revised annulus spectra are complete with the exception of three supports. To date, twelve supports require modification and the remainder are qualified as-built. Review and qualification of these three supports is scheduled to be complete by January 15, 1982.

During the reanalysis process, eleven small bore pipe single rod supports were found to be installed in locations requiring vertical seismic restraints. Since a single rod support does not restrain piping in the upward direction, it can not qualify as a vertical seismic restraint. Review of all Unit 1 small bore designs has identified a total of forty such supports. Modifications of these supports is scheduled to be complete by February 1, 1982.



D. J. A. BRAND  
Vice President, Engineering



10/30    11/6    11/13    11/20    11/27    12/4    12/11    12/18    12/25    1/1/82    1/8    1/15    1/22    1/29    2/5    2/12

PROGRESS CHART-ANNULUS AREA SEISMIC REVIEW PROGRAM

STATUS AS OF 1-6-82

ROBERT L. CLOUD ASSOCIATES, INC.

125 UNIVERSITY AVENUE

BERKELEY, CALIFORNIA 94710

(415) 841-9296

P 105-4

January 6, 1982

Mr. George Maneatis  
Senior Vice President  
Pacific Gas and Electric Company  
77 Beale Street  
San Francisco, CA 94106

Dear Mr. Maneatis:

Enclosed please find our fifth bi-weekly progress report on  
the seismic reverification program.

Yours truly,

*R. L. Cloud / za*  
R. L. Cloud

RLC:sgp

Enclosure

cc: James Rocca