

8/29/78

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)
DISTRIBUTION FOR INCOMING MATERIAL

50-275/323

REC: STOLZ J F
NRC

ORG: CRANE P A
PACIFIC GAS & ELEC

DOCDATE: 08/24/78
DATE RCVD: 08/28/78

DOCTYPE: LETTER NOTARIZED: NO

COPIES RECEIVED
LTR 1 ENCL 0

SUBJECT:
FURNISHING RESPONSE TO SERIES OF ADD QUESTIONS REC'D FROM NRC ON 07/31/78
CONCERNING APPLICANT'S FINANCIAL QUALIFICATIONS.

PLANT NAME: DIABLO CANYON - UNIT 1
DIABLO CANYON - UNIT 2

REVIEWER INITIAL: XJM
DISTRIBUTER INITIAL: *nc*

***** DISTRIBUTION OF THIS MATERIAL IS AS FOLLOWS *****

NOTES:
J HANCHETT W/1 CY ALL MATERIAL
F HEBDON W/1 CY ALL SAFETY MATERIAL

LICENSE APPLICATION AMDTS (GENERAL INFO)
(DISTRIBUTION CODE B005)

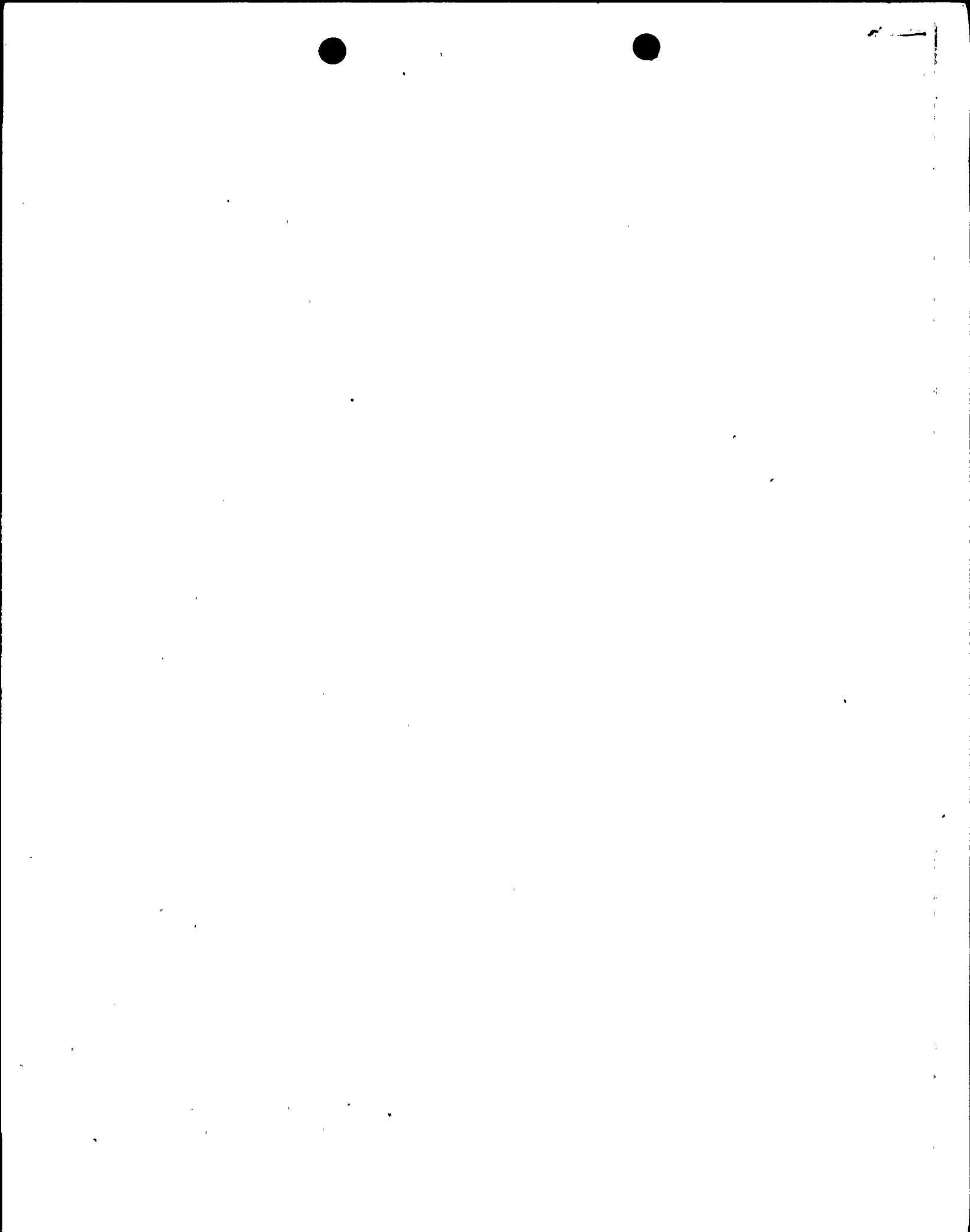
| | | |
|-------------|----------------------------------|-------------------------------|
| FOR ACTION: | BR CHIEF LWR#1 BC**LTR ONLY(1) | PROJ MGR ALLISON**LTR ONLY(1) |
| | LIC ASST LWR#1 LA**LTR ONLY(1) | |
| FOR INFO: | MOORE**LTR ONLY(1) | EPB#1 BC**LTR ONLY(1) |
| FOR INFO: | J JACKSON**LTR ONLY(1) | SLATER**LTR ONLY(1) |
| INTERNAL: | REG FILE**LTR ONLY(1) | NRC PDR**LTR ONLY(1) |
| | I & E**LTR ONLY(2) | OELD**LTR ONLY(1) |
| | HANAUER**LTR ONLY(1) | MELTZ**LTR ONLY(1) |
| | SALTZMAN**LTR ONLY(1) | RUTBERG**LTR ONLY(1) |
| EXTERNAL: | LPDR'S | |
| | SAN LUIS OBISPO, CA**LTR ONLY(1) | |
| | TERA**LTR ONLY(1) | |
| | NSIC**LTR ONLY(1) | |
| | ACRS CAT A**LTR ONLY(3) | |

DISTRIBUTION: LTR 22 ENCL 0
SIZE: 2P

CONTROL NBR: 782360296

MA 5P

***** THE END *****



PACIFIC GAS AND ELECTRIC COMPANY

PG&E + 77 BEALE STREET, 31ST FLOOR • SAN FRANCISCO, CALIFORNIA 94106 • (415) 781-4211

JOHN C. MORRISSEY
VICE PRESIDENT AND GENERAL COUNSEL

August 24, 1978

GILBERT L. HARRICK
GLENN WEST, JR.
DAN GRAYSON LUSBOCK
JACK F. FALLIN, JR.
BERNARD J. DELLABANTA

EDWARD J. MCGANNAY
DANIEL C. GIBSON
JOSEPH T. KELLY
HOWARD V. GOLUS
JAMES C. LOOSBOON

SENIOR COUNSEL

MALCOLM H. FURBUSH
ASSOCIATE GENERAL COUNSEL

CHARLES T. VAN DEUSEN
PHILIP A. CRANE, JR.
HENRY J. L'PLANTE
RICHARD A. CLARKE
JOHN S. GIBSON

JOSHUA BAR-LEVY
ROBERT L. BORDON
LEIGH S. CABBODY
BRIAN S. DENTON
GARY P. ENCINAS
DONALD ERICKSON
DAVID C. GILBERT
ANNETTE GREEN
ROBERT L. HARRIS
KEAMT R. KUBITZ
THEODORE L. LIMOSBERG, JR.
RICHARD F. LOCKE
ROBERT S. MOLEMAN
RICHARD H. MOSS
ROGER J. PETERS
ROBERT R. RICKETT
SHIRLEY A. SANDERSON
JACK W. SHUCK
SHIRLEY A. WOOD

J. PETER BAUMGARTNER
STEVEN P. BURKE
PAMELA CHAPPELLE
WILLIAM H. EDWARDS
JOSEPH S. ENOLERT, JR.
JOHN N. FRYE
PATRICK G. GOLDEN
PETER W. HANSEN
JUAN M. JAYO
F. DONALD LAUFHEIMER
MEREK E. LIPSON
HARRY W. LONG, JR.
RICHARD L. MEISS
DOUGLAS A. OLESBY
J. MICHAEL REIDENBACH
VIGOR E. SAMSON
SUE ANN LEVIN SCHIFF
DAVID J. WILLIAMSON
BRUCE R. WORTHINGTON

ATTORNEYS

ARTHUR L. HILLMAN, JR.
ROBERT OHLBACH
CHARLES W. THISELL
ASSISTANT GENERAL COUNSEL

Mr. John F. Stolz, Chief
Light Water Reactors Branch No. 1
Division of Project Management
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Re: Docket No. 50-275-OL
Docket No. 50-323-OL
Diablo Canyon Units 1 & 2

Dear Mr. Stolz:

The following is in response to a series of additional questions we received informally from the Staff on July 31, 1978 concerning PG&E's financial qualifications:

Question 1: What year does decommissioning begin?

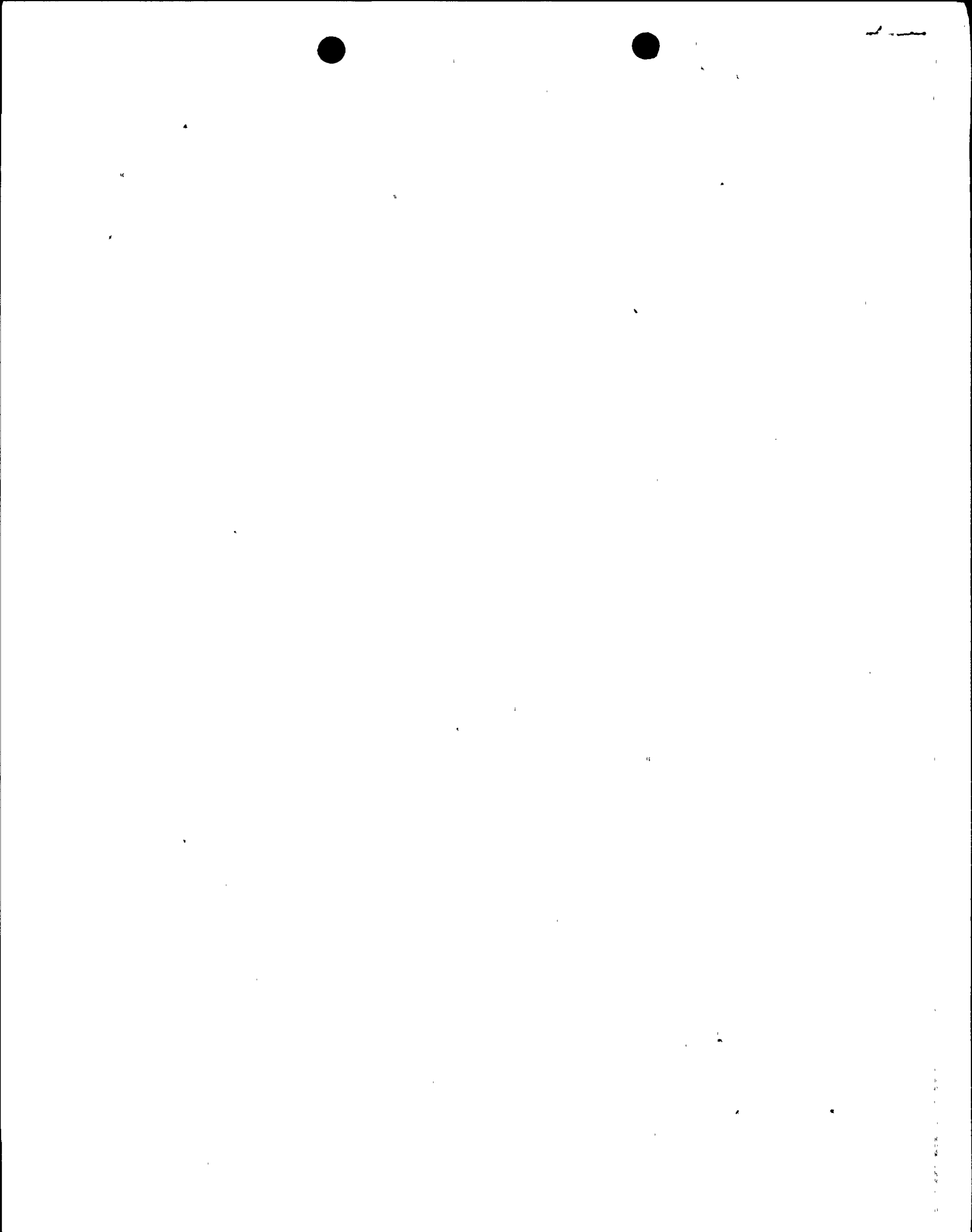
Response: Decommissioning would begin after the end of the economic operating life of the plant, at a time consistent with licensing and other requirements. It is estimated that decommissioning activities could commence 12 to 18 months after final plant shutdown, allowing that period for discharge, cooldown, and off-site shipment of the final fuel core. If we assume the plant starts up in 1979 and operates for 40 to 50 years, then decommissioning could begin sometime between the years 2019 and 2029.

Question 2: Was NUREG/CR-0130 considered in our answers, and are we consistent with it?

Response: NUREG/CR-0130 was not considered in our answers because it was not available at the time the answers were drafted. CR-0130 was published in June 1978 and received by us in July. It will be considered in our two-phase study of decommissioning which is now underway, and we will

782360296

Boos
SE
1/0



Mr. John F. Stolz

2

August 24, 1978

identify any inconsistencies which are noted. Preliminary reviews indicate we are consistent with its conclusion.

Question 3: There are several numbers being used to indicate the electric power output of the Units. What numbers should be used?

Response: The only numbers which should be used are 1084 MWe for Unit 1 and 1106 MWe for Unit 2. 1060 MWe is an old estimate developed as a nominal value before better estimates were available. 1131 MWe and 1156 MWe for Units 1 and 2, respectively, are values developed by the reactor vendor as possible "up-rated" outputs for the Units.

Question 4: What period of time is covered in the first column of tables submitted in response to information requests 1 a. and 1 b.?

Response: The first column for the Unit 1 table covers November and December 1978. The first column of the Unit 2 table covers May through December 1979. The remaining five columns of both tables cover the full twelve months' periods indicated.

Very truly yours,

Philip A. Green, V.

CC: Service List





UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

Docket

AUG 16 1978

Docket No: 50-275
and 50-323

Pacific Gas and Electric Company
ATTN: Mr. John C. Morrissey
Vice President & General Counsel
77 Beale Street
San Francisco, California 94106

Gentlemen:

SUBJECT: PWR STEAM GENERATOR CONFERENCE
(DIABLO CANYON NUCLEAR POWER PLANT, UNITS 1 AND 2)

The Division of Operating Reactors, Office of Nuclear Reactor Regulation, has organized a two-day PWR Steam Generator Conference to be held at the Holiday Inn in Bethesda, Maryland on September 7 and 8, 1978. The purpose of the conference is to provide an opportunity for industry, government, national laboratory, foreign, and possible public representatives to present and discuss operating experience relevant to steam generators and to exchange ideas for integrating design, inspection and operating procedures to ensure more reliable, safe operation of steam generators at nuclear power facilities.

Attached for your use is a Notice of the Conference and a tentative agenda.

Please notify Dr. B. D. Liaw, Division of Operating Reactors, U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, telephone (301) 492-8060 of your intent regarding attendance at the conference by August 25, 1978.

Sincerely,

D. B. Vassallo, Assistant Director
for Light Water Reactors
Division of Project Management

Enclosures:

1. Notice of Conference
2. Tentative agenda

cc w/ enclosures:
See Page 2

MA of
GD



Vertical text or markings on the right edge of the page.

Vertical text or markings at the bottom right edge of the page.

AUG 16 1978

cc: Philip A. Crane, Jr., Esq.
Pacific Gas and Electric Company
77 Beale Street
San Francisco, California 94106

Janice E. Kerr, Esq.
California Public Utilities
Commission
350 McAllister Street
San Francisco, California 94102

Mr. Frederick Eissler, President
Scenic Shoreline Preservation
Conference, Inc.
4623 More Mesa Drive
Santa Barbara, California 93105

Ms. Elizabeth E. Apfelberg
1415 Cazadero
San Luis Obispo, California 93401

Ms. Sandra A. Silver
425 Luneta Drive
San Luis Obispo, California 93401

Mr. Gordon A. Silver
425 Luneta Drive
San Luis Obispo, California 93401

Paul C. Valentine, Esq.
321 Lytton Avenue
Palo Alto, California 94302

Yale I. Jones, Esq.
100 Van Ness Avenue
19th Floor
San Francisco, California 94102

Ms. Raye Fleming
1746 Chorro Street
San Luis Obispo, California 93401

Mr. Richard Hubbard
MHB Technical Associates
366 California Avenue
Palo Alto, California 94306

Mr. James O. Schuyler, Nuclear Projects
Engineer
Pacific Gas and Electric Company
77 Beale Street
San Francisco, California 94106

Mr. W. C. Gangloff
Westinghouse Electric Corporation
P. O. Box 355
Pittsburgh, Pennsylvania 15230

Brent Rushforth, Esq.
Center for Law in the Public
Interest
10203 Santa Monica Boulevard
Los Angeles, California 90067

Arthur C. Gehr, Esq.
Snell & Wilmer
3100 Valley Center
Phoenix, Arizona 85073

Bruce Norton, Esq.
3216 North 3rd Street
Suite 202
Phoenix, Arizona 85012

Michael R. Klein, Esq.
Wilmer, Cutler & Pickering
1666 K Street, N. W.
Washington, D. C. 20006

David F. Fleischaker, Esq.
1025 15th Street, N. W.
5th Floor
Washington, D. C. 20005



ENCLOSURE NO. 1

CONFERENCE NOTICE

The Nuclear Regulatory Commission will sponsor a two-day Pressurized Water Reactor Steam Generator Workshop at the Holiday Inn in Bethesda, Maryland on September 7 and 8, 1978. The purpose of the workshop is to provide an opportunity for industry, government, national laboratory and foreign organizations, and possibly, public representatives to present and discuss operating experience relevant to steam generator tube degradation and to exchange ideas for integrating design, inspection and operating procedures to ensure safe operation of steam generators at nuclear power facilities. The workshop will be comprised of presentations by invited speakers followed by a panel discussion.

Requests for additional information, including requests to participate, should be addressed to Dr. B. D. Liaw, Division of Operating Reactors, U. S. Nuclear Regulatory Commission, Washington, D. C. 20555. Telephone (301) 492-8060.

A tentative agenda of the workshop is attached.



. . .

PRESSURIZED WATER REACTOR STEAM GENERATOR WORKSHOP

DIVISION OF OPERATING REACTORS

OFFICE OF NUCLEAR REACTOR REGULATION

U. S. NUCLEAR REGULATORY COMMISSION

WASHINGTON, D. C. 20555

General Chairman: Darrell G. Eisenhut, Assistant Director for
Systems and Projects
Division of Operating Reactors

September 7, 1978

8:00 a.m. - Registration

INTRODUCTORY SESSION: D. G. Eisenhut

9:00 a.m. - Opening and Welcome Remarks (V. Stello)

9:10 a.m. - Licensing Bases for Continued Operation of PWR Steam
Generators (D. G. Eisenhut)

9:30 a.m. - NRC Confirmatory Research Programs (C. Z. Serpan)

- Coffee Break -

GENERAL SESSION: L. C. Shao

10:00 a.m. - Westinghouse Steam Generator Operating Experiences
(Representative - Westinghouse Electric Corporation)

10:30 a.m. - Combustion Engineering Steam Generator Operating
Experiences (Representative - Combustion Engineering)

11:00 a.m. - B&W Steam Generator Operating Experiences
(Representative - Babcock & Wilcox, Inc.)

- Lunch Break -



TECHNICAL SESSION I: J. P. Knight

- 1:30 p.m. - Eddy Current Inspection Method Evaluation
(Representative - Battelle Columbus)
- 2:00 p.m. - Advanced ECT Probe Development
(Representative - ZETEC, Inc.)
- 2:30 p.m. - PNL Steam Generator Tube Integrity Program
(Representative - Pacific Northwest Laboratory)
- Coffee Break -
- 3:30 p.m. - BNL Stress Corrosion Tests
(Representative - Brookhaven National Laboratories)
- 4:00 p.m. - DOE Chemical Cleaning Program
(Representative - U. S. Department of Energy)

September 8, 1978

TECHNICAL SESSION II: B. D. Liaw

- 9:00 a.m. - Model Boiler Test for Reproducing Tube Denting
(Representative - Combustion Engineering, Inc.)
- 9:30 a.m. - Improved Westinghouse Steam Generator Design to
Avoid Various Forms of Tube Degradation
(Representative - Westinghouse Electric Corporation)
- 10:30 a.m. - Experience with Condenser Failures, Retubing and
Consequence
(Representative - Westinghouse Electric Corporation)
- 11:00 a.m. - Turkey Point Steam Generator Replacement Program
(Representative - Bechtel Power Corporation)
- Lunch Break -



100-100000

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

1:30 p.m. - PANEL DISCUSSIONS: D. G. Eisenhut

Panel Members: J. R. Weeks, L. Frank, J. Muscara,
J. Scinto, F. Almeter, B. D. Liaw,
and various industry representatives

- Need for Secondary Water Chemistry Control
- Steam Generator Tube Denting, Support Plate Cracking and Deformation
- Regulation and Regulatory Guide Interpretations - Tube Plugging Criteria, ISI Requirements
- Development ECT Inspection Techniques
- Additional Research Programs



1111