



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

November 21, 1988

DOCKET NOS.: 50-275
and 50-323

APPLICANT: PACIFIC GAS AND ELECTRIC COMPANY (PG&E)
FACILITY: DIABLO CANYON NUCLEAR POWER PLANT, UNITS 1 AND 2
SUBJECT: SUMMARY OF SEPTEMBER 12-15, 1988 PUBLIC MEETING TO DISCUSS
PROBABILISTIC RISK ASSESSMENT, DIABLO CANYON LONG TERM SEISMIC
PROGRAM (LTSP) (TAC NOS. 55305 AND 68049)

On September 12-15, 1988 the NRC staff and its consultants met with PG&E to discuss the recently submitted probabilistic risk assessment (PRA) for Diablo Canyon. The agenda for the meeting is given in Enclosure 1. Attendees at each day of the meeting are given in Enclosures 2 through 5.

At the conclusion of the meeting, the NRC staff identified a list of additional information that it needs to complete its review of the Diablo Canyon PRA. The additional information is described below.

1. Detailed information on four plant systems selected by the NRC staff for a comprehensive review. The information required includes analyses; drawings; diagrams; surveillance, maintenance, operating, and emergency procedures; etc. The four selected systems are:
 - A. High pressure safety injection system
 - B. Low pressure safety injection system
 - C. Auxiliary salt water system
 - D. Electrical systems
2. Appendix D, E and J of the detailed Diablo Canyon PRA report that was brought to the meeting by PG&E. Also needed are:
 - A. Mapping information relating event tree sequences to end states.
 - B. One-line diagrams for the AC and DC vital busses.
 - C. Copies of the FSAR and the Technical Specifications for staff consultants.
 - D. Digital information (computer files) on loading sequences, split fractions, and failure rates.
3. Human factors PRA methodology information.
4. Relay chatter PRA methodology information.
5. Data methodology information.
6. Seismic quantification information.

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November 21, 1988

The staff notes that a number of the above items have been submitted to the staff since the meeting by PG&E letters dated October 10, 1988 and October 28, 1988. The remaining information is scheduled for submittal by mid-November, 1988.

During the September 12-15, 1988 meeting, the staff and its consultants presented the results of studies conducted on the Diablo Canyon auxiliary feedwater system, the solid state protection system (part of the engineered safety features actuation system), and the reactor protection system. Draft reports on these studies will be transmitted to PG&E, in conjunction with a request that the issues raised by the studies be addressed.

At the conclusion of the meeting, the NRC staff stated that the meeting had been productive in giving an overview of the Diablo Canyon Probabilistic Risk Assessment, and in identifying the additional information needed to proceed with the staff review of the PRA.



Harry Rood, Senior Project Manager
Project Directorate V
Division of Reactor Projects - III,
IV, V and Special Projects

Enclosures:

1. Meeting Agenda
2. Attendees, 09/12/88
3. Attendees, 09/13/88
4. Attendees, 09/14/88
5. Attendees, 09/15/88

cc: w/enclosures
See next page



November 21, 1988

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original signed by Harry Rood

Harry Rood, Senior Project Manager
Project Directorate V
Division of Reactor Projects - III,
IV, V and Special Projects

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Diablo Canyon

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- 2 -

Diablo Canyon

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ENCLOSURE 1

NRC/PG&E MEETING
REVIEW OF PROBABILISTIC RISK ANALYSIS
DIABLO CANYON LONG TERM SEISMIC PROGRAM
ROCKVILLE, MARYLAND
SEPTEMBER 12-15, 1988

PURPOSE OF MEETING

1. Provide an overview of PRA results for NRC management.
2. Review analysis and model with NRC/Reviewers.
3. Discuss status of NRC review of previously submitted materials.

MONDAY, SEPTEMBER 12

- 9:00 a.m. Introductory Comments
- NRC
 - PG&E
- 9:30 a.m. PRA Summary Overview and Results - PG&E
- Discussion of IPE Issues
- 11:30 a.m. Discussion
- PRA Review Process and Schedule
 - NRC Documentation Requirements for LTSP
- 12:00 noon Lunch
- 1:00 p.m. PRA Working Session
- BNL Presentation of Preliminary Results
 - Backup Data Organization
 - Seismic Quantification

TUESDAY, SEPTEMBER 13 THROUGH THURSDAY, SEPTEMBER 15

- 9:00 a.m. ● Sequence Example [Offsite Power]
- Human Actions
 - Data Analysis
 - Other External

ENCLOSURE 2

ATTENDEES

Public Meeting on Probabilistic Risk Assessment
Diablo Canyon Long Term Seismic Program
Monday, September 12, 1988

<u>NAME</u>	<u>ORGANIZATION</u>
Bharet Agrawal	NRC/RES/PRAB
Goutam Bagchi	NRC/NRR/ESGB
Richard Barrett	NRC/NRR/RAB
William Beckner	NRC/RES/SAIB
Michael P. Bohn	Sandia (NRC)
George Bozoki	BNL (NRC)
Unte Cheh	NRC/RES/SAIB
John T. Chen	NRC/RES/SAIB
Nilesh Chokshi	NRC/RES/PRAB
Lloyd S. Cluff	PG&E
Franklin Coffman	NRC/RES/HFB
Mark Cunningham	NRC/RES/PRAB
Adel El-Bassioni	NRC/NRR/RAB
Robert G. Fitzpatrick	BNL (NRC)
Carl Johnson	NRC/RES/RHFB
Glenn Kelly	NRC/NRR/DREP
George Knighton	NRC/NRR/PDV
Barclay Lew	PG&E
Chang-Yang Li	NRC/NRR/SPLB
R. T. Locke	PG&E
Lambros Lois	NRC/NRR/SRXB
Kamal Manoly	NRC/NRR/EAD
Dick McMullen	NRC/RES/SSEB
Joseph A. Murphy	NRC/RES/DSR
Doug Naaf	PG&E
Raman Pichumani	NRC/NRR/EGSB
Dale Rasmuson	NRC/RES/HFB
Leon Reiter	NRC/NRR/EGSB
Harry Rood	NRC/NRR/PDV
Robert Rothman	NRC/NRR/ESGB
George Sarkisian	PG&E
Bruce D. Smith	PG&E
Ashok Thadani	NRC/NRR/SAD
Raymond Thierry	PG&E
Michael R. Tresler	PG&E
Harold Vandermolen	NRC/RES/PRAB
Ben Vogler	NRC/OGC
Bob Youngblood	BNL (NRC)
George Wu	PG&E

ENCLOSURE 3

ATTENDEES

Public Meeting on Probabilistic Risk Assessment
Diablo Canyon Long Term Seismic Program
Tuesday, September 13, 1988

<u>NAME</u>	<u>ORGANIZATION</u>
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George Bozoki	BNL (NRC)
Nilesh Chokshi	NRC/RES/PRAB
Lloyd S. Cluff	PG&E
Robert G. Fitzpatrick	BNL (NRC)
Peter Kohut	BNL (NRC)
Barclay Lew	PG&E
Harry Rood	NRC/NRR/PDV
M. Sabek	BNL (NRC)
Bruce D. Smith	PG&E
Raymond Thierry	PG&E
Michael R. Tresler	PG&E

ENCLOSURE 4

ATTENDEES

Public Meeting on Probabilistic Risk Assessment
Diablo Canyon Long Term Seismic Program
Wednesday, September 14, 1988

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George Bozoki	BNL (NRC)
Nilesh Chokshi	NRC/RES/PRAB
Robert G. Fitzpatrick	BNL (NRC)
Peter Kohut	BNL (NRC)
Barclay Lew	PG&E
Harry Rood	NRC/NRR/PDV
M. Sabek	BNL (NRC)
Bruce D. Smith	PG&E
Raymond Thierry	PG&E
Michael R. Tresler	PG&E

ENCLOSURE 5

ATTENDEES

Public Meeting on Probabilistic Risk Assessment
Diablo Canyon Long Term Seismic Program
Thursday, September 15, 1988

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Nilesh Chokshi	NRC/RES/PRAB
Mark A. Cunningham	NRC/RES/PRAB
Robert G. Fitzpatrick	BNL (NRC)
Peter Kohut	BNL (NRC)
Barclay Lew	PG&E
Joseph A. Murphy	NRC/RES/DSR
Leon Reiter	NRC/NRR/EGSB
Harry Rood	NRC/NRR/PDV
M. Sabek	BNL (NRC)
Bruce D. Smith	PG&E
Raymond Thierry	PG&E
Michael R. Tresler	PG&E
Harold Vandermolen	NRC/RES/DSR
G. C. Wu	PG&E

