

DEC 12 1973

Docket Nos. 50-275
and 50-323

APPLICANT: PACIFIC GAS AND ELECTRIC COMPANY (PG&E)

FACILITY: DIABLO CANYON UNITS 1 AND 2

SUMMARY OF SITE VISIT AND MEETING HELD ON NOVEMBER 14, 1973

This site visit and meeting were held to familiarize certain members of the staff with the Diablo Canyon site, and to discuss matters related to meteorology, hydrology, radiological assessment, and accident analysis. In the hydrology area, the staff was also represented by Dr. L. S. Hwang, consultant on tsunamis from Tetra Tech, Inc. An overall list of participants is attached as Enclosure No. 1.

For each of the four areas listed above, a summary of the site tour and significant items discussed at the meeting is given below.

1. Meteorology

The two meteorology towers which are currently operative at Diablo Canyon were visited and observed. Four other towers have also been used in the past in an effort to represent site meteorology. Topography at the site is extremely complex, and it is difficult to document representative atmospheric dispersion characteristics. Of the two towers currently operating, the 25-ft "A" tower is to be deactivated in the near future, and the 250-ft "E" tower located near the intake structure will remain as the permanent facility.

This tower has several instrumentation positions; the primary data recording system is magnetic tape. The system is inspected daily. Details of the program to monitor meteorological parameters in the control room have not yet been finalized, but PG&E has committed to such a program, and expects to supply this information to the staff within the time frame allotted for responses to round one questions.

Several questions raised previously during the staff's preliminary review were also discussed; PG&E indicated that nearly all of these outstanding items are addressed in Amendment I to the FSAR (received on 11-19-73).

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2. Hydrology

During the site tour, items inspected included the intake and discharge structures, the wave protection dikes or breakwaters at the intake cove, flood protection for safety-related pumps at the intake structure, Diablo Creek above the switchyard and the large culvert that passes the creek under the switchyard, the flood bypass around the switchyard embankment, and the site and road drainage system.

At the subsequent meeting, the discussion centered on questions of flood history, flood design considerations, probable maximum flood estimates, and probable maximum tsunami estimates for near-shore generators. This final item presents a potential problem with regard to meeting the review schedule. PG&E has retained Dr. Basil Wilson as a consultant to perform the tsunami analysis, but his services will not be available until after 12-1-73. The staff stressed the importance of obtaining the results of this work in time to meet the schedule dates for round one questions and responses.

3. Radiological Assessment

The radwaste concentrator compartment was visited to observe how tube withdrawal spaces are designed to preclude allowing direct radiation into adjacent areas. The unshielded tank arrays in shielded compartments were also observed, and problems that might evolve during maintenance operations were discussed. Also included in the tour were the locations of piping runs containing radioactive fluids, access controls from cold areas into higher radiation zones, personnel protection procedures, a typical monitoring station with a continuous sampler in operation, and thermoluminescent dosimeters used for environmental monitoring.

At the meeting following the site tour, discussions centered on the items listed below. Several of these involved questions from the preliminary review which had not yet been addressed:

- A. Basic AEC rationale for requiring annual man-rem exposure for inplant external radiation;
- B. AEC inhalation exposure criteria and dose assessment;
- C. The usefulness of continuous air monitors and air purifying respirators in the Health Physics iodine protection program.

PG&E agreed to address all of these items in detail in the next amendment to the FSAR.

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The first part of the document discusses the importance of maintaining accurate records. It emphasizes that proper record-keeping is essential for ensuring the integrity and reliability of the data collected. This section also touches upon the challenges associated with data management, such as ensuring consistency and preventing data loss.

In the second section, the focus shifts to the methodology used for data collection. The document describes the various techniques employed, including direct observation and the use of specialized equipment. It details how these methods were implemented to ensure that the data gathered was both comprehensive and representative of the study's objectives.

The third section addresses the analysis of the collected data. It outlines the statistical methods used to process and interpret the information. The document highlights the importance of using appropriate statistical tools to draw meaningful conclusions from the data and to identify any significant trends or patterns.

The fourth section discusses the results of the study. It presents the key findings and compares them with existing literature. The document notes that the results generally support the hypotheses, although there are some areas where the data deviates from expectations. These deviations are discussed in detail, along with potential reasons for the discrepancies.

The fifth section provides a conclusion and offers recommendations for future research. It summarizes the main points of the study and suggests ways in which the findings can be applied in practical settings. The document also identifies areas that require further investigation to address the limitations of the current study.

Finally, the document includes a list of references and an appendix. The references cite the key sources used in the study, while the appendix provides additional data and supporting information. This section is crucial for verifying the accuracy of the data and for understanding the context of the research.

The document concludes with a final statement on the significance of the research. It reiterates the value of the study and the importance of the findings. The authors express their gratitude to the funding agencies and the participants who made the study possible.

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4. Accident Analysis

The tour included a general view of the site area, with particular attention paid to areas which might be involved during evacuation procedures. In that regard, two commercial fishing vessels were observed diving for abalone within Diablo Cove. This cove is well within the one-half mile exclusion radius. PG&E indicated that a loudspeaker system or bullhorn can be utilized to warn persons in boats within the vicinity in the event of an emergency. Arrangements have also been made with the Coast Guard to insure proper evacuation. The control room was observed in light of questions which have been raised concerning post-accident control room exposure. PG&E indicated that some modifications of the control room ventilation system are presently being performed.

At the subsequent meeting the following significant items related to the FSAR were discussed:

- A. Chlorine Storage - PG&E verified the presence of chlorine storage on-site in the form of cylinders located in the pump house. It was indicated that an analysis of the potential consequences of chlorine release during storage or transport was in progress.
- B. Hydrogen Recombiners - The applicant requested guidance on whether hydrogen recombiners would be required for control of combustible gases in the containment following a LOCA. PG&E feels that adequate venting could be assured without recombiners, considering the containment design and the prevailing meteorological conditions. The staff indicated that additional information will be requested on this subject, and that PG&E will be advised in the near future as to the staff's position on recombiners. Requirements for control of combustible gas concentrations following a LOCA are discussed in Regulatory Guide 1.7.

The site tour and meetings concluded in late afternoon with all items on the meeting agenda having been covered. With regard to meeting the safety review schedule, the item in the above-mentioned areas which appears to present the greatest potential problem is the tsunami analysis for near-shore generators.

Thomas J. Hiron
PWR Branch No. 3
Directorate of Licensing

Enclosure: FOR DISTRIBUTION & CC'S SEE PAGE 4

OFFICE	Attendance List	L:PWR-3				
		x7243:tsb				
SURNAME		TJHiron				
DATE		12/ /73				



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cc w/encl:

ABC PDR

Local PDR

R. C. DeYoung

K. R. Goller

R. W. Klecker

RO (3)

TR Asst. Directors

TR Branch Chiefs

R. Cushman

V. H. Wilson

RP Asst. Directors

RP Branch Chiefs

L. Chandler

R. Fraley (16)

J. M. Hendrie

S. Block

J. E. Fairbent

E. Hawkins

L. G. Hulman

E. H. Markee

L. Soffer

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L Reading

TJHirons

PWR-3 Reading

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ENCLOSURE

ATTENDANCE LIST

PACIFIC GAS AND ELECTRIC COMPANY

J. Boots
W. Brunot
C. B. Cecilio
R. R. Fray
S. Gillespie
J. B. Hoch
W. J. Lindblad
J. A. McLaughlin
M. L. Mooney
D. Serpa
J. Shiffer
R. Swanson

AEC - STAFF

S. Block
J. E. Fairbent
E. Hawkins
T. J. Hiron
L. G. Hulman
E. H. Markee
L. Soffer

TETRA TECH, INC.

L. S. Hwang

