



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

August 11, 1988

The Honorable Robert J. Lagomarsino  
United States House of Representatives  
Washington, D.C. 20515

Dear Congressman Lagomarsino:

This letter responds to your letter of July 21, 1988, to Chairman Zech, which enclosed a letter from your constituent, Catherine Ann Wombold of Santa Maria, California. Ms. Wombold wanted information about Santa Barbara County's earthquake awareness, and she also wanted to know what effect a large-scale earthquake would have on the nuclear power plant at Diablo Canyon and whether it would endanger the public safety.

This Agency can provide no information about Santa Barbara County's earthquake awareness. However, the other issue raised by Ms. Wombold has been studied in detail by the Diablo Canyon owner, Pacific Gas and Electric Company, and by the Nuclear Regulatory Commission (NRC) staff over the past 20 years. NRC regulations (Appendix A to Part 100 of Title 10 of the Code of Federal Regulations) require that nuclear power plants be able to safely withstand the maximum seismic vibratory ground motion that can reasonably be expected to occur in the vicinity of the plant. Part 100 specifies that this finding shall be based on an evaluation of the maximum earthquake potential considering the regional and local geology and seismology and specific characteristics of local subsurface material. The NRC staff's evaluation of this issue is summarized in several supplements to the NRC Safety Evaluation Report on Diablo Canyon. The specific reports that are most relevant to Ms. Wombold's concerns are SER Supplement 1, dated January 31, 1975; Supplement 4, dated May 11, 1976; Supplement 5, dated September 10, 1976; Supplement 7, dated May 26, 1978; and Supplement 11, dated October 1, 1980.

On the basis of evaluations described in these and other reports and the results of extensive public hearings held to litigate seismic issues, the NRC staff concluded that there is reasonable assurance that the Diablo Canyon Nuclear Power Plant can safely withstand an earthquake that would produce the maximum vibratory ground motion at the plant site. For Diablo Canyon, this is a magnitude 7.5 earthquake occurring on the Hosgri fault, which is about 2½ miles from the plant at its closest approach. Other earthquakes were evaluated, such as a "great" earthquake (magnitude 8.5) on the San Andreas fault, but this earthquake would result in less severe ground motion at the plant because of its greater distance from the plant (the San Andreas is about 48 miles from the plant at the point of closest approach).

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The Honorable Robert J. Lagomarsino - 2 -

In summary, the NRC staff has concluded that the Diablo Canyon Nuclear Power Plants could withstand the earthquake producing the maximum vibratory ground motion at the plant sites without damage to the essential safety systems required to protect the health and safety of the public. On the basis of this conclusion and the finding that the Diablo Canyon plants meet all other applicable safety regulations, the two nuclear plants at Diablo Canyon were licensed by NRC to operate at full power on November 2, 1984 (Unit 1) and on August 26, 1985 (Unit 2).

The Code of Federal Regulations, Diablo Canyon Final Safety Analysis Report prepared by Pacific Gas and Electric Company, the NRC Safety Evaluation Report Supplements referenced herein, hearing transcripts, and the other information about earthquakes used by NRC in reaching its finding of seismic adequacy at Diablo Canyon are available for public examination at NRC's Local Public Document Room at the California Polytechnic State University Library, Government Documents and Maps Department, San Luis Obispo, California 93407.

I hope this information is helpful to you in responding to Ms. Wombold. Please contact me if I can be of further assistance.

Sincerely,

Original Signed By  
James M. Taylor

Victor Stello, Jr.  
Executive Director  
for Operations

DISTRIBUTION

Docket File

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Local PDR (w/cy of incoming)  
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JLee  
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FGillespie  
Sentry 88-0675

\*See previous concurrence

\*DRSP/LA:PD5  
Lee/GK for  
7/29/88

\*DRSP/PM:PD5  
HRood:dr  
7/29/88

\*TEDIT  
8/01/88

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GWKnighton  
7/29/88

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GMHolahan  
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DMCrutchfield  
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\*DPR  
FJMiraglia  
8/03/88

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8/8/88

GPA/CA  
8/11/88

EDONRR  
VStello  
8/10/88

Davis  
2/4



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VStello

8/ /88

FJMiraglia

8/3/88



2000

1. The first part of the document is a list of names and addresses. The names are: John Doe, Jane Smith, and Bob Johnson. The addresses are: 123 Main St, 456 Elm St, and 789 Oak St. The list is as follows:

Name	Address
John Doe	123 Main St
Jane Smith	456 Elm St
Bob Johnson	789 Oak St

2. The second part of the document is a list of names and addresses. The names are: Alice Brown, David Green, and Emily White. The addresses are: 101 Main St, 202 Elm St, and 303 Oak St. The list is as follows:

Name	Address
Alice Brown	101 Main St
David Green	202 Elm St
Emily White	303 Oak St

The Honorable Robert J. Lagomarsino - 2 -

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*for* DRSP/LA:PD5  
Lee  
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HRood:dr  
8/29/88

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*for* DRSP/PA:PD5  
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VStello  
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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

**ACTION**

EDO Principal Correspondence Control

FROM:

DUE: 08/09/88

EDO CONTROL: 0003851

DOC DT: 07/21/88

FINAL REPLY:

Rep. Robert J. Lagomarsino

TO:

Chairman Zech

FOR SIGNATURE OF:

\*\* GRN \*\*

CRC NO: 88-0675

Executive Director

DESC:

ROUTING:

ENCLOSES LETTER FROM CATHERINE A. WOMBOLD RE  
IMPACT OF A LARGE SCALE EARTHQUAKE ON  
DIABLO CANYON NUCLEAR POWER PLANT

JMartin, RV

DATE: 07/26/88

ASSIGNED TO:

CONTACT:

NRR

Murley

SPECIAL INSTRUCTIONS OR REMARKS:

NRR RECEIVED: JULY 26, 1988

ACTION: DRSP:CRUTCHFIELD

NRR ROUTING: MURLEY/SNIEZEK

MIRAGLIA

MARTIN

GILLESPIE

MOSSBURG

*gan*  
*Crutchfield*



OFFICE OF THE SECRETARY  
CORRESPONDENCE CONTROL TICKET

PAPER NUMBER: CRC-88-0675                      LOGGING DATE: Jul 25 88  
ACTION OFFICE: EDO  
AUTHOR: R.J. Lagomarsino--Const Ref  
AFFILIATION: U.S. HOUSE OF REPRESENTATIVES  
LETTER DATE: Jul 21 88              FILE CODE: ID&R-5 Diablo Canyon  
SUBJECT: Impact of large scale earthquake on Diablo Canyon  
          nuclear power plants  
ACTION: Direct Reply  
DISTRIBUTION: OCA to Ack  
SPECIAL HANDLING: None  
NOTES: Catherine A Wombold  
DATE DUE: Aug 8 88  
SIGNATURE:                                      DATE SIGNED:  
AFFILIATION:

EDO---003851

Rec'd Off. EDO  
Date 7-26-88  
Time 6:45

