



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

April 16, 1976

*Yellow*

Docket No.: 50-275

Honorable Charles H. Percy  
United States Senate

Dear Senator Percy:

This is in response to your note of March 17, 1976, requesting our views on a concern expressed by Mr. Eric Jacobson in his letter to you dated March 7, 1976. The Diablo Canyon Nuclear Power Plant is located on the coast about 12 miles from San Luis Obispo, California. Construction is nearly completed for the first of the two units at this site. The owner, Pacific Gas and Electric, (PG&E) applied for an operating license in 1973. The Commission's staff is currently evaluating the Final Safety Analysis Report for the plant. This evaluation is now nearing completion but has been delayed by considerations associated with the offshore Hosgri fault first reported in 1971.

Construction permits were first issued in 1968. Based on the investigations conducted at that time, the plant was designed to withstand the following earthquakes:

- (1) A great earthquake of magnitude 8.5 along the San Andreas fault 48 miles from the plant.
- (2) A major earthquake of magnitude 7.25 along the Nacimiento fault 20 miles from the plant.
- (3) A major earthquake of magnitude 7.5 along the offshore extension of the Santa Ynez fault 50 miles from the plant.
- (4) An aftershock of magnitude 6.75 not associated with a known fault six miles from the plant.

After the construction permits were issued, offshore seismic oil exploration conducted by Shell Oil Company showed the existence of a fault which had been previously unmapped. This is the Hosgri fault which runs offshore from the vicinity of Point Sal on the south to Point San Simeon on the north and passes within about 3 1/2 miles of the Diablo Canyon Nuclear Power Plant at its closest approach.

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*B/34*

Honorable Charles H. Percy  
United States Senate

Dear Senator Percy:

The Diablo Canyon Nuclear Power Plant is located on the coast about 12 miles from San Luis Obispo, California. Construction is nearly completed for the first of the two units at this site. The owner, Pacific Gas and Electric, applied for an operating license in 1973. The Commission's staff is currently evaluating the operating license application. This evaluation is now nearing completion and has been delayed nearly two years by considerations associated with the Hosgri fault, first reported offshore from the plant in 1971.

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After the construction permits were issued, offshore seismic oil exploration conducted by Shell Oil Company showed the existence of a fault which had been previously unmapped. This is the Hosgri fault which runs offshore from the vicinity of Point Sal on the south to Point San Simeon on the north and passes within about 3 1/2 miles of the Diablo Canyon Nuclear Power Plant at its closest approach.

The Pacific Gas and Electric Company was asked to provide additional data concerning the offshore fault zone. Seismic surveys performed by PG&E and our advisor, the U. S. Geological Survey (USGS) indicated a discontinuous fracture zone near the surface which could be caused by a continuous fault at depth. The surveys indicated the center of the main fault zone to be 3 1/2 miles offshore from the plant with a smaller splinter fault within 2 1/2 miles.

Such a fault could produce higher levels of shaking than were considered in design of the plant. The Applicant and his consultants, our staff, the USGS, and our structural engineering consultant, Dr. Nathan Newmark of the University of Illinois, are considering potential ground motion at the site from an earthquake on the Hosgri fault and the capability of the plant to withstand such ground motion.

Nuclear power plants are designed to withstand the pressures and temperatures which would be generated by a large break in the primary cooling system. Because these design loads frequently far exceed the seismic loads, the seismic design generally contains a large margin of safety. These safety margins are now being assessed. If analysis of plant design indicates that an earthquake that is possible on the Hosgri fault could cause damage, the NRC will require PG&E to redesign and modify the plant to withstand the shaking.

I trust that the above information is sufficient for your response to Mr. Jacobson. Please let me know if I can be of further assistance on this matter.

Sincerely,

Enclosure:

Note transmitting ltr from

DIST: Mr. Jacobson dtd 3/17/76

[[Signed]] William J. Dircks

William J. Dircks

Assistant Executive Director  
for Operations

DOCKET FILES 50-275

NRR Reading

GSB Reading

DSE Reading

EDO Reading

NRC-PDR

LOCAL-PDR

Brusche

ECase

JMiller

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RHeineman

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WGammill

RHofmann

JStepp

CA (3)

MGroff (00101)

ELD

MJambor

DMuller

WRagan

GKnighton

BYoungblood

I&E (4)

GErtter (00101)

ELD

4/8/76

|          |             |          |         |        |         |         |
|----------|-------------|----------|---------|--------|---------|---------|
| OFFICE   | DSE:ST:GMB  | DSE:ST   | DSE     | NRR    | EDO     | CA      |
| TURNNAME | RHofmann/rw | WGammill | DMuller | ECase  |         |         |
| DATE     | 4/7/76      | 4/7/76   | 4/2/76  | 4/5/76 | 4/14/76 | 4/14/76 |





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

April 9, 1976

L. V. Gossick, Executive Director of Operations

The attached memo was held an extra day by  
OELD thereby making it late for distribution.

A handwritten signature in cursive script, appearing to read "H. R. Denton".

H. R. Denton, Director  
Division of Site Safety  
and Environmental Analysis  
Office of Nuclear Reactor  
Regulation

A large, stylized handwritten signature in cursive script, possibly reading "Denton".

Rec'd by \_\_\_\_\_  
Date 4/13/76  
Time \_\_\_\_\_

March 17, 1976

*United States Senate*

Mr. Eric Jacobson  
3620 North Fremont  
Chicago, Illinois 60613

Respectfully referred to:

Nuclear Regulatory Commission

(please see last paragraph of letter)

Please reply to the attention of N. Wells.

Because of the desire of this office to be responsive to all inquiries and communications, your consideration of the attached is requested. Your findings and views, in duplicate form, along with return of the enclosure, will be appreciated by

Rec'd Off. Dir.

Date

3/26/76

Time

9:20

Charles H. Percy

U.S.S.

Form #2



2.7.76

Mo  
AR  
CP

Senator Percy:

Regarding Food Stamps

We favor legislation eliminating the purchase requirement for food stamps so that more of the poor could participate in the program.

We also urge amendments which raise the income eligibility guidelines to assure assistance to all who need it.

Regarding House Resolution 9005 - Developmental Assistance

we urge your support of amendments to retain appropriations for development assistance to the full authorization levels and to cut funds for military & security assistance

URGENT - PLEASE look into & inform us about the EL Diablo Nuclear Power Plant in SAN Luis Obispo County - California - This installation has been built over a fault line without adequate safeguards.

Eric H. Jackson  
3620 N. Fremont  
Chicago - Illinois