50-275/323

50-275

OCT 0 6 1978

Distribution w/o enclosure 2:

Docket File	E. Hughes
NRC PDR	L. Dreher
Local PDR	J. F. Stolz
EDO Reading	D. P. Allison
NRR Reading	E. G. Hylton
LWR 1 File	J. Yore, ASLB
H. R. Denton	IE (3)
E. G. Case	SECY Mail Facility (3)
R. S. Boyd	(#78-1335)
Attorney, ELD	D. F. Bunch
CA (3)	R. J. Mattson
G. Ertter (#04518)	R. C. DeYoung
M. Groff	V. Stello

The Honorable Phillip Burton
United States House of Representatives
Washington, D. C. 20515

Dear Congressman Burton:

I am pleased to respond to your letter of September 6, 1978 regarding the Diablo Canyon Nuclear Power Plant in Northern California. A brief history of the Diablo Canyon plant, which serves as background information is provided in Enclosure No. 1.

First, it should be noted that the plant is not located on any known capable fault. It is located about 3 1/2 miles from the offshore Hosgri fault which became known publicly after plant construction began. The current issue in the Commission's review of this matter is whether the plant, after appropriate modifications, is designed to safely withstand ground motions that could result from an earthquake on the Hosgri fault.

You asked for the reasons which supported approval of building this plant in this area. Basically, at the time the construction permits were issued in 1968 and 1970, independent reviews conducted by the U. S. Atomic Energy Commission, the U. S. Geological Survey and the U. S. Coast and Geodetic Survey indicated that the plant's original seismic design basis was adequate for the plant site. These reviews were documented and seismic design issues were aired at public hearings prior to decisions on the construction permits. Regarding offshore geology, some specific issues unrelated to the Hosgri fault were considered and resolved. At the time of the construction permit reviews the general understanding of offshore geologic structure and the lack of current seismic activity in the area did not appear to indicate the presence of capable offshore faults that would be big enough and close enough to affect the seismic design basis, particularly since the seismic design basis was felt to be quite conservative.

When the operating license review began in 1973 the original assessment of the site's earthquake potential came into question because of newly developed information about the Hosgri fault. A fault map indicating that the fault has substantial length and passed close to the plant had been published in 1971. In addition, shortly after the operating license review began, investigations by the U. S. Geological Survey suggested that the fault might be considered capable of producing earthquakes in the future. In 1976 the NRC staff and the U. S.

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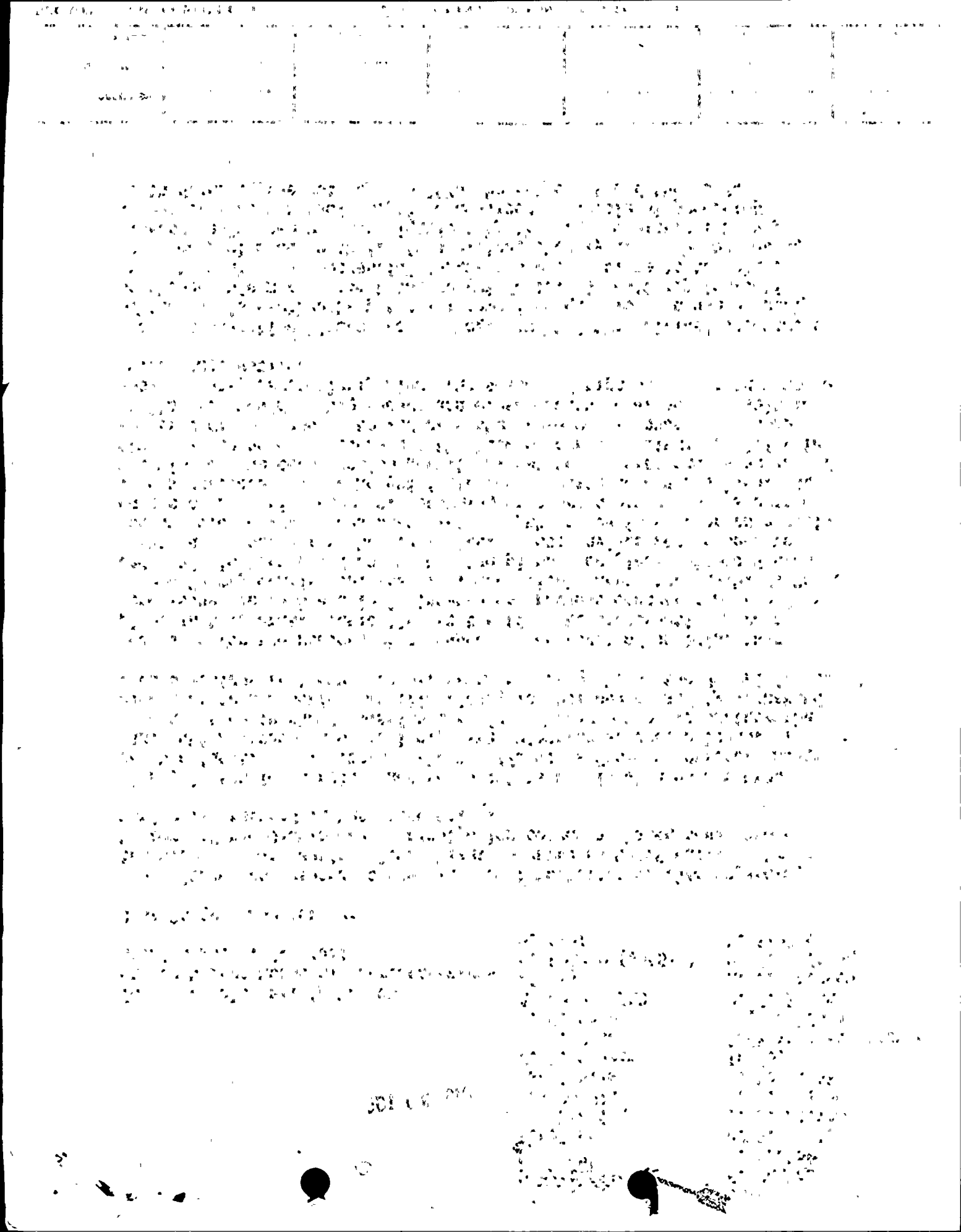

Distribution w/out enclosures:

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The Honorable Phillip Burton
United States House of Representatives
Washington, D. C. 20515

Dear Congressman Burton:

I am pleased to respond to your letter of September 6, 1978 regarding the Diablo Canyon Nuclear Power Plant in Northern California. A brief history of the Diablo Canyon plant which serves as background information is provided in Enclosure No. 1.

First, it should be noted that there has never been any question about the plant being located literally on a fault. The Diablo Canyon Nuclear Power Plant is located about 3 1/2 miles from the offshore Hosgri fault which came to light after plant construction began. The current issue in the Commission's review of this matter is whether the plant, after appropriate modifications, is designed to safely withstand ground motions that could result from an earthquake on the Hosgri fault.

You asked for the reasons which supported approval of building this plant in this area. Basically, at the time the construction permits were issued in 1968 and 1970, independent reviews conducted by the U. S. Atomic Energy Commission, the U. S. Geological Survey and the U. S. Coast and Geodetic Survey indicated that the plant's original seismic design basis was adequate for the plant site. These reviews were documented and seismic design issues were aired at public hearings prior to decisions on the construction permits. With regard to offshore geology, some specific issues, unrelated to the Hosgri fault, were considered and resolved. At the time of the construction permit reviews the general understanding of offshore geologic structure and the lack of current seismic activity in the area did not appear to indicate the presence of capable offshore faults that would be big enough and close enough to affect the seismic design basis, particularly since the seismic design basis was felt to be quite conservative.

When the operating license review began in 1973 the original assessment of the site's earthquake potential came into question because of newly developed information about the Hosgri fault. A fault map indicating that the fault has substantial length and passed close to the plant had been published in 1971. In addition, shortly after the operating license review began, investigations by the U. S. Geological Survey suggested that the fault might be considered capable of producing earthquakes in the future. In 1976 the NRC staff and the U. S.

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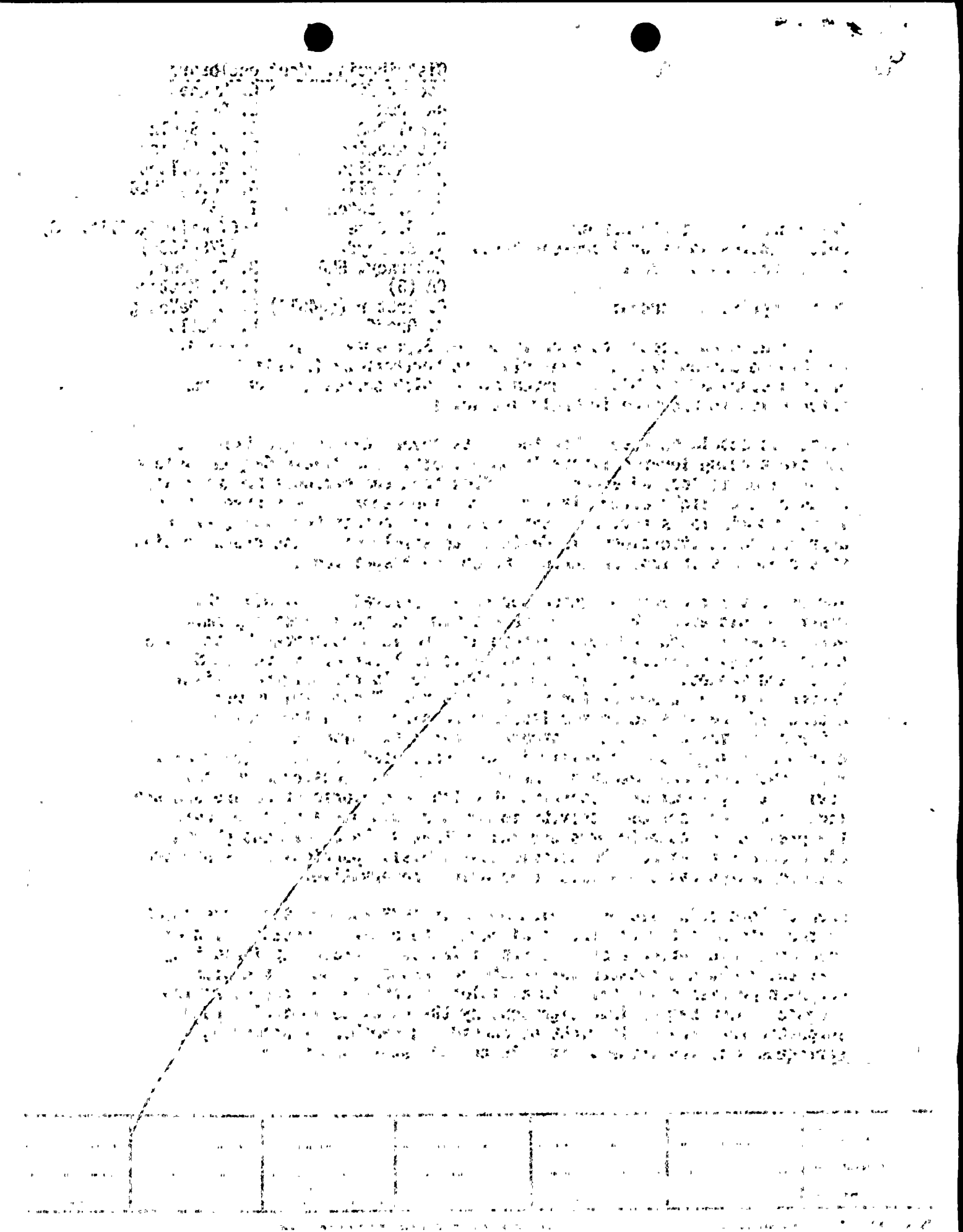

Geological Survey completed their reassessments and revised the seismic design basis for the plant site. The plant's seismic resistance is being upgraded to meet the new seismic design basis prior to a decision on the operating license application.

You also asked if reports that the facility will be decommissioned in 30-40 years are true. It is generally expected that the facilities will be decommissioned in the time frame that you indicated. Operating licenses are generally issued with expiration dates 40 years after the dates of issuance of the construction permits, which would be in the years 2008 and 2010 for the two units at Diablo Canyon. In addition, utilities generally plan on a useful life of 30-40 years for nuclear plants.

Finally, you mentioned that your constituent was concerned about radioactive waste. A brief discussion of this subject is provided in Chapter 5 of the Commission's 1977 Annual Report (Enclosure No. 2). Specifically, the decommissioning aspects of waste management are discussed on pages 75 and 76.

I trust you will find this information responsive to your request.

Sincerely,

(Signed)
William J. Dircks
Deputy Executive Director
for Operations

Enclosures:
1. Summary, Diablo Canyon Nuclear Power Plant
2. Chapter 5, Waste Management, NRC Annual Report, 1977

OELD changes on first page entered 10/2/78 DPAllison

Concur subject to changes noted on p. 1.

	NRR	NRR	EDO			
	EGCase	HRDenton	LVGossick			
	09/ /78	09/ 3 /78	09/ 4 /78			

CGP HEW2

OFFICE	DPM:LWR #1 DPA	DPM:LWR #1 DPA	DPM:LWR:AD	OELD	DPM	OCA
SURNAME	DPAllison:pcm	JFStolz	DBVassallo		RSBoyd	
DATE	09/ 26 /78	09/ 26 /78	09/26 /78	09/ 2 /78	09/ 3 /78	09/6 /78

(Signed)
William L. Dircks
Deputy Executive Director
for Operations

ENCLOSURE NO. 1
SUMMARY
DIABLO CANYON NUCLEAR POWER PLANT

Construction permits for Units 1 and 2 of the Diablo Canyon Nuclear Plant, located on the California coast about 12 miles from San Luis Obispo, were issued in 1968 and 1970 respectively. In addition to the AEC review of the proposed site, independent reviews were performed for the AEC by the U. S. Geological Survey and the U. S. Coast and Geodetic Survey. Based on these investigations, the units were designed and constructed to withstand the maximum earthquake potential identified for the site at that time (0.4g horizontal acceleration).

In 1971, the existence of a fault--now known as the Hosgri Fault--passing about 3.5 miles offshore from the plant site came to light. When application to the AEC (now NRC) for an operating license was made in 1973, detailed investigation of the Hosgri Fault began, leading to a conclusion by the NRC and the U. S. Geological Survey that the maximum potential earthquake ground motion at the proposed site "may be more severe than that for which the plant had been originally designed." Thus in April of 1976, the applicant for an operating license--the Pacific Gas and Electric Company--was advised that the plant's seismic capabilities should be reanalyzed "to determine what modifications would be necessary to withstand the more severe ground motion (0.75g)" predicated on the existence of the offshore fault.

As of September 1978 the applicant has completed most of the analysis work and plans to complete the extensive modifications for Unit 1 about the end of 1978. The Advisory Committee on Reactor Safeguards completed its review in July 1978, public hearings before the Atomic Safety and Licensing Board are scheduled to begin in December 1978 and a decision on the operating license application is expected in the Spring of 1979.

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SURNAME➤						
DATE➤						

PHILLIP BURTON
6TH DISTRICT, CALIFORNIA

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WASHINGTON, D.C. 20515
PHONE 202-225-4965

DISTRICT OFFICE:
450 GOLDEN GATE AVENUE
SAN FRANCISCO, CALIFORNIA 94102
PHONE: 415-556-4862

Congress of the United States
House of Representatives
Washington, D.C. 20515

COMMITTEES:
EDUCATION AND LABOR
INTERIOR AND INSULAR AFFAIRS

CHAIRMAN, SUBCOMMITTEE ON NATIONAL PARKS AND INSULAR AFFAIRS

September 6, 1978

Mr. Carlton C. Kammerer
Director
Office of Congressional Affairs
Nuclear Regulatory Commission
1717 H Street, N.W.
Washington, D.C. 20555

Dear Mr. Kammerer:

I recently received correspondence from a constituent regarding the Diablo Canyon Nuclear Power Plant in Northern California.

She posed questions regarding the safety factors of this power facility. My constituent is concerned about the construction of a nuclear power plant on an earthquake fault, in addition to the tremendous amount of radioactive waste which will be created by such a facility.

Please advise me of the reasons which supported the approval of building this plant in this area. Also, please advise me if reports that this facility will be decommissioned in 30-40 years are true.

Your quick assistance in providing me with information so that I may properly respond to my constituent is greatly appreciated.

Sincerely,

PHILLIP BURTON
Member of Congress

PB:why

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

MEMORANDUM FOR: Lee V. Gossick, Executive Director for Operations

FROM: Dennis P. Allison, Project Manager, Light Water Reactors Branch No. 1 Division of Project Management

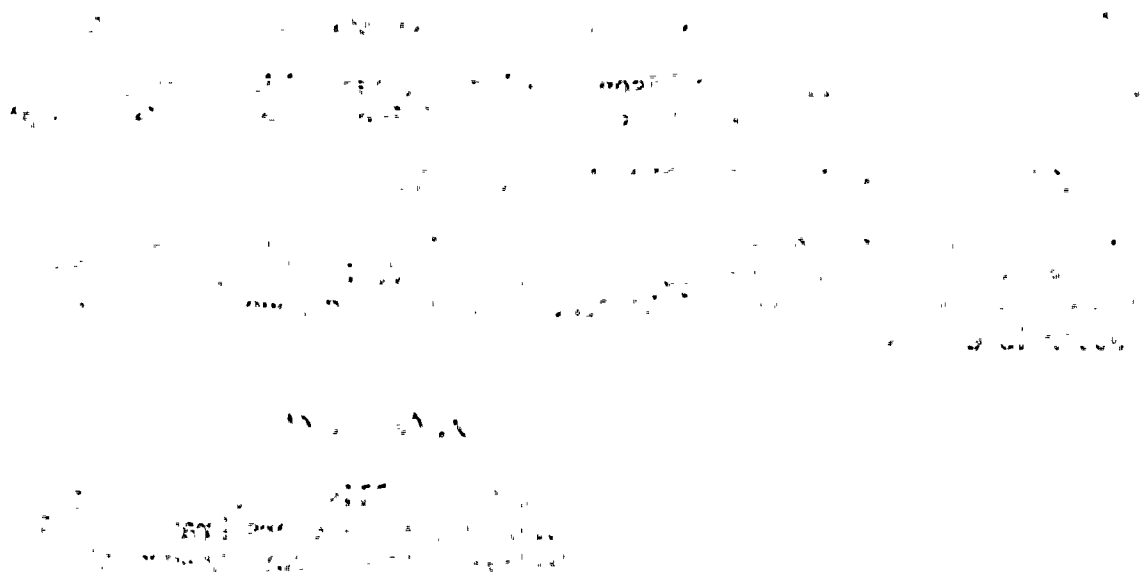
SUBJECT: LATE CONGRESSIONAL CORRESPONDENCE

The attached letter to Congressman Phillip Burton is two weeks late because it took three weeks to draft and redraft the letter several times and obtain the appropriate concurrences. A chronology of the matter is enclosed.

D Allison

Dennis P. Allison, Project Manager
Light Water Reactors Branch No. 1
Division of Project Management

Enclosure:
Chronology



ENCLOSURE

CHRONOLOGY OF LETTER TO CONGRESSMAN BURTON

Thursday 9/14/78	Letter received in branch LWR #1
Monday 9/18/78	Drafted response
Tuesday 9/19/78	Typed, redrafted, retyped response
Wednesday 9/20/78	Package to Assistant Director Returned for redrafting
Thursday 9/21/78	Redrafted
Friday 9/22/78	Retyped draft version To Assistant Director
Monday 9/25/78	Back from Assistant Director
Tuesday 9/26/78	Retyped Package to Assistant Director
Wednesday 9/27/78	Package to OELD
Monday 10/2/78	Returned from OELD with a few changes Retyped
Tuesday 10/3/78	Type late note Package to Director
	Package to Millie Groff