

DIVISION OF COMPLIANCE MONTHLY REPORT FOR FEBRUARY 1971

SOUTHERN CALIFORNIA EARTHQUAKE

An earthquake with a magnitude of 6.5 on the Richter scale occurred at approximately 6:00 a.m. on February 9, 1971, near Newhall, California (about 30 miles north of downtown Los Angeles). The epicenter occurred along the Soledad Fault about 10 miles east of Newhall. Extensive structural damage occurred, principally in the San Fernando Valley area of Southern California.

The following information was gathered by Region V (San Francisco), by telephone and licensee reports, concerning the effect of the earthquake on AEC licensed activities.

Reactors

Where possible, the reactor facilities in the Los Angeles area were telephoned for the purpose of obtaining information relating to any possible effects of the Newhall earthquake on the facilities. None of the reactor facilities checked suffered any damage.

The San Onofre plant was operating at 450 Mwe and its operation was not significantly affected by the quake. The strong motion accelerometer was actuated and recorded the effects at San Onofre. The tape was removed for analysis by Teledyne. The vibration of the No. 6 bearing on the turbine-generator increased from 2-3 mils to 8.6 mils and then returned to normal. About 10 minutes after the quake, the line frequency dropped to 59.2 hertz because of a separation from the PG&E system near Newhall. As a result, the SDG&E system which had been receiving 50 Mwe supplied the SCE system with 120 Mwe. There was a spent fuel pool level annunciator (high-low) from water "slopping" in the pool.

The emergency plan for earthquakes was initiated. The plan includes starting both emergency diesel generators and making a detailed inspection of the plant including the critical pressure vessels and piping located inside the containment vessel. All control rods were checked and found to be operating satisfactorily. No increase in make-up water rate had been noted nor had any of the containment building sump pumps operated. The detailed inspection did not disclose any anomalies.

Fuel Facilities

The only fuel facility affected by the earthquake was the DeSoto Avenue Plant of Atomics International. That plant is located approximately fifteen miles from the quake epicenter and about five miles from the area evacuated due to the possibility of rupture of the Van Norman Reservoir.

Atomics International sustained no major facility damage at either its DeSoto Avenue or Santa Susana sites. No AEC licensed material was released.

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PDR ADOCK 05000244  
S PDR

February 16, 1971

NOTE TO FILES

At the request of Jim Lyman, Public Information, I called Roger Newburger, Managing Editor of "Nucleonics Week," to provide him with the information which we have obtained from Southern California Edison Company concerning the effect of the earthquake which occurred in the San Fernando Valley on February 9, 1971, on the San Onofre Nuclear Power Station. The information which I provided to Mr. Newburger is contained in the attachment to the letter from Engelken to Mr. W. J. MacNelis, Administrative Assistant to Congressman Burt L. Talcott, dated February 11, 1971. Mr. Newburger had no substantive questions concerning the information and appeared pleased to get the information. Mr. H. L. Price was advised of the call to Mr. Newburger before it was placed.

R. H. Engelken

cc: J. P. O'Reilly, CO  
G. S. Spencer, CO:V

*Price*

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Chairman Seaborg  
Commissioner Ramey  
Commissioner Johnson  
Commissioner Larson

**EFFECTS OF RECENT CALIFORNIA EARTHQUAKE - SOUTHERN  
CALIFORNIA EDISON COMPANY (SAN ONOFRE)**

I am enclosing for your information a summary description of the effects of the recent earthquake, centered near Los Angeles, California, on the operation of the Southern California Edison Company's San Onofre Nuclear Generating Station. Preliminary information on this matter was furnished your Special Assistant on February 9, 1971.

(Signed) HLP

Harold L. Price  
Director of Regulation

Enclosure:  
Report, as stated

cc: General Manager (2)  
General Counsel (2)  
Secretary (2)

bcc: GMKavanagh, AGMR  
HLPrice, DR  
CKBeck, DR  
MMann, DR  
SHHansauer, DR  
CLHenderson, DR  
LDLow, CO  
PAMorris, DRL  
JFouchard, PI  
EGCase, DRS  
AGiambusso, CO  
LKornblith, JR., CO

RDO'Neill, OCR (2)  
MShaw, RDT  
HAHarris, PI  
JDAnderson, INS  
DR Reading File  
Central File  
CO Regions I, II, III, IV, V  
RFFraley, ACRS (3) rpt only  
RSBoyd, DRL  
RCDeYoung, DRL  
RSchemel, DRL

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SURNAME ▶	JGKeppler:ce	RHengelken	AGiambusso	LDLow	DJSkovholt	HLPPrice
DATE ▶	2/19/71			2/19	2/19	2/20/71

ATOMIC ENERGY COMMISSION

EFFECTS OF RECENT CALIFORNIA EARTHQUAKE  
SOUTHERN CALIFORNIA EDISON COMPANY (SAN ONOFRE)

Report by the Director, Division of Compliance

On February 9, 1971, an earthquake occurred in the San Fernando Valley, approximately 30 miles north of Los Angeles, California. The magnitude of this earthquake was 6.5 on the Richter scale. The earthquake epicenter was located approximately 85 miles north of the Southern California Edison Company's San Onofre pressurized water reactor.

The Division of Compliance contacted by telephone on February 9, 1971, the Southern California Edison Company and the licensees of the five research reactor facilities located in or near the Los Angeles area to determine what effect the earthquake had on these facilities. All licensees reported that no apparent damage resulted from the earthquake.

A summary description of the information provided by the Southern California Edison Company is as follows:

1. The San Onofre facility was operating at 450 megawatts electric, 100 percent power, at the time of the earthquake. Operations were not affected.
2. The licensee's emergency action plan for seismic disturbances was placed in effect. The preplanned actions taken by the licensee included the following:

a. Both emergency diesel generators were started as a precaution and

OFFICE ► placed on standby. The units functioned properly.

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- b. All control rods were checked for proper position and operability. No abnormalities were noted.
  - c. Checks were made on the rate of addition of makeup water to the primary system and on the operation of the containment building sump pumps to see if there was any indication of a leak in the primary system. No indication of a problem was noted.
  - d. An inspection was made of the plant outside containment. This inspection included a check of the radiation processing and effluent control system and of the fuel building which contains new and spent fuel. No damage was evident.
  - e. An evaluation was made of core physics parameters and special surveillance tests were conducted. No abnormalities were noted.
  - f. Entries were made by personnel into containment to look for damage. Visual checks were made of the reactor coolant system, the control rod drive housings, steam generators, primary pumps, pressurizer, and associated piping. No abnormalities were noted.
3. The earthquake automatically triggered the strong-motion accelerometer which was installed for the purpose of measuring forces caused by seismic disturbances. The recordings from this instrument are being processed and will be available for analyses in the near future.

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The Special Assistants to the Commissioners were informed by telephone on February 9, 1971.

Mr. W. J. MacNelis, Administrative Assistant to Congressman B. L. Talcott (California), requested information on the effects of the earthquake on the San Onofre facility from the Division of Public Relations on February 10, 1971. The Division of Compliance responded to this inquiry and the substance of the information contained in this report was provided Mr. MacNelis by telephone on February 11, 1971, and confirmed, at his request, in writing.

The staff of the Joint Committee on Atomic Energy was informed by telephone. A letter of confirmation to them is in preparation.

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