

# Little damage in county quake

By Steven Churm  
Staff Writer

A moderate earthquake, measured at 4.6 on the Richter scale, rattled most of San Luis Obispo and Santa Barbara counties Wednesday night but caused no major damage, authorities reported.

Seismologists at Cal Poly said the quake, which hit at 8:38 p.m. was centered about 5 to 10 miles west of Point Sal at the southern end of the Hosgri Fault in the Pacific Ocean.

No major aftershocks were reported. Political aftershocks may come, however, as the Hosgri Fault runs within three miles of the nearly completed Diablo Canyon nuclear power plant.

Opponents of Pacific Gas & Electric Co.'s nuclear plant near Avila Beach have claimed the facility is not solid enough to withstand a major earthquake along the Hosgri. There

were no reports of damage at the plant after Wednesday's quake, PG&E officials said today.

Residents of San Luis Obispo, Paso Robles, Cambria, Pismo Beach, Grover City and Nipomo reported feeling a strong shake, police and fire officials said.

Dennis Meredith of the California Institute of Technology Seismology Lab in Pasadena, said there was no connection between the moderate temblor and the recent series of major quakes that jolted the Mammoth Lakes region in the Sierra Nevada.

County residents reported that windows shook, chandeliers swayed, and books fell from some living-room shelves during the quake, which rocked the Central Coast from Santa Barbara to Gorda in Big Sur.

In Avila Beach, Cal Poly gymnastics coach Andy Proctor was recapping his team's

season during a women's sports banquet at the San Luis Bay Inn when the quake hit.

Marilyn McNeil, the women's basketball coach, then asked Proctor: "Would you talk at all our pre-game meetings next year?"

In Morro Bay, police said several bookshelves in the department's office on Morro Bay Boulevard were knocked down, but no injuries were reported.

In rural Arroyo Grande, Tim Burton was walking home from baseball practice. He said he saw houses start to sway in the Village area of the city.

"I knew right away it was an earthquake," the Arroyo Grande High School sophomore said.

Steve Hodges of Grover City saw his large stereo speakers move back and forth, he said this morning. "I haven't felt one like that here in years," he said.

Other South County residents reported loud rumbling noises, dishes rattling and feelings of dizziness.

About 60 persons were attending a planning commission meeting at San Luis Obispo City Hall when the quake rattled the building. The discussion — on hillside subdivision — came to an abrupt halt and a few audience members left their seats to stand under a doorway.

Moments later, City Clerk Jean H. Fitzpatrick who was working late in his office, interrupted the meeting to make sure doors to the council chambers were unlocked.

Fitzpatrick is the city's Civil Defense coordinator. He was in City Hall working on a countywide emergency evacuation plan when the quake hit.

In the North County, most residents were startled by the rolling sensation, but no major problems were reported.

San Francisco Chronicle  
Thurs., May 29, 1980

## Small Quake in Santa Barbara

San Luis Obispo

A moderate earthquake measuring 4.6 on the Richter scale rattled parts of Santa Barbara and San Luis Obispo counties last night but no major damage was reported, sheriff's deputies said.

Dennis Meredith of the California Institute of Technology Seismology Lab in Pasadena said the quake, which hit at 8:38 p.m., was centered in the Pacific Ocean about 25 miles west of Santa Maria.

Residents of San Luis Obispo, Santa Barbara, Santa Maria and Paso Robles reported feeling a severe jolt, police said.

Associated Press

San Luis Obispo County

# Telegram - Tribune

111TH YEAR NO. 252

28 PAGES TODAY

20c PER COPY

THURSDAY, MAY 29, 1980

# Earthquake may have been on Hosgri

By Carl Nelburger  
Staff Writer

Scientists were scrambling this morning to pinpoint the epicenter of the 4.6 magnitude earthquake that shook San Luis Obispo and Santa Barbara counties Wednesday night and to figure out its significance.

They said, however, that they will be able to draw only limited conclusions from data recorded by seismic stations.

Preliminary calculations by scientists at the California Institute of Technology in Pasadena and the National Earthquake Center in Spokane placed the quake about 5 to 10 miles west of Point Sal, off the coast of northern Santa Barbara County, said Cal Poly physics professor Kenneth Hoffman.

That's the location of the southern end of the Hosgri Fault, which also passes about 3 miles offshore of the Diablo Canyon nuclear power plant north of Port San Luis. Point Sal is about 25 miles south of Diablo Canyon.

Half a dozen smaller faults are also near the earthquake's epicenter, meaning it will be difficult or impossible to determine which

caused the quake, said Caltech's Thorne Lay. A 4.6 magnitude quake is considered "moderate" by seismologists, meaning that it wouldn't cause ground accelerations greater than about one-tenth of gravity, Lay said.

By contrast, the Diablo plant is supposed to be designed to withstand earthquake shocks of three-quarters the acceleration of gravity.

PG&E spokesman Chris Piper said today, "A preliminary investigation of the (Diablo) plant indicates there was no damage whatsoever. There was not so much as a book knocked off a shelf there."

Piper said data registered on earthquake measuring instruments at the Diablo plant hadn't been analyzed and wouldn't be made available for a couple of days.

Hoffman said the quake was the first local one measured on Cal Poly's seismographs, which were installed nine months ago by instructor Robert G. Pizzi.

The Cal Poly data will have little scientific value compared with that recorded by other, more distant stations, because the vibrations were so strong that the seismograph's needle was knocked off the chart, Hoffman said.

"There was ink all over the place."

The Cal Poly record does give a precise arrival time of the earthquake's shock waves in San Luis Obispo, however, Hoffman said.

Scientists elsewhere will be using data from seismic equipment across the continent to try to find out which direction the earth moved during the quake — up and down or sideways — said Robert A. Page of the U.S. Geological Survey.

He said the information would give scientists a better understanding of how Central Coast faults behave.

One thing scientists can't tell from Wednesday's quake is what it portends for other earthquake activity in California, said Page, who heads the Geological Survey's earthquake hazards section in Menlo Park.

The quake could be a solitary event, it could be the first of a series of moderate-sized quakes or it could be the precursor of a much larger quake, he said.

"We really can't say very much," Page said.

He said 1980 has been an unusually active year for earthquakes in California, with last

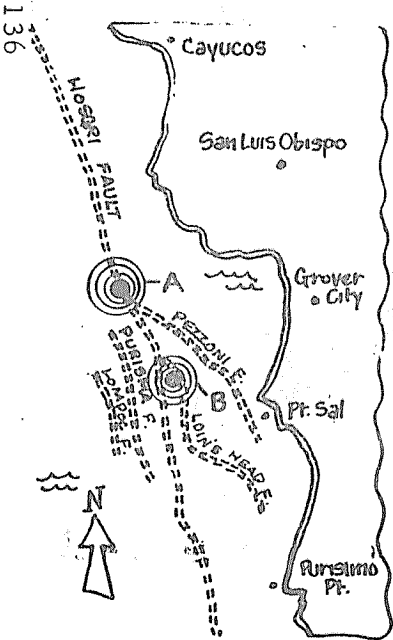
week's Mammoth Lakes events. This might be coincidence or it might portend a general increase in seismic events in California, said Page.

"People wouldn't be too surprised if in the next few years we had a major earthquake on the San Andreas," he said. The San Andreas Fault, the largest in California, runs through eastern San Luis Obispo County and is believed by some scientists to be linked indirectly to the Hosgri.

The 4.6 magnitude quake isn't unusual for the Point Sal area, said geologist Douglas H. Hamilton of Palo Alto, who has researched the Hosgri Fault as a PG&E consultant.

He said two quakes larger than magnitude 4 have been recorded definitely on the Hosgri Fault in the past century, one of them about 8 miles north of Wednesday's quake.

The largest quake to have occurred in the area was the 1927 Lompoc Earthquake which is estimated at magnitude 7.3. Former USGS scientist William H. Gawthrop estimated in 1975 and 1977 that the 1927 quake's location was about the same as that estimated for Wednesday's quake.



San L...  
4.6 earth...  
the Diab...  
plant w...  
spoke...  
cep...  
Howe...  
nuclear...  
Wednes...  
regard...  
still un...  
sets loc...  
The qu...  
p.m. We...  
damage...  
Luis Obs...  
Called...  
dith said...  
had pint...  
miles ve...  
miles of...  
region...  
Accor...  
gists, Ka...  
runs off...  
from Sar...

# Cover-up alleged on quake danger at Diablo nuclear plant

SAN LUIS OBISPO (AP) — Charging a Watergate-style cover-up of possible earthquake danger at the Diablo Canyon nuclear power plant site, a \$100 million suit was filed Wednesday

against Pacific Gas & Electric Co. by the man who leased the property to PG&E.

Robert Marre's Superior Court suit alleges that the company defrauded him and dam-

aged the value of his 8,500-acre ranch on the coast southwest of San Luis Obispo.

"PG&E defrauded the Marre Land and Cattle Co. . . . because it promised Marre that it

would conduct a complete geological survey of the area and that the nuclear plant would be constructed only if the Marre ranch site proved suitable," Marre attorneys Anthony Glassman and

David Hinden said in Beverly Hills.

According to San Luis Obispo attorney Jim Duenow, representing PG&E, Marre and the utility agreed to the lease in 1966. In exchange for

access to some 540 acres of land, PG&E agreed to guarantee loans for Marre and his business entities, with the amount Marre could borrow depending upon value of certain other land.

28 Part I—Fri., May 30, 1980

Los Angeles Times \*

## Quake Triggers New Wave of Anti-Nuclear Protests

By GRAHAME L. JONES  
Times Staff Writer

SAN LUIS OBISPO—A magnitude 4.6 earthquake centered 25 miles from the Diablo Canyon nuclear power plant was dismissed by a plant spokesman Thursday as "not an exceptional event at all."

However, environmental and anti-nuclear groups said Thursday the Wednesday evening quake should be regarded as further evidence that the still unused nuclear plant is at an unsafe location and should be permanently closed.

The quake, which occurred at 8:38 p.m. Wednesday, caused little or no damage in Santa Barbara and San Luis Obispo.

Caltech spokesman Dennis Meredith said seismologists in Pasadena had pinpointed the epicenter at 22 miles west of Santa Maria, about nine miles offshore "in the Hosgri Fault region."

According to one of those seismologists, Kate Hutton, the Hosgri Fault runs offshore in a discontinuous zone from Santa Maria roughly halfway to

the Monterey Bay. It passes within about three miles of the Diablo Canyon site.

At Diablo Canyon, spokesman Chris Piper said the temblor "was felt at the project but following our inspection we find that there was no damage."

"This size earthquake is not outside the expected range for activity in this area. It is not an exceptional event at all. The earthquake produced a structural response of less than one-hundredth of that for which the plant was designed."

The response from anti-nuclear activists, however, was more pronounced.

John Rosenthal, a spokesman for People Generating Energy, said the plant's operator, the Pacific Gas and Electric Co., had ignored warnings about the possibility of earthquake activity in the region.

"The quake last night has shown once again the inexcusable irresponsibility on the part of PG&E and the

Nuclear Regulatory Commission in allowing Diablo to be built," Rosenthal said.

"What it really confirms to us is that the NRC and PG&E are purely in the business of licensing and operating Diablo at any cost regardless of public safety. They've exhibited that time and time again."

Ironically, Wednesday's earthquake occurred less than 12 hours after a \$100 million lawsuit had been filed against PG&E in San Luis Obispo County Superior Court, alleging that the company had been negligent in not taking the earthquake issue properly into account before proceeding with construction of the plant.

The suit was filed in behalf of the Luigi Marre Land and Cattle Company, owners of the land which is leased to PG&E.

A PG&E spokesman Thursday afternoon said copies of the suit had not yet been received and that the company would have no immediate comment.

Meanwhile, Gov. Jerry Brown announced Thursday that he had declared a state of emergency in Mono County, site of three temblors Sunday and Tuesday that measured 6.0 or more on the Richter scale.

The declaration means that residents there can apply for state and federal emergency funds but not low-interest loans, which are reserved for areas declared disaster areas.

Copyright, 1980, Los Angeles Times Copyright 1980.

## Quake Off Coast Shook Diablo Plant

San Luis Obispo

Earthquake scientists upgraded Wednesday night's offshore earthquake to 4.9 magnitude yesterday, but the exact location of the temblor that shivered the San Luis Obispo area, including the Diablo Canyon nuclear power plant, remained hidden in the ocean depths.

The moderate quake, about 30 miles south southwest of the yet-to-be opened nuclear plant, caused no injuries and no major damage. It was felt in parts of Santa Barbara and San Luis Obispo counties.

Dick Davin, spokesman for Pacific Gas and Electric Co., which owns the nuclear plant, said the quake caused no damage, "none at all, it didn't even knock over a coffee cup in the plant."

Davin said the plant, which PG & E hopes to open later this year, was built to withstand earthquakes 100 times as strong as the quake Wednesday.

The earthquake hit at 8:38 p.m. Wednesday. Its force was first gauged at 4.6 on the Richter Scale, but scientists at the University of California Seismographic Station in Berkeley upgraded the magnitude yesterday to 4.9. The U. S. Geological Survey in Menlo Park measured the temblor at 4.8.

It was agreed that the epicenter of the quake was in the Pacific about 30 miles south southwest of San Luis Obispo, but no one could say for certain if it was centered on the newly-discovered Hosgri Fault, a complex network of submarine faults that some anti-nuclear critics fear could shake the Diablo Canyon plant into a nuclear disaster.

Associated Press

San Francisco Chronicle May 30, 1980

A note from EERI Member S. Rihal, Cal Poly University, San Luis Obispo:

Magnitude 4.6 (Physics Bldg Seismograph)  
Location: 25 miles west of Santa Maria

11 mi north of Diablo Canyon: Felt well.

Atascadero: Only damage broken windows.

Arroyo Grande & Solvang: Power outages.

San Luis Obispo County: Hazard Coordinator reported "no damage to speak of".

## More tremors rattle fault

SAN LUIS OBISPO, Calif. (UPI) — Minor earthquakes jiggled California Thursday, the day after an offshore tremor in the area of a recently discovered fault network rattled a nuclear power plant.

Experts said the 4.6 Richter scale temblor was not related to a series of heavier quakes that shook Sierra resort areas earlier in the week.

The quake Wednesday occurred only hours after a \$100 million suit was filed against the utility that owns the still unused nuclear plant. The lawsuit charges that earthquake studies were not adequate.

The suit was filed by the Marre Land and Cattle Co., owners of the land that Pacific Gas & Electric Co. leases for the Diablo Canyon Nuclear Power Plant.

A spokesman for Caltech's seismology lab said the quake was in the area of the Hosgri fault, which only last year was found to be connected to a network of faults leading to the San Andreas fault and thus capable of more severe damage than was earlier thought.

"We're not willing to say it was the Hosgri fault, but it was fairly close to it. It's definitely a possibility," the spokesman said.

Rob Leslie, a graduate student at University of California at Santa Cruz, last year found the Hosgri fault, situated 2.5 miles offshore from the \$1.6 billion nuclear facility, was connected to the San Simeon fault and from there to the San Andreas fault.

Leslie said at the time a fault network of that length — about 250 miles — was capable of an earthquake with a magnitude of 8 on the Richter scale. His estimate was disputed by UCLA scientist Clarence Hall Jr., who said the maximum earthquake would be 7.5.

(A quake of magnitude 8 on the Richter scale would be 50 times greater than one of magnitude 7.5. The scale is logarithmic with each tenth equal to 10 times greater magnitude.)

The Nuclear Regulatory Commission safety board had determined the plant could withstand an earthquake of magnitude 7.5. Pacific Gas & Electric began construction in 1968, a year before the Hosgri fault was discovered and 10 years before Leslie found it was part of a network in a fault zone.

Last October, the NRC's licensing board ruled the altered plant could withstand a temblor of 7.5 but after the Three Mile Island accident, ordered new earthquake safety tests.

The Dallas Morning News Friday, May 30, 1980