

New report confirms seismic safety at Diablo Canyon, PG&E says

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Pacific Gas and Electric Co. says advanced seismic research of earthquake faults near its nuclear facility on the coast between Avila Beach and Los Osos confirms Diablo Canyon Power Plant is seismically safe and could withstand the largest potential temblors in the area.

The electric company, which owns and operates the twin-reactor plant, submitted a recently completed report of findings from the research that included using state-of-the-art 3-D PCapable equipment to survey faults offshore to the federal Nuclear Regulatory Commission Wednesday.

The report contains 12 detailed, technical findings of key regional seismic features and also provides updated information on the level of potential ground motions or shaking that could be produced by earthquakes on local geologic faults near Diablo Canyon, according to PG&E.

One of the main findings in the report is that the aging nuclear plant and its equipment could withstand a major earthquake, and the facility doesn't pose a seismic safety risk.

Diablo Canyon was constructed in the early 1980s and the reactors came online in 1985 and 1986, respectively. The plant sits on an 85-foot bluff above the Pacific Ocean and within three miles of two underwater earthquake faults, including the Shoreline fault that was discovered in 2008 a mile offshore.

Technology used during the research efforts provided detailed imaging of steeply dipping faults that are difficult to capture using traditional 2-D multichannel seismic data. The data also provided measurements of fault offsets at unprecedented scales, both vertically, and, more importantly, horizontally. Offset information is a critical input to informing hazard assessments, according to PG&E.

"This research effort, utilizing the latest techniques, demonstrates Diablo Canyon continues to be seismically safe," Ed Halpin, PG&E senior vice president and chief nuclear officer, said in a statement. "These studies provide scientists and regulators an unprecedented scientific analysis of the seismic characteristics near Diablo Canyon."

Ground motion data is used by engineers to design and evaluate structures in determining whether they are seismically safe. Ground motion strength is derived from determining both the magnitude of an earthquake and the distance from a fault line to a specific location and also depends on natural features, such as whether a structure is built on sturdy bedrock, such as Diablo Canyon, or weaker soil, such as sand.

"This research confirms previous analyses that the plant is designed to withstand the ground motions from earthquakes in the region, and that major components can continue to perform their safety functions during and after a major seismic event," Halpin said.

PG&E's release of the report comes on the heels of the Associated Press obtaining a report two weeks ago from senior federal nuclear inspector Michael Peck that urged regulators to shutter Diablo Canyon until they can determine whether the facility could withstand powerful shaking from any one of several nearby earthquake faults.

Peck, who for five years was Diablo Canyon's lead on-site inspector, said in the 42-page, confidential

report that the Nuclear Regulatory Commission is not applying the safety rules it set out for the plant's operation.

In a ruling, also announced Wednesday, from the NRC concerning Peck's formal objection, the agency said it disagreed with the inspector's conclusions and doesn't believe PG&E requires an amendment to its operating license, after the discovery of the Shoreline fault, which reinforces the electric company's claims Diablo Canyon is safe.

"Today's NRC announcement reaffirms that Diablo Canyon has been and continues to be seismically safe and that PG&E acted appropriately in its evaluation of the Shoreline fault as well as other new seismic information," said Diablo Canyon spokesman Blair Jones.