

Diablo seismic decision upheld

The Nuclear Regulatory Commission said Thursday it will not reverse an NRC appeal board decision that said the Diablo Canyon nuclear power plant was earthquake safe.

The decision came on a 3-2 vote. Commissioners Victor Gilinsky and Peter Bradford issued a strong dissent calling the appeal board decision, issued last summer, inadequate and "very likely wrong."

The commission ruling concerns the engineering theories used in designing the Diablo plant to withstand a major earthquake on the Hosgri fault, 3 miles offshore of the plant.

The decision does not affect a review now underway to determine whether these theories were applied properly in the design of the \$2.4-billion Pacific Gas and Electric Co. plant.

Commission Chairman Nunzio Palladino, however, expressed uneasiness about issuing the ruling before completion of the design review:

"I would (prefer) not (to) make a final decision until the commission knows more about the results of the Diablo

Canyon reverification," he said.

Gilinsky and Bradford focused their criticism on the appeal board's acceptance of the "tau effect," the theory that a large building like the nuclear plant could ride out seismic waves the way a large ship rides ocean waves.

"The fact is that the tau effect has not been used in any other nuclear power plant analysis," they wrote. "To our knowledge, it has not been used in the design of any other large building."

Commissioner John Ahearne, who voted in the majority, conceded that part of the appeal board's conclusion was in error — that some seismic waves would be so long that the plant would be unable to ride them out.

He said, however, there was evidence that justified use of the tau effect — that earthquake shock waves become jumbled and incoherent while traveling through the ground and thus less forceful.

Ahearne said he accepted the appeal board's ultimate conclusion, saying, "All seismic data in this area is weak and in the end the decision will be based upon engineering judgment."