SHAILER S. PHILBRICK
CONSULTING ENGINEERING GEOLOGIST
ITHACA, N. Y. 14850

607 257-1957

117 TEXAS LANE

C-T-1101
PDR 5/18/79

7 April 1979

Mr. Gary Quittschreiber
Advisory Committee on Reactor Safeguards
Nuclear Regulatory Commission
1717 H Street, N.W.
Washington, D.C. 20555

Dear Sir:

Following are my comments on the NRC review of certain data requested of the Southern California Edison Company on structural conditions in the vicinity of the San Onofre Nuclear Power Plant presently under construction, at San Onofre, California. The review took place on April 3, 4 and 5, 1979 and consisted of oral and graphic presentations on April 3, field observations by helicopter over flight and ground inspection on April 4, and ground observation on April 5..

U-2 photos had been analyzed by SCE with a view to finding other lineaments than had been previously recognized and considering the structural implications of these lineaments. Along Christianitos Canyon small steep angle faults were viewed at two places along one of the lineaments. The relationship between the faults and the lineaments were coincidental, in my opinion, because interstream ridges on both sides of the canyon showed no notching or depression on the line of the lineament. The faults were overlain with undisturbed soil in one place and at the other by a continuous layer of gravel above the bed rock. Thus the lineament was not associated with any active faulting.

Faults in Horno Canyon and Dead Dog Canyons were beveled by the gravels on the old abrasion platform similarly to the beveling of the Christianitos fault closer to the plant and thus are older than the age of the platform, about 125,000 years.

In Target Canyon, the case is different. There a landward dipping fault cuts the basal gravels on the platform with an uplift seaward of about one foot. Displacement is reported to continue upward to within about 8 or 10 feet from the ground surface. Landward of the this feature are several subparallel fractures, without offset of the platform. Further laiward another fracture near the culvert likewise cuts the platform, slightly, and dips landward. These features have been argued to be landslide fractures derived from settlement of a large mass further landward. This is hard to see. Likewise the suggestion that the seaside of the fractures have been overthrust from the sea is hard to understand. These are minor breaks, thousands of years old and not affecting the present ground surface.

Sincerely yours,

Shailer S. Philbrick

2342 340

7906260632