CT-1242

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

607 257-1957

2 May 1980

Mr. Elpido Igne
Advisory Committee on Reactor Safeguards
Nuclear Regulatory Commission
Washington, D.C. 20555

Dear El:

Reference is made to GE response to my recommendations of 14 December 1979 which response was inclosed with GE letter to you dated 14 April 1980.

The fundamental reason for recommending the additional subsurface investigations at and beneath the GETR was to establish the feasibility of isolating the GETR from foundation disturbance in the event of displacement of the earth mass overlying the shears eastward and possibly beneath the GETR. Such information is applicable to solution of the foundation problem regardless of whether the shears are the result of faulting or landsliding.

Not mentioned in my letter of 14 December was my serious doubt that the shear exposed in some of the trenches down hill from the GETR is nothing but a plane of failure of a local landslide, not comparable to the shear mapped at the base of the hill above the GETR.

During the meeting on 14 November, in reply to my questioning, it was stated that the lower shear was found only in the trenches on the flat nose of the hill down hill from the GETR. The shear was not found in the flanking trenches on the sides of that flat nose. From these statements I drew the conclusion that the lower shear was a local occurrence with short extent in a north-south direction, the lateral direction. This conclusion I stated at the meeting, possibly not as strongly as I should have stated.

Let us consider the effect of the absence of the shear in the flanking trenches on the uphill extent of that shear. The shear is narrow in lateral extent, a fact. The shear would seem to be related to a slump slide, the surface of which slide has been eroded to remove the offsets common to such type of slide, a theory. Slump slides of narrow lateral extent, in my experience, commonly do not attain great vertical extent. (I suppose this may be the result of the side friction or shear resistance being much greater relatively than that of a very wide slump slide.) Thus I would suspect that the lower shear may not extend very far up the hill, possibly not reaching the GETR. If this were the case, the foundation problem would become much less complex, its solution much simpler and isolation something to be seriously examined.

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

607 257-1957

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The answer to all of the above lies in subsurface investigations to define the uphill extent of the lower shear. That is why I recommended additional subsurface investigations in my letter of 14 December 1979. If it were my responsibility, I would investigate, but it is GE's responsibility, not mine.

Sincerely yours,

Shailer S. Philbrick

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