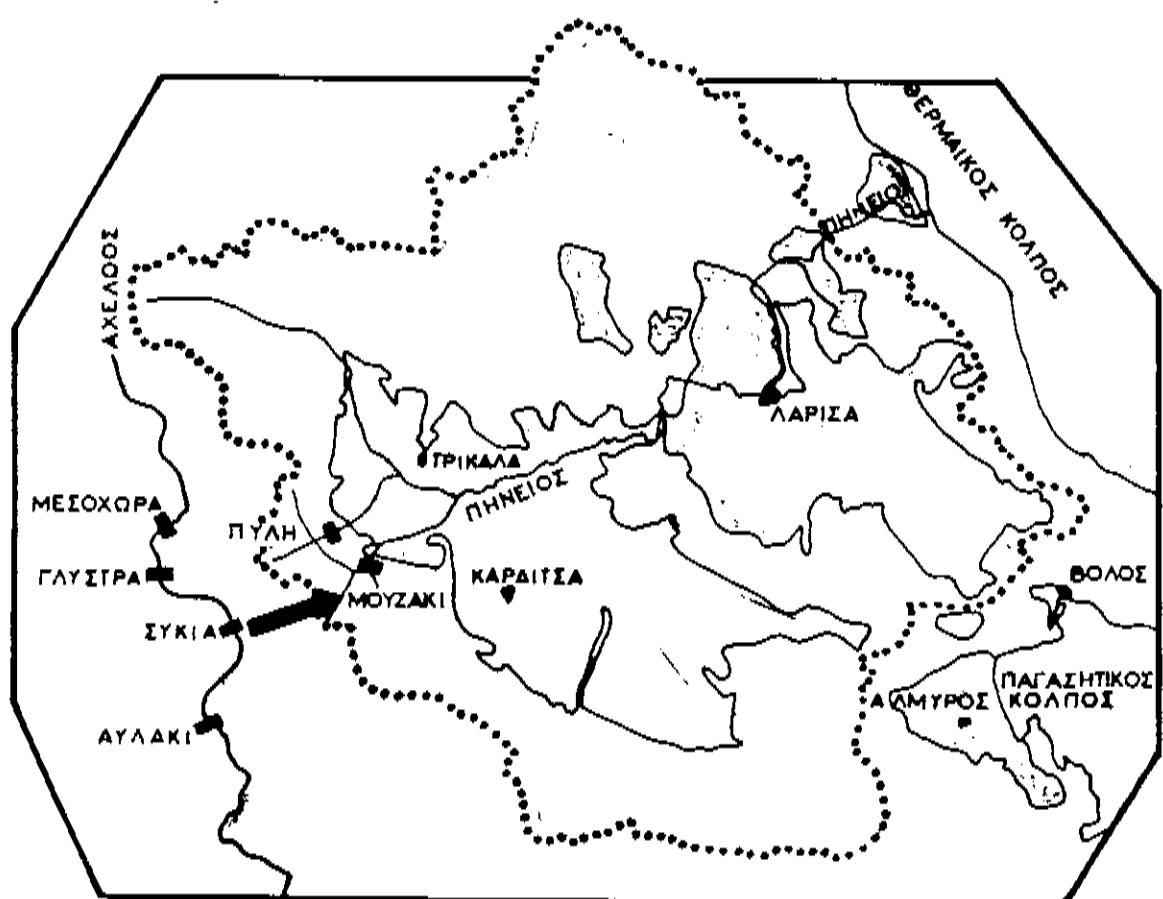


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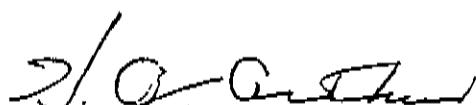


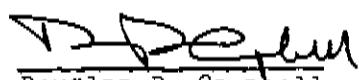
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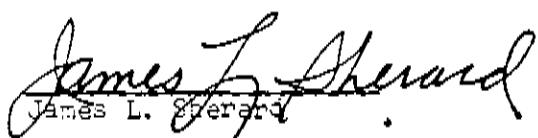
PUBLIC POWER CORPORATION
HYDROELECTRIC PROJECTS DEVELOPMENT DEPARTMENT

UPPER ACHELOOS PROJECTS AND
DIVERSION TO THESSALY PLAIN

Consulting Board Report No. 1


Harold G. Arthur


Douglas D. Campbell


James L. Gerard

Athens, Greece July 6 1984

5. SYKIA PROJECT

5.1 Extent of Board's Review

This Board examined the Sykia damsite and the Pigae Slide area on foot and from a helicopter in 1978. At that time much of the drill core from the damsite was logged. During the present field trip the Board again examined the damsite and the slide area from a helicopter and in addition examined the toe of the slide from a gravel bar at river level. The cores from bore holes B1, B9 and B24, which had been drilled since the Board's visit in 1978, were also examined and logged in a general fashion.

For the preparation of this report the Board made use of the following references:

- 1) Upper Acheloos River Hydroelectric Development, Preliminary Report Jan. 1977, SNC.
- 2) Sykia Engineering Report, Vols. 1-5, May 1972, SNC.
- 3) Special Board Report on the Sykia Project, July 1978, A. Desio, W. Judd, L. Muller.
- 4) Board of Consultants Report on Sykia Project, June 3, 1978, A.L. Parme, H.G. Arthur, D.D. Campbell, J.L. Sherard.

5.2 Technical Limitations of Dam Height

In 1978 the Board indicated that there were neither site nor technical constraints on the raising of the Sykia Dam height to either 525 m elev. (arch) or 550 m elev. (embankment). It appears that any constraints on heights of embankment dams, above these elevations will be controlled by topography.

5.3 Suggested Dam Types

It is the opinion of the Board that for dams below elev. 525 m either an arch dam or an embankment dam is feasible and satisfactory; however, above that elevation it would appear that an embankment dam would be technically and economically more favorable. There are no new data made available since 1978 that alters this conclusion.