

## **GEOSTRUCTURAL CONDITIONS OF THE HIGH- RISE DAMS OF GEORGIA**

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The river Enguri is the most significant one among the South Caucasus rivers from the point of view of Energy. There are two arch dams on the Enguri river: the Enguri Arch Dam of 275 meters height and Khudoni Arch Dam of 165 meters. The last one is under construction. Enguri dam is based on the carbonic rocks of the lower Cretaceous age and the second one on the volcanic rocks of the middle Jurassic period. According to the tectonic development, several structural stages are distinguished in both areas. Enguri Dam is in very complicated conditions from the tectonic point of view. It is located on the boarder of the two geo-structural units. This boarder coincides with the deep fault. The rocks are plicated and are complicated by the fault of the strong meridional direction. One branch of this fault directly crosses basement of the Dam. Four structural blocks are surrounded by faults, having different development. The tectonic movements caused development of cracks of six systems. The construction area of the Khudoni Dam is located in the plication line having latitude direction, where faults of the latitude and meridional direction are developed. In this case as well one fault is crossing basement of the Khudoni Dam. Most of the cracks are of tectonic genesis. In this case also six systems, coinciding with the directions of plication and faults are distinguished. There are discerned in the gorge several neo-tectonic units, which, in their turn, are divided into blocks with independent movements.