THE RIVER FLOW MANAGEMENT BY A SYSTEM OF FLOOD CONTROL FACILITIES DISTRIBUTED ON A DRAINAGE BASIN

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Abstract
In this work a river flow management during extreme river discharges for a hydro complex with hydroelectric power plant (HPP) on a main river and flood control facilities on its side tributaries is studied. The mathematical models are developed and used to determine the operating modes of hydro facilities, considering the modern economic and environmental requirements, revision of their parameters, estimation of the energy-economic and environmental effects after creation of flood control facility systems distributed on drainage basins. These mathematical models are realized in the computer program and test calculations using this program show the possibilities of river flow management in the whole river basin.
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Keywords: river flow management, hydropower, computer simulation, environmental protection, flood control

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