



**ПІДВИЩЕННЯ ЕФЕКТИВНОСТІ
РОБОТИ ГІДРОЕЛЕКТРОСТАНЦІЙ
В УМОВАХ РИНКУ ЕЛЕКТРИЧНОЇ
ЕНЕРГІЇ УКРАЇНИ ТА ОСОБЛИВИХ
ТЕХНОЛОГІЧНИХ ОБМЕЖЕНЬ**

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efficiency of hydroelectric power plants in
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The monograph considers the issue of
solving the problems of planning the
activities of hydroelectric power plants
(HPPs) in order to increase the efficiency of

their operation in the electricity market of Ukraine, taking into account existing technological limitations. The structures of the simulation model of the operation of HPPs and PSPs for the use of hydro resources are proposed based on the created hydrological model of the cascade of power plants for the production and sale of electricity. The description of the functioning of HPPs in the structure of the Unified Energy System of Ukraine in the electricity market is given. Based on analytical studies, methods for assessing the condition of structural units of HPP generating equipment, principles for constructing a capacitive air gap meter in hydrogenerators resistant to the influence of magnetic fields, as well as a capacitive sensor of radial vibration of the stator core winding rod have been developed.

The monograph is intended for specialists involved in planning the costs of hydro resources and the operation of hydraulic units operating in cascades of HPPs and PSPs in the structure of the Unified Energy System of Ukraine, as well as for graduate students and students of electrical engineering specialties.

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