

OPTIMIZATION OF OPERATING RESERVES IN POWER SYSTEMS

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Three problems of planning and optimization of operational reserves in power system are considered in this paper: 1) planning of reserve size, 2) determination of costs related to the keeping of operating reserves, 3) optimal utilization of operating reserves. The size of control reserves has to be determined on the basis of probabilistic information about errors of load forecasting. Linear or non-linear models could be applied for the optimization of the costs of operating reserve keeping. For optimal utilization of reserves the application of dynamic characteristics of power units is recommended.

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