

## **Development of the generation unit unloading in case of nearby fault algorithm based on phasor measurement units.**

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The proposed algorithm is based on the application of the «equal area criterion». To determine the beginning and parameters of the transient process, the data obtained from the system of phasor measurement units are used. The adaptability of the algorithm is ensured by minimizing the use of a priori information about the parameters of the equivalent circuit models of the power region under consideration. The algorithm was tested on a single-machine scheme, implemented in Matlab/Simulink, taking into account the models of the automatic voltage regulator, turbine speed controller and steam turbine.

*Key words: steam turbine fast valving, phasor measurement units, equal area criterion, emergency control at the rate of the transient process.*