**Research of global inter-area low frequency oscillations in the United power system of Russia.**

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Information about the level of global low frequency oscillations of regime parameters (LFO) must be taken into account while planning the regimes and in the process of dispatching control. A method of research LFO based on the correlation analysis according to synchrophasor measurements is proposed. The paper presents the results of identification the global inter-area LFO in the United power system of Russia, antiphase coherent groups of generators, inter-area cross sections and average statistical values of modal parameters. The configuration of power system equivalent model for predictive calculation of oscillation stability margin in inter-area cross sections of the United power system of Russia has been developed. The results of the work are also advisable to use in verification the computational dynamic model of the United power system of Russia and in assessment of necessity to adjust the settings of system stabilizers or stabilization channels of strong action AVR.

*Keywords: low frequency oscillations, synchrophasor measurements, oscillation stability, coherent generators, equivalent model of power system, model identification.*