

## **Tuning of Automatic Voltage Regulators in Isolated Power Systems.**

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An analysis of the oscillatory characteristics of isolated electric power systems is presented. It is shown that, due to the specific operating conditions of such power systems, oscillations of electric variables may arise in the infra-low frequency range of 0,05–0,35 Hz. These oscillations are caused by insufficient quality of voltage regulation at load buses. It is demonstrated that an effective method for damping this type of oscillations is to increase the proportional gain of the automatic voltage regulators of synchronous generators.

*Key words: power system, oscillatory stability, automatic voltage regulator, power system stabilizer, synchronous machine, parameter tuning.*