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The new structure for stabilization loop of the synchronous generator mode and the general principles of its settings based on fuzzy approximator.

A method and algorithm for constructing the automatic adaptive system of field control (Sauvo) based on fuzzy approximator. The proposed algorithm performs an automated calculation of coefficients of system stabilizer depending on the parameters of the external network and the gain of the voltage controller.

Key words: synchronous generators, field control, adaptive control system, fuzzy logic, optimal setting.

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