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Automated system for calculating the maximum allowed operating states of power system under the conditions of static and dynamic stability.

Algorithm for calculating the allowed operating states of power system under the conditions of static and dynamic stability is described. Algorithm consists of three main parts: monitoring the allowed operating states of the current mode (for given vector mode change) by condition of static stability; monitoring the allowed operating states of the current mode for a given perturbation emergency by conditions of static stability of after-failure modes and dynamic stability taking into account the action of the local stability control systems, calculate the maximum allowed active power flows in predetermined monitored by conditions of static and dynamic stability, taking into account the action of the local stability control systems.

Key words: static and dynamic stability of power systems, current mode, post-fault conditions, algorithm, calculated critical section, monitored section, maximum allowed active power flows in monitored sections.

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