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**The application of automation separation of power system for transient stability saving under lengthy three-phase faults.**

In article the short characteristic of structure of automatic unloading in case of close short circuits and the analysis of limitation delivery of total available capacity of Tom'-Usinsk power plant is presented. The basic principles of construction of automatic unloading in case of close short circuits and its realization on the basis of microprocessor devices are represented.

*Key words: transient stability, emergency control automatic unloading in case of close short circuits.*

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