

## **Admissible parameters determination of isolated power district synchronization with power system with frequency difference over than 0.1 Hz**

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Most of the time to synchronize isolated power districts with one power plant with power system there are no recommendations to calculate accepted values of regime parameters except the recommendation from Technical operation rules and instructions (p. 5.1.19). According to this document to maintain frequency's difference between isolated power district and power network not over 0.1 Hz. The fulfillment of this requirement is too much and may lead to unnecessary limitation of power consumption in isolated power district or can lead to decrease of generation rating less than minimum of technological boundaries of power generation equipment. In order to reduce a manipulation directed to electric utilities of the electric power industry, in this paper a methodology to determine the admissibility of frequency's difference raise between isolated power district and power network at the moment of synchronization is developed.

*Keywords: synchronizing of isolated areas, transient stability, frequency difference.*