

Abstract Details

Title: Controlling of Load Frequency

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Abstract: This research project presents decentralized control scheme for Load Frequency Control in a multi-area Power System by appreciating the performance of the methods in a single area power system. In an interconnected power system, if a load demand changes randomly, both frequency and tie line power varies. The main aim of load frequency control is to minimise the transient variations in these variables and also to make sure that their steady state errors is zero. A number of modern control techniques are adopted to implement a reliable stabilizing controller. The objective of these control techniques is to produce and deliver power reliably by maintaining both voltage and frequency within permissible range. When real power changes, system frequency gets affected while reactive power is dependent on variation in voltage value. That's why real and reactive power are controlled separately. This thesis studies the robustness and reliability of the various control techniques of load frequency control of the proposed system through simulation in the MATLAB-Simulink environment.

Keywords: Frequency, ALFC, AVR, AGC.