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| **Title:** | Design and Implementation of a Synchronous Generator with Rotor Angle Stability Control for Damping Interarea Oscillations of Interconnected Power Systems via PSS | | |
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| **Abstract:** |  |
| The main aim of this paper is to regulate the rotor angle of the synchronous generator and solve the inter-area mode of oscillation in a power system using a power system stabilizer. That is a major concern. The inter-area modes are basically an interaction between the mechanical parts of the generating plans through the electrical part of the system. So, the transmittance of the electrical power of the areas has a significant influence generally on the damping. Inter-area oscillations are innate to power systems. This type of oscillation is characterized by a group of generators in one area of the system oscillating against another group located in another area. In this paper power system stabilizer (PSS) is used to damp the inter-area mode of oscillation in the power system. In this system simulation model is set up into MATLAB/SIMULINK software | |