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A PI Controller Based on Gain-Scheduling for Synchronous Generator


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 [Keywords](#)

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Abstract: In this paper a gain- scheduling scheme of a proportional integral (GSPI) controller is proposed for a synchronous generator. In presented scheme, both proportional and integral gains are allowed to vary within a predetermined range. In order to validate the effectiveness of GSPI controller, simulation studies for a single-machine infinite bus power system are used .The results verify improved performance of GSPI controller comparing to conventional AVR under various operating conditions.

Key Words: Gain-Scheduling PI Controller, Single machine infinite bus, Conventional AVR, Ground fault



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