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APPLICANT NAME	VNR Vignana Jyothi Institute of Engineering and Technology (VNRVJIET)
TITLE OF INVENTION	Method and Implementation for mitigating Voltage Sag and swell in distributed system with Under Voltage /Over Voltage Relay based Compensators
FIELD OF INVENTION	ELECTRICAL
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(51) International classification	:G06F0030367000, G06F0030200000, H02J0003000000, H02J0003060000, G05B0017020000	(71) Name of Applicant : 1)VNR Vignana Jyothi Institute of Engineering and Technology (VNRVJIET) Address of Applicant :VNRVJIET Vignana Jyothi Nagar, Pragathi Nagar, Nizampet (S.O), Hyderabad- 500090, Telangana State, India Tamil Nadu India
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(57) Abstract :

A distribution system is developed for the simulation study in the MATLAB Simulink environment and analyzed the simulation results in both loop models. The simulation of voltage sags, swells and VF_{TO}TMs in gas insulated system equivalent circuit Simulink model have been performed. The under voltage as well as over voltage relay based compensator models have been implemented in both open loop as well as closed loop modes.. This method of mitigation of voltage sags, swells and VF_{TO}TMs have been simulated and the analyzed the results. The simulation results show that the said method is quiet effective in mitigating the PQ issues. Voltage sags, swells and VF_{TO}TMs have been obtained without compensation equipment. Secondly these PQ issues have been mitigated with open loop control of compensation equipment and lately over voltage and under voltage relay based closed loop control have been implemented and mitigated the PQ problems

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