

MW AND MVAR CONTROL USING ARTIFICIAL IMMUNE SYSTEM (AIS)

Project report is presented in partial fulfilment for the award of the Bachelor of Electrical Engineering (Hons.)



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ABSTRACT

This project report presents a new technique of MW and MVAR control. This study method utilized the concept of Artificial Immune System (AIS) technique which applies in real and reactive power dispatch and also explored multi control function and objective function/fitness for minimization of total loss and total cost of generation. Comparison was made in order to determine the best fitness control function and objective function/fitness to be used in controlling the real and reactive power dispatch. This technique was tested on IEEE 26 bus reliability system and the simulation results reveal that the development technique is easy to implement and converge within an acceptable time. The result also confirms that AIS technique can be useful tool for solving real and reactive power dispatch.

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