APPLICATION OF ARTIFICIAL IMMUNE SYSTEM FOR SOLVING LOAD FLOW PROBLEM

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

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ABSTRACT

The load-flow problem is the calculation of the real and reactive powers flowing in each line and the magnitude and phase angle of the voltage at each bus. This project report presents an Artificial Immune System based on optimization approach for solving the load-flow problem in a power system. Artificial Immune System is a computational or search method based upon metaphors of the biological immune system, while load- flow studies are the backbone of power system analysis and design. The simulation results reveal that the developed algorithm could provide an alternative to solve the load- flow problem. A comparative studies was done between result obtain from Artificial Immune System load- flow technique and the Newton Raphson load -flow technique. It is tested and illustrated by applying the method to the IEEE 6-bus test system

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