#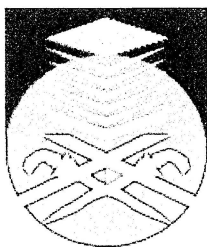 COMPARISON OF EVOLUTIONARY PROGRAMMING AND MULTIAGENT IMMUNE EVOLUTIONARY PROGRAMMING TECHNIQUE IN MAXIMUM LOADABILITY IMPROVEMENT

Thesis presented in partial fulfillment for the award of the
Bachelor of Electrical Engineering (Hons)
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ABSTRACT

This paper presents the enhancement of system loadability through optimal reactive power dispatch technique using a newly developed optimization technique, termed as Multiagent Immune Evolutionary Programming (MAIEP). The concept of MAIEP is developed based on the combination of Multiagent System (MAS), Artificial Immune System (AIS) and Evolutionary Programming (EP). In realizing the effectiveness of the proposed technique, validation is conducted on the IEEE-30-Bus Reliability Test System. The program was developed by using MATLAB software. The main propose of this project is improving loadability system by using (EP) and (MAIEP) techniques. From the result, it shows that MAIEP has faster computation time compared to EP technique in maximum loadability improvement in the system.

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