

**ARTIFICIAL IMMUNE SYSTEM (AIS) APPLICATION FOR MAXIMUM
LOADABILITY DETERMINATION**

**This project thesis is presented in partial fulfillment for the award of the
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**MOHD NORAMAR BIN MOHD MUNAWAR
Faculty of Electrical Engineering
UNIVERSITI TEKNOLOGI MARA
40450 SHAH ALAM SELANGOR**

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ABSTRACT

This project report presents the Artificial Immune System (AIS) application to determine the maximum loadability. This project determines the maximum loadability at the PQ buses in a power system. The technique presented here generates exact estimates of the maximum possible amount of load increase that the system can tolerate along a specific path, as well as the corresponding voltage vector. The proposed technique was tested on the IEEE 30 bus Reliability Test System (RTS) and the result proved that the proposed technique is able to estimate the maximum loadability in a system.

Keywords

Artificial Immune System, Maximum Loadability

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