

**OPTIMAL ECONOMIC DISPATCH USING  
ARTIFICIAL NEURAL NETWORK**

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## **ABSTRACT**

This project presents a methodology for solving optimal economic dispatch by using back propagation neural networks. The optimal power flow for each generating units must have total fuel cost at minimum point. For this problem, the total load is varied and the losses for generating units are ignored. There are many conventional method to solve economic dispatch such as Lagrange multiplier method, Lambda iteration method and Newton Raphson method. This paper present the back-propagation neural networks model to carry out instead the conventional Lambda iteration method. The proposed technique was tested on single bus system.

### **Keywords:**

Economic Dispatch (ED), Back-Propagation Method, Lambda iteration method.

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