

**ECONOMIC DISPATCH OF POWER SYSTEM INCORPORATING
WIND POWER PLANT**

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ABSTRACT

This thesis presents the solution for Economic Dispatch (ED) problem when wind power plant is incorporated in the system. Particle Swarm Optimization (PSO) method has been implemented to solve the ED problem in order to minimize the total production cost considering wind power plant and valve-point effect of generation units. For numerical simulation, six units system incorporating one wind power generation is used. The simulation results show the effect of wind power plant in reducing total fuel cost.

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