Abstract

The economic load dispatch problem aims at controlling the committed generating unit outputs so as to meet the required load demand at minimum operating cost while satisfying the power demand and system equality and inequality constraints. The economic load dispatch is a non-linear constrained optimization method whose complexity increases when constraints such as system power balance constraints and generator constraints are considered. This paper describes the use of particle swarm optimization algorithm in finding out which combination of generators should be worked together in order to meet the required load demand at minimum operating cost.

References

4. Kerala State Electricity Regulatory Commission Orders, April 2017

Index Terms

Computer Science
Power Systems
Keywords

Economic load dispatch, particle swarm optimization and power balance constraints.