Abstract

Economic Dispatch (ED) optimization problem is the most important issue which is to be taken into consideration in power systems. The problem of ED in power systems is to plan the power output for each devoted generator unit in such a way that the operating cost is minimized and simultaneously, matching load demand, power operating limits and maintaining stability. In this paper, the traditional economic dispatch problem has been modified to minimize generation cost.
Multi-Objective Optimization using Linear Membership Function

and line flow. As the two sub-problems have conflicting objectives, fuzzy decision making multi-objective optimization has been applied to get single optimal solution from conflicting objectives of generation cost and line flow. Practically, it has been tested on IEEE 30-bus system. The results describe the capability of the proposed approach of reducing line flow while maintaining economy in the load dispatch.

References

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Index Terms
- Computer Science
- Image Processing

Keywords
- Economic Load Dispatch
- Fuzzy Decision Making
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