Abstract

Economic Load Dispatch problem (ELD) is considered a NP-hard combinatorial optimization problem. The function of (ELD) determines low price process regarding a power system through dispatching the power generation sources in order according to supply the load demand. In this paper, one of the most known electrical problems has been displayed by the (ELD). Various methods have been used to make the ELD solutions better, most well-known employing meta-heuristic algorithms. The aim of paper is to find the optimal or near-optimal ELD fuel cost (fuel cost with the minimum cost) by involving a newly created meta-heuristic algorithm, mainly Salp Swarm Algorithm (SSA). Using four test systems generating datasets, the swarm intelligence (SI) has contributed in creating the notion of SSA to get the required value of the present approach. Moreover, it will be measured and contrasted with other similar types or with those of the same significant style that are available in the literature. Accordingly, the results make it clear that the SSA is able to represent the ELD problem and it able to obtain acceptable solutions.
A Swarm-based Algorithm for Solving Economic Load Dispatch Problem

References

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Index Terms
Computer Science
Algorithms
Keywords

Economic Load Dispatch, Salp Swarm-Based Algorithm, swarm intelligence, optimization, meta-heuristic, population based algorithm.