Abstract

This paper introduces a GSA for implementing economic operation of an interconnected area power system and computes how much power has to be generated internally in an area and how much power has to be borrowed from other areas through tie-line for a specified load so that generation cost is minimized in the most economical sense. This method is explained with an example and the result obtained by the proposed method is compared with those obtained by particle swarm optimization (PSO) as reported in literature. It has been shown that this method is more efficient and takes less computation time than PSO.

References


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**Index Terms**

Computer Science  
Power Electronics

**Keywords**

Optimization, PSO, GSA, ELD, Power system