Abstract

This paper introduces a GSA for implemented to economic operation of a 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 area through tie-line for a specified load so that generation cost is minimized in most economical sense. This method is explained with an example and the result obtained by the proposed method is compared with 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

Economic Operation of Interconnected Power System and Unidirectional Flow through GSA


**Index Terms**

Computer Science

Power Electronics

**Keywords**

Optimization, PSO, GSA, ELD, Power system