# The MOGA algorithm used in power networks with regard to economic and environmental goals

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***Abstract***:

In this paper for more efficient use of fossil fuels in order to reduce fuel costs, reserve and reduce emissions at the same time on the network, taking into account constraints such as the effects of the valve point the ramp rate, frequency constraints, etc., an intelligent algorithm for solving multi – objective economic Dispatch pollution is presented. Finally, the performance of the proposed algorithm with other methods such as non liner programing, genetic algorithm , particle swarm optimization algorithm, bacterial foring algorithm and bacterial foring – nyldr mead hybrid algorithm were compared. Simulation results, the advantages of frequency constraints on production costs and advantages of the proposed method in improving the accuracy and convergence results compared to the algorithm of the show.

***Keywords:*** Emission , Reserve And Economic Load Dispatch, Variable – Multi Objective Genetic Algorithm