

Genetic Algorithms Applications In Load Frequency Control

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Summary

This paper deals with the application of genetic algorithms for optimizing the parameters of conventional automatic generation control (AGC) systems. A two-area nonreheat thermal system is considered to exemplify the optimum parameter search. A digital simulation is used in conjunction with the genetic algorithm optimization process. The integral of the square of the error and the integral of time-multiplied absolute value of the error performance indices are considered in the search for the optimal AGC parameters. The results reported in this paper demonstrate the effectiveness of the genetic algorithms in the tuning of the AGC parameters

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