عنوان مقاله:

LOAD FREQUENCY CONTROL DESIGN USING ARTIFICIAL BEE COLONY

محل انتشار:

ششمین کنفرانس بین‌المللی مسائل فنی و فیزیکی در مهندسی قدرت (سال: 1389)

تعداد صفحات اصل مقاله: 6

نویسندگان:

H Shayeghi - *Technical Engineering Department, University of Mohaghegh Ardabili, Ardabil, Iran*

H.A Shayanfar - *Islamic Azad University, South Tehran Branch, Tehran, Iran*

N Haghi - *Technical Engineering Department, University of Mohaghegh Ardabili, Ardabil, Iran*

N.M Tabatabaei - *Electrical Engineering Department, Seraj Higher Education Institute, Tabriz, Iran*

خلاصه مقاله:

This paper presents an Artificial Bee Colony (ABC) algorithm to tune optimal gains of a Proportional Integral Derivative (PID) controller for Load Frequency Control (LFC) design in an interconnected power system. The problem of robustly tuning of the PID based LFC design is formulated as an optimization problem according to the time domain-based objective function which is solved by the ABC technique that has a strong ability to find the most optimistic results. To demonstrate the effectiveness of the proposed method a two-area interconnected power system is considered as a test system under different operating conditions. The simulation results are shown to maintain robust performance in comparison with the particle swarm optimization based tuned PID controller and classical controllers.

کلمات کلیدی:

LFC, ABC, PID, Power System Stability

لینک ثابت مقاله در پایگاه سیویلیکا:

https://civilica.com/doc/90073