Optimal Bidding strategy in South Region Day-ahead Market Model using New Aggregated Demand Model and Hybrid Technique

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Abstract

In this paper a half breed calculation (ABC_PSO) comprising of Artificial Bee Colony (ABC) and Particle Swarm Optimization (PSO) in light of demonstrating for the ideal offering systems in an aggressive power force business sector is proposed. We set forward a novel enhanced strategy which enhances the Profit of the suppliers. In the aforementioned technique ideal using so as to offer parameters are controlled the two periods of the Artificial Bee Colony (ABC). From the streamlined parameters the definite arrangement is anticipated by utilizing third phase of the ABC calculation i.e scout honey bee. Here, the honey bee's populace speed and the position vector are enhanced by utilizing the method of PSO rather than Scout honey bee, to locate the precise offering parameters. The Indian Energy Exchange (IEX) hourly based burden request dataset is utilized for using so as to foresee the heap Artificial Neural Network (ANN) system. At long last the proposed system is executed in the MATLAB/simulink stage and viability is investigated by utilizing the correlation of distinctive procedures like Artificial Bee Colony (ABC) calculation, Particle Swarm Optimization (PSO) calculation, ABC_PSO. The aftereffects of
examination exhibited the prevalence of the proposed approach and affirm its capability to take care of the issue.

References


Index Terms

Computer Science

Information Sciences

Keywords

ABC, PSO, ANN, optimal bidding, electricity power market