

Title: Fuzzy control applied to microgrid

Generated on: 2026-05-22 22:59:09

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Integrating LSTM-based predictions provides foresight into system parameters such as state of charge, load demand, and battery health, while fuzzy logic ensures real-time adaptive control.

This study introduces a novel Fuzzy-GPC framework for microgrids, integrating adaptive control, fault-resilient energy management, and context-aware battery optimization.

This paper presents an advanced frequency control solution for multi-microgrid systems (MMGS) with high renewable energy penetration, where conventional control methods struggle with...

Therefore, this study introduces a novel Deep-Fuzzy Logic Control (Deep-FLC) framework that combines the predictive power of LSTM models with the adaptability of fuzzy logic ...

To efficiently divide the power across the three sources (Fuel Cell/Battery/SC) and utilize the regenerative energy, an energy management method based on fuzzy logic control and a rule ...

This paper proposes a method to adapt the inertia, damping, and droop parameters dynamically through a fuzzy neural network controller. This controller trains itself online to choose appropriate values for ...

Abstract--This paper deals with fuzzy logic control based energy management system for dc and ac microgrids. AC microgrid includes renewable energy sources connected to ac load and storage facility.

So, intelligent computing is needed to be developed for these systems. This paper uses an optimal and robust fuzzy controller for automatic voltage and frequency regulation. The fuzzy logic ...

This paper has presented a novel application of fuzzy logic control based on an African vulture optimization algorithm for improving the microgrid transient responses, despite the load ...

This article proposes a novel scalable fuzzy voltage control scheme for nonlinear direct current microgrids



Fuzzy control applied to microgrid

(DCmGs) composed of DGUs and constant power loads (CPLs) interconnected via power ...

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