

Title: Fuzzy Control of Microgrid

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Thus, this paper proposes a robust and adaptive energy management system using the cascaded dual-fuzzy logic-based control approach to mitigate such issues.

This study addresses the need for improved frequency regulation in isolated AC microgrids (MGs) by proposing a fuzzy PI (FPI) controller capable of dynamically adjusting control ...

This paper introduces a Fuzzy Logic-based Smooth Transition Regulator (FL-STR) to enable seamless transitions between different microgrid operation modes. The proposed method is compatible with ...

Hybrid microgrids are attractive design that can be used for a variety of purposes, especially in stand-alone power generation systems like lighting, water pumping, etc. Energy management control will ...

In this context, this paper investigates the application of fuzzy logic control as a promising approach to enhance energy management within DC microgrids.

This article proposes a novel scalable fuzzy voltage control scheme for nonlinear direct current microgrids (DCmGs) composed of DGUs and constant power loads (CPLs) interconnected via power ...

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 ...

An Integrated Energy Management System (EMS) was proposed employing fuzzy logic as a solution to manage the energy needs of loads in this work.

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