# Photovoltaic energy storage new energy controller

## Overview

This paper proposes a robust controller for managing the direct current (DC) bus voltage to optimize the performance of ESS. The proposed controller combines a fractional-order proportional integral (FOPI) with a classical PI controller for the first time in the DC microgrid. Large-scale energy storage systems (ESSs) that can react quickly to energy fluctuations and store excess energy are required to increase the reliability of electricity grids that rely heavily on renewable energy sources (RESs). This study investigates the theoretical and practical issues of integrated floating photovoltaic energy. In this paper, an intelligent approach based on fuzzy logic has been developed to ensure operation at the maximum power point of a PV system under dynamic climatic conditions.

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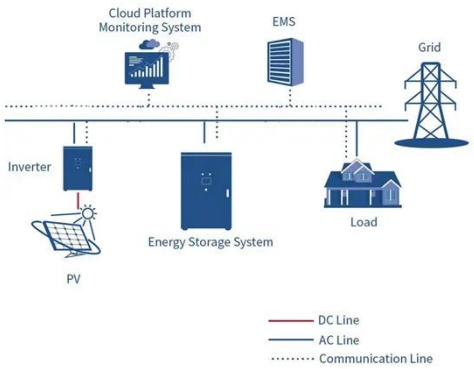


controller and its applications is a detailed investigation of photovoltaic (PV) controllers and their use in a variety of applications.

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