

عنوان مقاله:

Technical and Economic Assessment of the Implementation of Energy Management strategies for a substation

محل انتشار:

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خلاصه مقاله:

Nowadays, the request for electricity consumption is increasing sharply due to the expansion of various technologies and population growth. The energy management system is responsible for managing and prioritizing loads and generators optimally to maintain a stable collection system in the event of network disruptions or potential threats to the energy system. In this paper, a dual-purpose energy management system for managing and reducing the peak load consumption of the complex as well as optimizing energy production for the next day operation in a substation. The operation strategy of this system is focused on production scheduling and consumer management. The proposed model specifies the regulatory power for energy-dispersive units and the amount of power exchange between producers and consumers on an hourly basis for the day ahead. The components used in the studied system include solar panels, wind turbines, and loads with different prioritization. In the following, the results of the simulation of the proposed model are analyzed and the result of the work is presented

کلمات کلیدی:

Microgrid, Energy Management, Photovoltaic System, Wind Turbine, Uncertainty

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