Abstract

This paper describes a feasible operation of micro grid. The micro grid is the combination of multiple distributed generators to solve global warming problems by reducing carbon dioxide emission in the electricity generation field. The increasing interest in micro grids (MGs), particularly those containing renewable sources such as solar and wind generation, is due to easy availability of renewable sources of energy. A Microgrid model, simulated on Matlab/Simulink software, is analyzed. Due to wide use of these in isolated micro grid, this paper describes the new method of micro grid controlling strategy introduced using Fuzzy-PI controller Algorithm using this technique the Islanded micro grid over come fluctuation problem the controller aims to optimize the better operation of micro grid central controller during the Islanded mode i.e. maximize the performance of micro grid. The developed operational algorithms are applied to the micro grid similarly the controller increases the performance of active power, variable frequency, phase angle, better synchronization. The practical results are provided to validate the control scheme using PI-fuzzy-PI controller algorithm.


Index Terms

Computer Science  Electronics

Keywords
BESS  DG  Microgrid  MCC  IED/STS  EPS