

Micro Grids, Solution to Power Off-Grid Areas in Pakistan

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Abstract : In the presence of energy crisis in Pakistan, off-grid remote areas are not on priority list. The use of new large scale coal fired power plants will also make this situation worst. Therefore, the greatest challenge in our society is to explore new ways to power off grid remote areas with renewable energy sources. It is time for a sustainable energy policy which puts consumers, the environment, human health, and peace first. The renewable energy is one of the biggest growing sectors of the energy industry. Therefore, the large scale use of micro grid is thus described here with modeling, simulation, planning and operating of the micro grid. The goal of this research paper is to go into detail of a library of major components of micro grid. The introduction will go through the detail view of micro grid definition. Then, the simulation of Micro Grid in MATLAB/Simulink including the Photo Voltaic Cell will be described with the detailed modeling. The simulation with the design and modeling will be introduced too.

Keywords : micro grids, distribution generation, PV, off-grid operations

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