

3rd International Conference on **Hydrology & Meteorology**

September 15-16, 2014 Hyderabad International Convention Centre, India

Performance and emission analysis of 1.5 MW photovoltaic energy systems

Md. Fahim Ansari

JK Lakshmi Pat University, India

India has high solar insolation, making the place good for solar power initiatives. Thar Desert has been set aside for solar power projects, sufficient to generate 700 to 2,100 GW. India unveiled a \$19 billion plan to produce 20 GW of solar power by 2020. India receives solar energy equivalent to over 5,000 trillion kWh/yr. The daily average solar energy incident varies from 4-7 kWh/m² depending upon the location. Many parts of the country do not have an electrical grid. The paper presents performance, sensitivity analysis and optimization studies are carried out for PV energy system proposed at Minambakkam. Energy model of 1.5 MW PV energy systems is simulated to judge its performance. Two configurations are analyzed one with battery and other without it battery for PV system, capital and replacement multipliers has been chosen as 0.8 and PV life 20 yr. Considering energy security, results with battery cash flow summary is illustrated in this paper.

Biography

Md. Fahim Ansari received PhD (Electrical Engineering) from NITTTR Chandigarh, Punjab University, Chandigarh MTech (Electrical Engineering) from Central University AMU Aligarh BTech (Electrical Engineering). He has published over 22 research papers in international and national journals/conferences and supervised more than 13 MTech theses. His many research papers have been awarded by international and national committees/conference. He has chaired several national conferences. He has given expert lecture in various colleges like NITTTR Chandigarh. He has visited many countries for attending and presenting the research papers in the international conferences. Currently, he is supervising two PhD scholars and evaluated two PhD theses. He is the active reviewer of IEEE Journal, Taylor and Francis Elsevier and other various journals. He is member of BOG of BRCM CET Bahal.

fahim402001@yahoo.co.in