

Probabilistic Assessment Of Photovoltaic (PV) Generation Systems

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Power Systems, IEEE Transactions on;Publication Date: Feb 2002;Vol: 17,Issue: 1
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Summary

The sizing of photovoltaic (PV) power systems for remote offshore loads has been the concern of end users. This is because of the space constraints associated with the application and the expensive cost of panels and batteries. This paper evaluates the design of the PV system using three probabilistic methods. One is considering fixed days of battery back up and recharge and the other is based on loss of load probability (LOLP). The third is based on Markov chain modeling. LOLP distinctly shows reduction in the number of panels and size of batteries while providing a detailed view of the system performance

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