

Article Abstract

Title:	Reliability analysis of wind embedded power generation system for Indian scenario
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Abstract:	This paper presents a method for Reliability Analysis of wind energy embedded in power generation system for Indian scenario. This is done by evaluating the reliability index, loss of load expectation, for the power generation system with and without integration of wind energy sources in the overall electric power system. In the present study, we have taken Wind energy sources for the description of methodology and simulation results for an Indian power system are presented. The methodology can be utilized for any type of alternative generation sources as it is general in nature and not specific to any particular generation energy source. This paper provides a study in Indian scenario to analyze the effect on system reliability when the percentage of wind energy generation increases in the total power generation of system.
Keywords:	Electrical systems; Energy sources; Loss of Loss; Power; System reliability; Wind energy.