Abstract

With the increase in the wind turbine power and size, its control system plays an important role to operate it in safe region and also to improve energy conversion efficiency and output power quality. In this paper a feedback quadratic function controller for controlling a wind energy system is presented. A nonlinear wind energy system has been linearized and simulated using MATLAB programming language. An enhanced profile has been acquired for active and reactive power when adopting the feedback quadratic controller, through checking the settling time of the step response.

References


**Index Terms**

Computer Science  
Control Systems

**Keywords**

Wind Energy, quadratic Function, and feedback controller.