

Vardar A, Ünal H (2006) A Research Towards Meeting the Electricity Demand of a Plant via Wind Turbine. *Journal of Applied Sciences*, 6(5): 1176-1181.

Abstract

In this study, the use of individual wind turbines towards meeting the electricity demands of a plant was emphasized. For this purpose, the electrical energy demand of the plant was revealed, and then the mathematical equations directed towards determining whether the selected wind turbine could meet the electrical energy demand of the plant. The use of four types of wind turbines with different technical features for meeting the energy demands of three plants with different characteristics was evaluated in view of the mathematical equations established. The suitable wind turbines as well as the unsuitable ones were determined for every plant as a result of evaluations. This study was designed especially in a way that the plant which intend to take benefit of wind energy could pattern after. It is possible for the managements to determine the suitable wind turbines for themselves by putting their own data in the mathematical equations.