Tehran grid-connected wind power generation system

This study investigates the modeling of an off-grid HRES based on the wind turbine/photovoltaic/gas generator for supplying the consumption of a residential complex in Tehran (capital of Iran).

In this study, the power required to supply electricity to 250 households in the Shahryar region located in Tehran province was analysed using a hybrid system based on wind turbine load and fuel cell.

Only PV-battery-grid and PV-grid system will be compared and discussed since the goal of this work are to determine the optimal configuration and sizing of a grid-connected PV system for the building.

This chapter is descriptive and analytical. The findings indicated potential for wind energy and electricity generation source in provinces and regions of Iran. Moreover, a framework for future ...

It was found that the wind potential of the region can be adequate for non-grid connected electrical and mechanical applications, such as wind generators for local consumption, battery ...

Thus, in this paper, a PV/wind source with various backups including battery/grid/diesel generator for an educational load with 35kW peak in Tehran city are proposed in order to reach the ...

In this study, a hybrid system is presented for connection to wind power plants consisting of fuel cell and hydrogen production, to provide reliable power and valuable by-products. In this paper, a case study ...