Abstract

The energy is an important factor for the development of social and economic of any country. In recent years, utilizing renewable energy and reducing pollution have become important in the whole world. Wind power is one of the strongest growing forms of renewable energy. Now a days, wind power generation increases rapidly. A detailed study of the models helps energy planning, research and policy making. The available wind energy mainly depends on the wind speed. For the wind-farm operator, this poses difficulty in the system scheduling and energy dispatching, as the schedule of the wind-power availability is not
known in advance. In this paper, we describe different technique for forecasting wind speed. The model based on the neural network, demonstrated a good agreement and produced the wind forecast with high accuracy.

Reference

- ‘Short-Time Wind Speed Prediction for Wind Farm Based on Improved Neural Network’ by Han Xiaojuan, Yang Xiyun, Liu Juncheng in World Congress on Intelligent Control and Automation July 6-9 2010, Jinan, China
- ‘The study on short-time wind speed prediction based on time-series neural network algorithm’ LiangLanzhen
- ‘Short-Horizon Prediction of Wind Power: A Data-Driven Approach’ Andrew Kusiak, IEEE transactions on energy conversion, VOL. 25, NO. 4, December 2010
- ‘Evaluation of two simple wind power forecasting models’ E. Panteri S. apathanassiou National Technical University of Athens
- ‘Neural Networks for Short Term Wind Speed Prediction’ K. Sreelakshmi, P.Ramakanthkumar in World Academy of Science, Engineering and Technology
- ‘wind speed prediction by different computing techniques’ Munir Ahmad Nayak1 Indian Institute of Technology Bombay
- ‘ARIMA vs. Neural Networks for Wind Speed Forecasting’ J.C. Palomares-Salas, in International Conference on Computational Intelligence for Measurement Systems and Applications May 2009
- ‘Wind Speed Prediction Based on the Elman Recursion Neural Networks’ Junfang Li, Buhan Zhang, Chengxiong Mao,
- ‘Entropy and Correntropy Against Minimum Square Error in Offline and Online Three-Day Ahead Wind Power Forecasting’ in IEEE transactions on power systems, vol. 24, no. 4, november 2009

Index Terms

Computer Science

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### Key words

| NWP | ARMA | ANN |