Title: Short-term wind power forecasting in Portugal by neural networks and wavelet transform

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Abstract: This paper proposes artificial neural networks in combination with wavelet transform for short-term wind power forecasting in Portugal. The increased integration of wind power into the electric grid, as nowadays occurs in Portugal, poses new challenges due to its intermittency and volatility. Hence, good forecasting tools play a key role in tackling these challenges. Results from a real-world case study are presented. A comparison is carried out, taking into account the results obtained with other approaches. Finally, conclusions are duly drawn. (C) 2010 Elsevier Ltd. All rights reserved.

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