Title: Application of Adaptive Neuro-Fuzzy Inference for Wind Power Short-Term Forecasting

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Abstract: 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. In this paper, an adaptive neuro-fuzzy inference approach is proposed for short-term wind power forecasting. Results from a real-world case study are presented. A thorough comparison is carried out, taking into account the results obtained with other approaches. Numerical results are presented and conclusions are duly drawn. (C) 2011 Institute of Electrical Engineers of Japan. Published by John Wiley & Sons, Inc.

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