



PROCEEDINGS

11th International Workshop on Large-Scale Integration of Wind Power into Power Systems as well as on Transmission Networks for Offshore Wind Power Plants

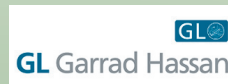
13 - 15 November 2012
Lisbon, Portugal

Edited by Uta Betancourt / Thomas Ackermann

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Proceedings
of the 11th International Workshop on Large-Scale Integration of Wind Power into
Power Systems as well as on Transmission Networks for Offshore Wind Power Plants
published in 2012 by

Energynautics GmbH
Mühlstraße 51
63225 Langen
Germany
www.energynautics.com
info@energynautics.com

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ISBN 978-3-98 13870-5-6

Cover design by:
Sabine Leskien, Berlin, Germany

Printed by
Kopierart GbR, Berlin, Germany
<http://kopierart.de>

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M. Wang-Hansen, R. Josefsson, H. Mehmedovic (ÅF, Sweden)

Session 9A: HVDC Technology II

14:00 – 15:40 / 15 November 2012 / Room Alfama / Session chair: T.B.A.

Power-electronic Asset Characteristics for HVDC-connected Offshore Grids

C. Heising, D. Meyer, R. Bartelt (Avasition, Germany), M. Koochack Zadeh, T. J. Lebioda, J. Jung (TenneT Offshore, Germany)

Investigation of Steady State Operation and Dynamic Performance of a MMC Based HVDC Link

E. N. Abildgaard, Ø. A. Rui (Statnett, Norway), M. Molinas (Norwegian University of Science and Technology, Norway)

Reliability Analysis of HVDC Grid Combined with Power Flow Simulation

Y. Yang, T. Langeland, J. Solvik (DNV, Norway), E. Stewart (DNV KEMA, USA)

Examination of Fault Ride-Through Methods for Off-Shore Wind Farms Connected to the Grid through VSC-Based HVDC Transmission

U. Karaagac, J. Mahseredjian, H. Saad (Polytechnical School of Montreal, Canada), S. Jensen, L. Cai (REpower, Germany)

Session 9B: Grid Code Issues

14:00 – 15:40 / 15 November 2012 / Room Castelo I/II / Session chair: T.B.A.

50/60 Hz Grid Code Test and Verification Experience

Z. Fan (GermanischerLloyd, Germany), J. Meggers (GL Garrad Hassan, Germany), T. Wehrend, T. Gehlhaar (Germanischer Lloyd, Germany)

FGW's Experiences with and Solutions for the Integration of Renewables into the German Grid

J. Rauch (FGW, Germany), J. Möller (M.O.E., Germany)

Transient Control of Grid-connected Converters for Wind Turbines to Fulfill Future Grid Codes

D. Tong, X. Yuan, J. Hu (Huazhong University of Science and Technology, China)

Flexible Fault Ride Through of DFIG Wind Turbines with DC-Chopper Solution

C. Wessels, M. Laubrock, U. Bellgardt (Nordex Energy, Germany), A. Genius (Woodward Kempen, Germany)

The Influence of Reactive Current on Wind Farm LVRT Behavior

Q. Li, M. Zhang, J. He, S. Qin (China Electric Power Research Institute, China)

Session 9C: Modelling II

14:00 – 15:40 / 15 November 2012 / Room Castelo VIII/IX / Session chair: Jens Fortmann (REpower Systems, Germany)

Generic Simplified Simulation Model for DFIG with Active Crowbar

F. Jiménez Buendía (Gamesa, Spain), B. Barrasa Gordo (Assystem Iberia, Spain)

A Wide-Band Equivalent Model for the Full-Converter Based (Type-4) Wind Power Plant

D. N. Hussein, R. Iravani (University of Toronto, Canada)

Power System Modelling at the Interplay of Markets, Control and Engineering

J. Frunt, G. Dekker, W. de Boer, M. Duvoort (DNV KEMA, the Netherlands)

Session 10: Closing Session – Podium Discussions

16:00 – 17:00 / 15 November 2012 / Room Alfama / Session chair: T.B.A.

Podium discussions -Participants:

Paul Gardner (GL Garrad Hassan, United Kingdom) et al.

The contributions and discussions of this session are not part of the proceedings.

Poster Presentations

ACE-netting Between Germany, Western Denmark, the Netherlands and Switzerland

J.E.S. de Haan, A. Virag, I. Lampropoulos (Eindhoven University of Technology, the Netherlands), J. Frunt (DNV KEMA, the Netherlands), W. Kling (Eindhoven University of Technology, the Netherlands)

Grid Integration Aspects within Wind Farm Projects

R. van de Sandt, H. Bußmann (Fichtner, Germany)

Schematic Network Based on German Power System to Support Research Projects

F. Florez, T. Degner (Fraunhofer IWES, Germany), S. Mesa (XM TSO, Colombia)

Virtual Power Players Dealing With Excessive Wind Power Situations Using Real Time Pricing

P. Faria, Z. Vale, H. Morais (GECAD Polytechnic of Porto, Portugal)

Small-Signal Stability Analysis of DC-Link Voltage Control System Affected by Synchronization Control in a Wind Turbine Connected to Weak Grid

Y. Huang, X. Yuan, J. Hu (Huazhong University of Science and Technology, China)

Comparing Two Statistical Local Wind Power Forecasting Methodologies

A. Arnoldt, M. Agsten, P. Bretschneider (Fraunhofer IOSB-AST, Germany)

Regulation of the Wind Power Production: Contribution of the Electric Vehicles and Other Energy Storage Systems

C. B. Mateus, A. Estanqueiro (LNEG, Portugal)

Wind Energy Management for Smart Grids with Storage Systems

M. Gascó (University of Alicante, Spain), A. Rios (European University of Madrid, Spain)

Grid Integration Study of a Wind Farm in a 220 kV Grid

E. Teixeira, C. Alvarez-Ortega (Energy to Quality, Spain)

Wind Turbines for Bridge Structures and for Built-Environment Wind Turbines

L. Åkesson (SP Technical Research Institute of Sweden, Sweden)

Examining the Variability of Wind Power Output in the Regulation Timeframe

B.-M. Hodge, S. Shedd, A. Florita (NREL, USA)

Modelling Wind Speed Parameters for Computer Generation of Wind Speed in Flanders

M. Gay, M. Van Dessel (Lessius Mechelen, Belgium), J. Driesen (KULeuven, Belgium)

Evaluation of Different Operational Strategies for Lithium Ion Battery Systems Connected to a Wind Turbine for Primary Frequency Regulation and Wind Power Forecast Accuracy Improvement

M. Swierczyński, D. I. Stroe, A. I. Stan, R. Teodorescu, S. J. Andreasen (Aalborg University, Denmark)

Offshore Grid Transmission Planning Using Approximated HVDC Power Flows

S. Shariat Torbaghan, B. G. Rawn, M. Gibescu, M. van der Meijden (TU Delft, the Netherlands)

Artificial Intelligence to Predict Short-term Wind Speed

T. Pinto, J. Soares, S. Ramos, Z. Vale (Polytechnic of Porto, Portugal)

Evaluation of Planetary Boundary Layer Parameterizations in the WRF Model for Wind Energy Applications at Ceará State, Brazil

C. Melo, P. Carvalho (DEE - UFC, Brazil), J. Leal Júnior (FÍSICA - UECE, Brazil)

Maximising Value of Wind Power Allocation: A Multi-objective Optimisation Approach

L. Reichenberg, J. Goop, F. Johnsson, M. Odenberger (Chalmers University of Technology, Sweden)

An Introduction to Variable-Energy-Resource Integration Analysis

E. Toolson (Energy Exemplar LLC, USA)

Design of Efficient and Reliable Cluster Collection Systems

J. Pan, S. Bala (ABB Corporate Research, USA), O. Apeldoorn, S. Ebner (ABB, Switzerland), M. Reza (ABB Corporate Research, Sweden), Stephan Ebner (ABB Switzerland)

Investigating the Benefits of Loss Minimization in Wind Farms by Optimal Control

A. Timbus, C. Franke (ABB Corporate Research, Switzerland), C. Băncăanu, I. Vrânceanu, R. Teodorescu, A. Adamczyk (Aalborg University, Denmark)

A Simplified Approach to Detect Undervoltage Tripping of Wind Generators

L. Sigrist, L. Rouco (Comillas University Madrid, Spain)

Assessment of a Methodology for Transmission Expansion Planning around the North Sea

S. Jaehnert, H. Farahmand, S. Völler, O. Wolfgang, D. Huertas-Hernando (SINTEF, Norway)

Transmission Infrastructure Development Criteria for Interconnecting Large Scale Wind Generation

V. Banunarayanan, K. Collison, K. Kumaraswamy, (ICF International, USA)

Variation Management through Spatial Distribution of Wind Power Capacity

L. Göransson, L. Reichenberg, F. Johnsson (Chalmers University of Technology, Sweden)

Pressure Coefficient Evolutions on the Blades of a Savonius Rotor

A. Chauvin, S. Guignard (Laboratoire IUSTI, France), B. Kamoun (Laboratory of Applied Physics, Tunisia)

Workshop Participants

Workshop Information
