

CALL FOR PAPERS

IEEE Transactions on Energy Conversion

Special Issue on Wind Power

Introduction

Wind power is today's most rapidly growing renewable power source - up 25% from 2004. According to Global Wind Energy Council, installed capacity, worldwide is 59,322MW, in Germany 18,428MW, in Spain 10,027MW, in the US 9,194 MW. Inherent characteristics, such as uncontrollable wind source fluctuations and incompatible turbine speeds requiring different generator types, pose technical issues not encountered with conventional thermal, hydro, or nuclear power. These differences affect wind power's integration into power grids.

These difference barriers may be fundamental, or may be technically overcome at higher costs. The debate continues, worldwide, even while installed capacity grows. This is an opportune time for the power engineering community to share theoretical insight and practical experience and to shape wind power's impact on power systems.

Recognizing the pressing need for authoritative information, IEEE Transactions on Energy Conversion seeks manuscripts submissions for a Special Issue on Wind Power.

Preferred Subjects for the IEEE TEC Special Issue include, but are not limited to:

- Wind forecasting's impact on wind power's integration into power systems
- Wind power generation economics, including effects on system operation
- Wind turbine reliability
- Wind turbine design to mitigate environmental effects
- Wind power generation's probabilistic aspects and possible links with probabilistic network-planning approaches
- Wind generation evacuation issues and storage: hydrofiring, hydrogen storage
- Wind-turbine-generating systems: drive-train concepts, generator design, loss minimization, design optimization
- Wind-turbine-generating systems modelling for power systems: load-flow, fault analysis, protection analysis, power-system dynamics, electromagnetic transients
- Control system and wind turbines innovations
- Interconnecting wind power and distribution systems: impact on protection schemes, fault levels, network operation
- Large-scale, wind power integration with transmission systems: voltage and reactive power control, supply and demand balance

IEEE Transactions on Energy Conversion is an IEEE Power Engineering Society publication which promotes area development through peer-reviewed publications. This authoritative publication selects from, and provides access to, an archival library of long-term technical value material that delineates progress in the diverse field of energy generation and conversion.

IEEE Power Engineering Society is a worldwide, non-profit association of more than 21,000 individuals engaged in electric power engineering. PES members are involved in planning, research, development, construction, installation, and operation of equipment and systems for safe, reliable, and economic generation, transmission, distribution, measurement, and control of electric energy. The Power Engineering Society provides the world's largest forum for sharing the latest technological developments in the electric power industry, for developing standards that guide the development and construction of equipment and systems, and for educating members of the industry and the general public.

Manuscript Submission: Papers must be prepared in accordance with the procedures outlined in the PES Publications Guide, which is part of the PES Authors Kit available at the PES web site (<http://www.ieee.org/power>). Complete manuscripts are to be submitted electronically via the **TEC web site (<http://tec-ieee.manuscriptcentral.com>)**, which can also be accessed from the PES web site. The submission site will be available for paper submissions through **July 1, 2006**.

Authors will be notified of the decision regarding their paper by .

Summary of Important Dates:

Paper Submission Website Open	Now
Papers Due	July 1
Authors Notified (Accept, Reject or Revise)	September 1
*Revised Papers Due	October 1
*Revised Paper Authors Notified	November 1

*Papers may be revised and resubmitted **ONLY** at the request of the TEC Special Issue on Wind Power Guest Editor