Offshore Wind Farms: Technologies, Design and Operation provides the latest information on offshore wind energy, one of Europe's most promising and quickly maturing industries, and a potentially huge untapped renewable energy source which could contribute significantly towards EU 20-20-20 renewable energy generation targets.

It has been estimated that by 2030 Europe could have 150GW of offshore wind energy capacity, meeting 14% of our power demand. Offshore Wind Farms: Technologies, Design and Operation provides a comprehensive overview of the emerging technologies, design, and operation of offshore wind farms.

Part One introduces offshore wind energy as well as offshore wind turbine siting with expert analysis of economics, wind resources, and remote sensing technologies. The second section provides an overview of offshore wind turbine materials and design, while part three outlines the integration of wind farms into power grids with insights to cabling and energy storage. The final section of the book details the installation and operation of offshore wind farms with chapters on condition monitoring and health and safety, amongst others.

- Provides an in-depth, multi-contributor, comprehensive overview of offshore technologies, including design, monitoring, and operation
- Edited by respected and leading experts in the field, with experience in both academia and industry
- Covers a highly relevant and important topic given the great potential of offshore wind power in contributing significantly to EU 20-20-20 renewable energy targets

Contents:

Part 1 Introduction to offshore wind energy and offshore wind farm siting
1. Introduction to offshore wind energy
2. Economics of building and operating offshore wind farms
3. Wind resources for offshore wind farms: characteristics and assessment
4. Remote sensing technologies for measuring offshore wind

Part II Wind turbine components and design
5. Developments in materials for offshore wind turbine blades
6. Design of offshore wind turbine blades
7. Design of gearbox and other drivetrain components for offshore wind turbines
8. Design of generators for offshore wind turbines
9. Modeling of power electronic components for evaluation of efficiency and power density of offshore wind power converters
10. Design of offshore wind turbine towers
11. Design of floating offshore wind turbines

Part III Integration of wind farms into power grids
12. Offshore wind farm arrays
13. Cabling to connect offshore wind turbines to onshore facilities
14. Integration of power from offshore wind turbines into onshore power grids

15. Energy storage for offshore wind farms

16. Hydropower flexibility and transmission expansion to support integration of offshore wind

Part IV Installation and operation of offshore wind farms

17. Assembly, transportation, installation and commissioning of offshore wind farms

18. Condition monitoring of offshore wind turbines

19. Health and safety of offshore wind farms

20. Offshore wind-turbine foundations: analysis and design

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