

1. Record Nr.	UNINA9911006557803321
Autore	Tavner Peter
Titolo	Offshore wind turbines : reliability, availability and maintenance // Peter Tavner
Pubbl/distr/stampa	London, : Institution of Engineering and Technology, 2012
ISBN	1-62198-567-9 1-299-10444-4 1-84919-230-8
Descrizione fisica	1 online resource (292 p.)
Collana	Renewable energy series ; ; 13
Disciplina	621.31/2136
Soggetti	Wind power Wind turbines Offshore wind power plants
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Contents; Preface; Acknowledgements; Nomenclature; List of abbreviations; 1. Overview of offshore wind development; 2. Reliability theory relevant to offshore wind turbines; 3. Practical wind turbine reliability; 4. Effects of wind turbine configuration on reliability; 5. Design and testing for wind turbine availability; 6. Effect of reliability on offshore availability; 7. Monitoring wind turbines; 8. Maintenance for offshore wind turbines; 9. Conclusions; 10. Appendix 1: Historical evolution of wind turbines; 11. Appendix 2: Reliability data collection for the wind industry 12. Appendix 3: WMEP operators report form 13. Appendix 4: Commercially available SCADA systems for WTs; 14. Appendix 5: Commercially available condition monitoring systems for WTs; 15. Appendix 6: Weather, its influence on offshore wind reliability; Index
Sommario/riassunto	The first book to specifically focus on offshore wind turbine technology and which addresses practically wind turbine reliability and availability. The book draws on the author's experience of power generation reliability and availability and the condition monitoring of that plant to describe the problems facing the developers of offshore wind farms and the solutions available to them to raise availability, reduce cost of

energy and improve through life cost.
