

Investigation on Installation of Offshore Wind Turbines(PDF)

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Title: Investigation on Installation of Offshore Wind Turbines

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关键词: wind turbine; foundation style; split installation; overall installation

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摘要: Wind power has made rapid progress and should gain significance as an energy resource, given growing interest in renewable energy and clean energy. Offshore wind energy resources have attracted significant attention, as, compared with land-based wind energy resources, offshore wind energy resources are more promising candidates for development. Sea winds are generally stronger and more reliable and with improvements in technology, the sea has become a hot spot for new designs and installation methods for wind turbines. In the present paper, based on experience building offshore wind farms, recommended foundation styles have been examined. Furthermore, wave effects have been investigated. The split installation and overall installation have been illustrated. Methods appropriate when installing a small number of turbines as well as those useful when installing large numbers of turbines were analyzed. This investigation of installation methods for wind turbines should provide practical technical guidance for their installation.

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