

新能源与分布式发电

海上风电场集电系统可靠性评估

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摘要:

在分析海上风电场集电系统结构和接线特点的基础上, 考虑了风速变化对系统可靠性指标的影响, 提出了海上风电场集电系统可靠性综合评估的模型和算法。以中国某海上风电场原规划的集电系统为例, 说明了集电系统拓扑形式和风速变化对系统可靠性的影响。

关键词:

Reliability Evaluation of Wind Power Collection System for Offshore Wind Farm

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Abstract:

On the basis of analyzing the structure and connection property of wind power collection system for offshore wind farms, the influences of wind speed variation on the reliability indices of offshore wind power generation system are considered, and a comprehensive reliability evaluation model of power collection system for offshore wind farms and its corresponding algorithm are proposed. Taking a wind power collection system planned for a certain offshore wind farm in China for example, the influences of collection system's topology and wind speed variation on system reliability are analyzed.

Keywords:

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