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ICS 27.180
CCS F 11

FD

FD 003-2007

Design regulations on subgrade and foundation for wind turbine generator system

风电机组地基基础设计规定（试行）

(English Translation)

Issued on: September 7, 2007 **Implemented on: September 7, 2007**

Issued by: China Institute of Hydropower and Water Conservancy Planning and Design

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1 Foreword

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The document runs to 101 pages in English translation.

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2 Scope Preview

1.0.1 This standard specifies such contents as the basic principles and methods for the design of subgrade and foundation for wind turbine generator system tower in wind power station, engineering geological conditions, environmental conditions, load, structural design, ground treatment, inspection and monitoring involving subgrade and foundation. 1.0.2 This standard is applicable to the design of subgrade and foundation for wind turbine generator system tower in newly-built onshore wind power station. Completion acceptance, reconstruction (extension) of existing project and periodical safety inspection shall be implemented by reference to this standard. 1.0.3 The design of subgrade and foundation for wind turbine generator system tower in wind power station shall comply with the requirements of this standard, subgrade of collapsible soil, permafrost and expansive soil and that in erosive environment or under temperature influence shall also meet those specified in relevant current national standards.

FD 003-2007 falls under ICS 27.180, in the field of energy and heat transfer engineering.

This catalogue holds 5 other FD standards in that field.

In this catalogue, FD standards carry edition years from 2007 to 2011.

3 Normative references

GB 18306 - Seismic Ground Motion Parameter Zonation Map of China

GB 18451.1 - Wind Turbine Generator Systems - Safety Requirements

GB 50007 - Code for Design of Building Foundation

GB 50009 - Load Code for the Design of Building Structures

GB 50010 - Code for Design of Concrete Structures

GB 50011 - Code for Seismic Design of Buildings

GB 50021 - Code for Investigation of Geotechnical Engineering

GB 50046 - Code for Anticorrosion Design of Industrial Constructions

GB 50153 - Unified Standard for Reliability Design of Engineering Structures

GB 50223 - Standard for Classification of Seismic Protection of Building Constructions

GB 50287 - Code for Hydropower Engineering Geological Investigation

GBJ 146 - Technique of Powdered Coal Ash Concrete Application

FD 002-2007 - Classification and Design Safety Standard of Windpower Projects

DL/T 5082 - Design Specifications of Hydraulic Structures against Ice and Freezing Action

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JB/T 10300 - Wind Turbine Generator System - Design Requirements

JGJ 24 - Code for Design of Civil Architecture Thermal Engineering

JGJ 94 - Technical Code for Building Pile Foundations

JGJ 106 - Technical Code for Testing of Building Foundation Piles

JTJ 275 - Corrosion Prevention Technical Specifications for Concrete Structures of Marine Harbor Engineering

4 About this standard

Issued by: China Institute of Hydropower and Water Conservancy Planning and Design

English translation: about 101 pages

Chinese original: about 153,187 characters

5 Related standards

Standards on related subjects:

GB/T 19070-2017 - Stall regulation wind turbines-Control system-Test method

GB/T 17646-2013 - Design requirements for small wind turbine

GB/T 18451.1-2012 - Wind turbine generator systems -- Design requirements

FD 008-2011 - Technical code for construction planning of offshore wind power projects

FD 007-2011 - Preparation rules of offshore windpower projects feasibility study report

FD 005-2008 - Preparation rules of offshore windpower projects plannting report

6 Classification and status

International classification (ICS): 27.180

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