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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 46244-2025

**Wind energy generation systems - Power performance
measurements overview of electricity producing wind turbines**

风能发电系统 风力发电机组功率特性测试概述

(English Translation)

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

This document is equivalent to IEC 61400-12:2022 "Wind power generation systems - Part 12: Overview of power characteristic testing of wind turbine generators".

The following minimal editorial changes have been made to this document.

---To align with existing standards, the standard name has been changed to "Overview of Power Characteristic Testing of Wind Turbine Generator Sets in Wind Power Generation Systems".

1 Scope

This document describes the procedure for evaluating the power characteristics of wind turbine generators.

This document provides an overview of the available options for power characteristic testing and related evaluation, which are covered in the IEC 61400-12 series of documents.

Further details are provided in other parts of the document. While this document and other parts of the IEC 61400-12 series define power... Specifications for meteorological variables (especially wind speed) required for characteristic assessment are provided, but measurements are also defined in the IEC 61400-50 series of wind measurement documents.

Methods and procedures for obtaining wind speed data in other ways.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included.

For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies to this document.

IEC 61400-12-1 Wind power generation systems - Part 12-1. Test of power characteristics of wind turbine generators (Wind energy generation - Note: GB/T 18451.2-2025 Power characteristic test of wind turbine generator sets for wind power generation systems (IEC 61400-12-1:2022, IDT)

IEC 61400-12-2 Wind power generation systems - Part 12-2. Power characteristic testing of wind turbine generators based on nacelle anemometer method

Note: GB/T 33225-2025 Power Characteristic Test of Wind Turbine Generators Based on Nacelle Anemometer Method for Wind Power Generation Systems (IEC 61400-12-2:2022) IDT)

Note: GB/T 46245-2025 Field calibration of power characteristic test for wind power generation systems (IEC 61400-12-3:2022, IDT)

IEC 61400-12-5 Wind power generation systems - Part 12-5. Power characteristic testing and assessment of obstacles and terrain (Wind)

Note: GB/T 46242-2025 Power characteristic testing of wind power generation systems - Obstacle and terrain assessment (IEC 61400-12-5:2022, IDT)

IEC 61400-12-6 Wind power generation systems - Part 12-6. Measurement of wind speed transfer function in wind turbine nacelles (Wind (ducting wind turbines)

Note: GB/T 46241-2025 Measurement of wind speed transfer function of wind turbine nacelle in wind power generation system (IEC 61400-12-6:2022, IDT) Part 50: Wind measurement - Overview)

Note: GB/T 45851-2025 Overview of wind energy resource measurement for wind power generation systems (IEC 61400-50:2022, IDT)

IEC 61400-50-1 Wind power generation systems - Part 50-1. Based on wind measurement equipment mounted on wind measurement towers, nacelles and fairings