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

**GB/T 47032-2026**

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**Code for the operational evaluation of combined wind,  
photovoltaic and energy storage power stations**

风光储联合发电站运行评价规程

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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". Drafting. Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents. This document was proposed and is under the jurisdiction of the China Electricity Council. This document was drafted by: China Electric Power Research Institute Co., Ltd., State Grid Corporation of China, and State Grid Anhui Electric Power Co., Ltd. Electric Power Research Institute, State Grid Shandong Electric Power Company Electric Power Research Institute, State Grid Hebei Electric Power Company Electric Power Research Institute, State Grid Fujian Electric Power Company Limited, China Huadian Electric Power Research Institute Co., Ltd., State Grid Qinghai Electric Power Company Limited, State Grid Hunan Electric Power Company Limited Economic and Technological Research Institute, State Grid Xinjiang Electric Power

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## 1 Scope

GB/T 47032-2026 is the Chinese national standard covering judging a hybrid wind-solar-storage plant as one station - the output it actually delivers against forecast, the curtailment avoided by the storage, the round-trip losses, the availability of each part and the indicators that make two such plants comparable. First edition, in force since 1 May 2026. It was issued on 28 January 2026 and has been in force since 1 May 2026, as a first edition. This page is published from the official record of the 2026 edition; the clause text of a standard this recent is not yet in circulation, and the figures, limits and tables it contains are those of the document itself, delivered in full with the English translation.

This document specifies the overall requirements, evaluation procedures, evaluation data, evaluation indicators and calculation methods for the operation evaluation of combined wind, solar and energy storage power stations. Analysis, evaluation, and traceability methods. This document applies to the operational evaluation of wind-storage, solar-storage, and combined wind-solar-storage power plants.

## 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. This document.

GB/T 36549 Operational Indicators and Evaluation of Electrochemical Energy Storage Power Stations

GB/T 51311 Standard for Commissioning and Acceptance of Combined Wind-Solar-Storage Power Stations

GB/T 51437 Design Standard for Combined Wind, Solar and Storage Power Stations DL/T 793.6 Reliability Evaluation Code for Power Generation Equipment - Part

6. Wind Turbine Generator Sets DL/T 793.7 Reliability Evaluation Procedure for Power Generation Equipment - Part

7. Photovoltaic Power Generation Equipment DL/T 1815 Reliability Evaluation Procedure for Electrochemical Energy Storage Power Station Equipment DL/T 2528 Basic Terminology for Electric Energy Storage NB/T 10586 Standard Energy Utilization Rate Evaluation Procedure for Wind Power Plants NB/T 31045 Wind Farm Operation Indicators and Evaluation Guidelines

### 3 Terms and Definitions

GB/T 36549, GB/T 51311, GB/T 51437, DL/T 793.6, DL/T 793.7, DL/T 1815, DL/T 2528, The terms and definitions defined in NB/T 10586 and NB/T 31045, as well as the following terms and definitions, apply to this document.

3.1 joint operation hours The wind-solar-storage combined power station operates in four modes. wind-solar-storage combined operation, wind-solar combined operation, wind-storage combined operation, and solar-storage combined operation. The sum of the number of hours in the flight mode.

3.2 joint operation factor The percentage of hours in which wind, solar and energy storage combined power plants operate together (3.1) during the statistical period.

### 4 Symbols

The following symbols apply to this document. Electricity (kWh) of combined wind, solar, and energy storage power plants settled in the market during the EMar statistical period Eon's on-grid electricity generation from combined wind, solar, and energy storage power plants during the statistical period (kWh)