

ICS 27.180
CCS F 19



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

GB/T 46372-2025

**Guide for commissioning flywheel energy storage power
stations**

飞轮储能电站调试导则

Issued on: October 31, 2025

Implemented on: May 1, 2026

**Issued by: State Administration for Market Regulation;
Standardization Administration of the PRC**

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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 by the China Electricity Council. This document is under the jurisdiction of the National Technical Committee on Standardization of Power Storage (SAC/TC550). This document was drafted by: China Energy Investment Corporation Ningxia Electric Power Co., Ltd., Huachi Power (Beijing) Technology Co., Ltd., and North China Electric Power University. North China Electric Power Research Institute Co., Ltd., China Electricity Council, State Energy Group Shandong Electric Power Co., Ltd., Huaneng Inner Mongolia Inner Mongolia East New Energy Co., Ltd., State Grid Inner Mongolia East Electric Power Co., Ltd., State Grid Economic and Technological Research Institute Co., Ltd., China Electric Power Research Institute Research Institute Co., Ltd., State Grid Shandong Electric Power Research Institute, Huadian Shanxi Energy Co., Ltd., China Power Construction Group East China Exploration and Design Institute Measurement and Design Institute Co., Ltd., Tianjin Chentang Thermal Power Co., Ltd., State Grid Corporation of China North China Branch, and Guodian Nanjing Automation Co., Ltd. Limited Company, Shenyang Microcontroller Flywheel Technology Co., Ltd., State Grid Inner Mongolia East Electric Power Research Institute, Guoneng Zhicheng Control Manufacturing Technology Co., Ltd. The main drafters of this document are. Liang Zhihong, Wang Zhiqiang, Fang Fang, Huang Tianxiao, Li Yunning, Wang Shaomin, Su Sen, Liu Huadong, Lei Chunmin, and Huang Songtao. Zhao Tianqi, Peng Long, Zhou Lipeng, Jiang Wen, Rong Jingguo, Li Fei, Zhang Guoxing, Liu Yinglin, Li Jun, Shang Guozheng, Yu Dahai, Liu Shaolong, Li Ning, Zheng Yingxia Yu Zhenyue, Shi Shuo, Lü You, Bu Lijun, Dong Enlei, Liu Yu, Li Lei, Jiang Yanjun, Ding Mingjin, Ren Zhengjun, Tang Junjie, Chen Xiaolu, Zheng Bowen, Qi Xiangbai, Chen

Feng, Niu Haiming, Liu Weian. Commissioning Guidelines for Flywheel Energy Storage Power Stations

1 Scope

GB/T 46372-2025 is the Chinese national standard covering bringing a flywheel storage station into service - the vacuum and bearing checks before the rotor is ever spun, the staged run-up, the charge and discharge tests at rated power, the protection trips proved, and the grid connection. First edition, under the China Electricity Council. In force from 1 May 2026. Issued on 31 October 2025, it has been in force since 1 May 2026.

This document specifies the items and methods for the joint commissioning of subsystems and the entire flywheel energy storage power station. This document applies to the commissioning of newly built, renovated, or expanded flywheel energy storage power stations.

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 156 Standard Voltage

GB/T 1980 Standard Frequency

GB/T 7261 Basic Test Methods for Relay Protection and Safety Automatic Devices

GB/T 12325 Power Quality - Supply Voltage Deviation

GB/T 12326 Power Quality - Voltage Fluctuations and Flicker

GB/T 14285 Technical Specification for Relay Protection and Safety Automatic Devices

GB/T 14549 Power Quality - Harmonics in Public Power Grids

GB/T 15543 Power Quality - Three-phase Voltage Imbalance

GB/T 19582.1 Industrial Automation Network Specification Based on Modbus Protocol Part