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

GB/T 22384-2024

Replacing GB/T 22384-2008

**Inspection specification for security and stability control
system of power system**

电力系统安全稳定控制系统检验规范

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part

1. Structure and drafting rules for standardization documents". Drafting is required. This document replaces GB/T 22384-2008 "Test Specification for Safety and Stability Control Systems of Power Systems" and is In addition to structural adjustments and editorial changes, the main technical changes are as follows:

--- Added terms and definitions (see Chapter 3);

--- Added corresponding requirements before inspection work and network security protection requirements (see 4.1, 4.3);

--- Changed the inspection classification (see 5.1,

4.1 of the.2008 edition);

--- Added static test, dynamic test and system transmission test inspection methods, among which dynamic test includes dynamic whole group test and actual Digital simulation test (see 5.2);

--- Changed the provisions for factory acceptance inspection and dynamic testing (see 5.3, 4.1 of the.2008 edition);

--- Changed the provisions on full inspection cycle, partial inspection cycle and inspection scope (see 5.4.2.1,

4.2.1 of the.2008 edition);

--- Added requirements for handling defects and problems found during inspection (see 5.5);

--- Added the requirement to carry out risk point analysis and take safety precautions before inspection (see 6.2);

--- Added preparations before factory acceptance inspection and system transmission test (see 6.3, 6.5);

1 Scope

GB/T 22384-2024 is the Chinese national standard on inspection specification for security and stability control system of power system, in the field of electrical engineering. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 26 October 2024 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 May 2025. Classification: ICS 29.240, CCS K45. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This document specifies the overall inspection requirements, inspection classification and requirements, inspection The test preparation, test items and requirements are described, and the test methods for the inspection of power system safety and stability control systems are described. This document is applicable to the safety and stability control systems or safety and stability control devices of power generation enterprises or departments, power grid enterprises or departments and users. Design, manufacture, installation, commissioning, operation, maintenance and management of [abbreviated as "stabilization and control system (device)"]].

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document. For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to This document.

GB/T 7261 Basic test methods for relay protection and safety automatic devices

GB 26860 Electricity Safety Work Regulations - Electrical Parts of Power Plants and Substations

GB/T 34871 Specification for inspection and testing of relay protection for smart substations

GB/T 36572 Guidelines for Cybersecurity Protection of Power Monitoring Systems

GB/T 40091 Safety measures requirements for relay protection and grid safety automatic devices in smart substations

GB/T 40587 Technical Specification for Power System Safety and Stability Control Systems

DL/T 527 Technical requirements for power supply modules (modules) for relay protection and control devices DL/T 995 Inspection procedures for relay protection and power grid safety automatic devices DL/T 1092 General Technical Requirements for Power System Safety and Stability Control Systems DL/T 2544 Guidelines for Condition-Based Maintenance of Relay Protection Devices

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 To ensure the stability of the power system when encountering large disturbances, control equipment is installed in power plants, substations or new energy stations to achieve Equipment with functions such as generator cutting, load shedding, rapid output reduction, DC emergency control, and rapid control of new energy sources such as wind power, photovoltaics, and energy storage.

Note. referred to as stabilizing device. [Source: GB/T 40587-2021, 3.1]

3.2 A system consisting of two or more power plants and stations connected by communication equipment to achieve regional or larger-scale power Stable control of the force system.

Note. referred to as stabilization control system. [Source: GB/T 40587-2021, 3.2]