

ICS 27.180
CCS F 19



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

GB/T 43868-2024

**Code for start-up and acceptance of electrochemical energy
storage power station**

电化学储能电站启动验收规程

Issued on: April 25, 2024

Implemented on: November 1, 2024

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

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Foreword

This document was drafted in accordance with the provisions of GB/T 1.1-2020 "Directives for standardization - Part 1: Rules for the structure and drafting of standardizing documents".

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This document was proposed by China Electricity Council.

This document shall be under the jurisdiction of National Technical Committee on Power Storage of Standardization Administration of China (SAC/TC 550).

Drafting organizations of this document. Electric Power Research Institute of Yunnan Power Grid Co., Ltd., Electric Power Research Institute of State Grid Gansu Electric Power Company, Electric Power Research Institute of State Grid Zhejiang Electric Power Co., Ltd., Power Dispatching and Control Center of Guangdong Power Grid Co., Ltd., China Southern Power Grid Energy Storage Co., Ltd., State Grid Jibei Zhangjiakou Wind and Solar Storage and Transmission New Energy Co., Ltd., China Southern Power Grid Electric Technology

Co., Ltd., China Electric Power Research Institute Co., Ltd., Yunnan Power Grid Co., Ltd., Huaneng New Energy Co., Ltd., Quzhou Great Power Energy Technology Co., Ltd., Yunnan Power Grid Energy Investment Co., Ltd.

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Code for start-up and acceptance of electrochemical energy storage power station

1 Scope

This document specifies the start-up and acceptance preparation, system and equipment inspection, start-up and acceptance test, trial operation and evaluation, and handover of electrochemical energy storage power stations.

This document applies to the start-up and acceptance of newly built, rebuilt and expanded electrochemical energy storage power stations connected to the grid at voltage levels of 10 kV (6 kV) and above.

2 Normative references

GB/T 36547

GB/T 36548

GB/T 36558

GB/T 42312

GB/T 42737-2023

GB 50150

GB 51048

3 Terms and definitions

For the purpose of this document, the terms and definitions defined in DL/T 2528 apply.

4.1 The electrochemical energy storage power station shall establish a start-up and

acceptance committee (hereinafter referred to as the "Start-up Committee") to uniformly manage the start-up and acceptance work. The responsibilities and contents of the Start-up

Committee are shown in Annex A.

4.2 The start-up and acceptance work of an electrochemical energy storage power

station shall be carried out after the installation of various equipment, subsystem commissioning and joint commissioning are completed, and after the inspection and acceptance of supporting facilities such as civil engineering, electrical, and fire protection.

4.3 The start-up and acceptance of electrochemical energy storage power stations shall

be carried out according to the following procedures.

5.1 Before the start-up and acceptance of electrochemical energy storage power stations,

the following conditions shall be met.

- a) Sign a grid-connection dispatching agreement, a power purchase and sales contract, and a power supply and use contract with the power grid enterprise.
- b) Complete the installation and quality acceptance of the equipment, and obtain the quality inspection report issued by the quality inspection agency.
- c) Complete the grid-connected line subsystem and joint commissioning in accordance with the provisions of GB/T 42737-2023, and meet the operating conditions.
- d) Complete the communication joint commissioning and relay protection setting value setting and verification with the power grid dispatching agency, to meet the requirements of dispatching automation, relay protection, safety automatic devices and dispatching communications.
- e) Complete the commissioning and acceptance of special facilities such as fire protection, environmental protection, soil and water conservation, flood control, and labor safety.
- f) The operating duty personnel have completed the training and obtained the corresponding qualification certificates and are qualified for the job.
- g) Prepare relevant operating procedures, safety procedures, safety management systems, and emergency plans. The preparation of emergency plans complies with the provisions of GB/T 42312.

5.2 The Start-up Committee shall organize the review of the following start-up and

acceptance materials of electrochemical energy storage power stations.

- a) Project design summary report, project construction management summary report, project construction summary report, project construction supervision summary report, project commissioning summary report, project trial operation production preparation report; the main contents of each report are shown in Annex B;
- b) Equipment type test report, factory-exit test report, installation and quality acceptance report, quality inspection report, etc.;
- c) Commissioning report, test records, etc.; the commissioning content and results comply with the provisions of GB/T 42737-2023;
- d) Power monitoring system safety protection acceptance report; the safety protection complies with the provisions of DL/T 2192;
- e) Fire protection system acceptance report; the fire protection system complies with the provisions of GB 51048;
- f) Operating procedures and management systems, and qualification certificates of operating duty personnel.

6.1 Grid-connected line inspection

Check that the grid-connected line has been installed and passed the unit project acceptance.

6.2 Substation electrical equipment inspection

Check that the electrical equipment such as circuit breaker, high-voltage busbar, transformer, isolating knife switch, reactive power compensation device in the substation have been installed and passed the unit project acceptance.

6.3 Distribution cabinet equipment inspection

Check that the distribution cabinet has been installed and passed the unit project acceptance.

6.4 Cable line, bridge and wire duct inspection

Check that the cable line, bridge and wire duct have been installed and passed the unit project acceptance.

6.5 Battery pack inspection

Check that the battery pack has been installed and passed the unit project acceptance; subsystem commissioning has been completed.