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**CERTIFICATION AND ACCREDITATION INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

RB/T 091-2022

**Certification requirements for operation service of
grid-connected photovoltaic power station
(English Translation)**

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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:

Please note that some contents of this document may refer to patents: The issuing agency of this document assumes no responsibility for identifying patents:

Introduction

The security of power grid is related to the national strategic security, and the quality of supporting service provided by photovoltaic power stations to the power grid directly affects the safe operation of the power grid: Establish the evaluation and certification mechanism for the hardware facilities, grid-connected performance and operation and maintenance management capabilities of photovoltaic power stations is to control and improve the grid-connected services of photovoltaic power stations effective means of capacity: With the proposal of the "double carbon" goal and the goal of building a new power system with new energy as the main body, photovoltaic power generation has the proportion in the network will increase rapidly, and gradually become the main power supply: The stability of the power grid will face a new situation, and the service certification of photovoltaic power stations will development is particularly urgent:

Power station facilities are the hardware that must be configured for photovoltaic power stations and meet the requirements of relevant standards, and are the basis for realizing various functions of the power station:

The completeness and performance quality of photovoltaic power plants directly affect the grid-connected performance of photovoltaic power stations: Grid-connected requirements are the basic requirements for photovoltaic power stations to be connected to the grid:

The grid-connected performance of photovoltaic power stations directly affects the safe and stable operation of the grid: The excellent power prediction performance of photovoltaic power stations will improve photovoltaic consumption, Optimizing power grid dispatching operation; excellent grid-connected tolerance and support performance will improve the coordination, safety, economy and efficiency of the source network; high level the operation and maintenance management of the power station will improve the operation safety of the power station, prolong the life of the power station, and benefit the reliable operation of the power grid:

Photovoltaic power station grid-connected operation service certification requirements

1 Scope

This document specifies the general requirements, basic conditions, star service and service certification evaluation criteria for grid-connected operation service certification of photovoltaic power stations:

Require:

This document is applicable to the certification of photovoltaic power station grid-connected operation services:

2 Normative references

The contents of the following documents constitute the essential provisions of this document through normative references in the text: Among them, dated references for documents, only the version corresponding to the date is applicable to this document; for undated reference documents, the latest version (including all amendments) is applicable to this document:

GB/T:19964 Technical Regulations for Connecting Photovoltaic Power Stations to Power Systems
GB/T 27207-2020 Guidelines for Selection and Application of Certification Modes for Conformity Assessment Services
GB/T 37408 Technical requirements for grid-connected inverters for photovoltaic power generation
GB 38755 Guidelines for Power System Safety and Stability
DL/T 1870 Power System Network Source Coordination Technical Specifications
NB/T 32011 Technical Requirements for Power Prediction System of Photovoltaic Power Station

3 Terms and Definitions

The terms and definitions defined in GB/T:19964, GB/T 37408, GB 38755, DL/T 1870 and NB/T 32011 apply to this document:

4 General requirements

4.1

The certification object of a photovoltaic power station shall be a single photovoltaic power station managed by grid dispatching:

4.2

The certification body shall carry out the certification after the photovoltaic power station has passed the completion acceptance and is officially put into operation:

4.3

The certification body shall review the materials submitted by the applicant, including the planning, design, construction, acceptance and operation of the photovoltaic power station:

Process control documents, test reports and related materials:

4.4

The certification body should first carry out the basic condition compliance judgment, and carry out the star service evaluation on the premise of meeting the basic conditions:

5 Basic conditions

5.1

Power Station Facilities

5.1.1

The deviation between the actual installed capacity of the photovoltaic power station and the recorded installed capacity should be within 5%:

5.1.2

Photovoltaic inverters should meet the requirements of GB/T 37408 and pass the testing and certification of third-party testing and certification agencies:

5.1.3

The configuration of the secondary system of the photovoltaic power station shall meet the following requirements:

- a) Configure the monitoring system and put it into normal operation;
- b) Configure the active power control system and put it into normal operation;