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**Technical specifications for remote automatic power control
(ADC) of high voltage direct current converter station**

高压直流换流站直流功率远方自动控制（ADC）技术规范

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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.

Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

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Remote automatic control of DC power in HVDC converter stations (ADC) Technical Specifications

1 Scope

This document specifies the system configuration of the DC power remote automatic control master station and substation of the $\pm 100\text{kV}$ and above HVDC converter station.

System architecture, functions, performance, information interaction and testing requirements.

This document is applicable to the design of ADC technology equipment for new (renovation, expansion) construction of power dispatching organizations and converter stations with voltage levels of $\pm 100\text{kV}$ and above.

design, construction, commissioning and operation.

2 Normative references

GB/T 13498

GB/T 13729

GB/T 22390.1

GB/T 33590.2

GB/T 36572

IEC 60870

3 Terms and Definitions

The terms and definitions defined in GB/T 13498, GB/T 33590.2 and GB /Z 14429 and the following terms and definitions apply to this document.

3.1

According to the grid operation conditions, the DC active power control target is calculated in real time, and the DC power of the converter station is automatically closed-loop controlled to achieve the goal of A technical support system for remotely regulating the active power and power regulation rate of a DC transmission system.

Note. Its technical equipment system mainly includes the dispatching organization energy management system, telecontrol transmission channel, DC converter station remote terminal equipment or SCADA system, The DC control and protection system of the flow station, as well as the application software and hardware that realize the DC power automatic control function, is referred to as the ADC system.

3.2 DC control unit DC control unit

HVDC system control objects modeled in the dispatching agency energy management system.

Note. One DC control unit corresponds to a two-terminal, multi-terminal or back-to-back DC transmission system.