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**Technical specification for security protection of electric power
optical transmission systems**

电力光传输系统安全防护技术规范

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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 is required.

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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Technical specification for safety protection of power optical transmission system

1 Scope

This document defines the terms and definitions of safety protection for power optical transmission systems, and specifies the abbreviations, The architecture, general requirements and technical requirements describe the detection methods for safety protection of power optical transmission systems.

This document is applicable to the planning, design, research and development, construction, installation and commissioning of safety protection for power optical transmission systems carried by power optical cables.

Testing, system transformation and operation management.

2 Normative references

GB/T 22239-2019

GB/T 25069

GB/T 35273-2020

GB/T 36572-2018

GB 40050-2021

IEC 9899

3 Terms and definitions

The terms and definitions defined in GB/T 25069 and the following apply to this document.

3.1 Electric power optical transmission system

SDH, SDH?MSTP, SDH?ASON, WDM, OTN optical transmission equipment and optical transmission network used in power system The combination of pipe, optical subsystem and optical subsystem network management, BITS equipment and BITS network management, and optical cable is used to carry the power company's Systems for producing, controlling and managing operational business operations.

3.2 physical isolation

Communication technologies such as carrier isolation and time slot isolation are used to ensure that communication data is transmitted only in the communication link according to the rules configured by the user.

Different communication links cannot be connected directly or indirectly.

[Source. GB/T 26863-2022, 11.2.44, 11.2.85, modified]

3.3 transport plane

The layer in the transport network layer structure that is responsible for transmitting user information, control information, and network management information.

[Source. GB/T 21645.1-2008, 3.1.68, modified]