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

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**Basic configuration technical conditions of local power grid
sales control center
(English Translation)**

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009 "Guidelines for Standardization Work Part 1: Standard Structure and Compilation".

This standard was proposed by the China Electricity Council.

This standard is under the jurisdiction of the National Power Grid Operation and Control Standardization Technical Standards Committee (SAC/TC446).

Drafting organizations of this standard. China Southern Power Grid Power Dispatching Control Center, State Grid Corporation of China National Power Dispatching Control Center, Guangzhou State Power Supply Bureau Co., Ltd. Power Dispatching Control Center, Guangdong Power Grid Corporation Power Dispatching Control Center, State Grid Tianjin Power Dispatching Control Center, State Grid Overseas Power Dispatching Control Center, State Grid Chongqing Power Dispatching Control Center, State Grid Jiangsu Power Dispatching Control Center, China Southern Power Grid Science Research Institute Co., Ltd., Beijing Kedong Power Control System Co., Ltd.

1 Scope

This standard specifies the business scope, technical support, data interaction, network security, and professional technical support of local power grid sales control centers Ability and other requirements.

This standard applies to the planning, design, construction, operation and maintenance of local power grid sales control centers.

2 Normative references

The following documents are indispensable for the application of this document. For dated reference documents, only the dated version applies to this article Pieces. For undated references, the latest version (including all amendments) applies to this document.

GB/T 18700.1 Telecontrol equipment and system Part 6: Part 503 of telecontrol protocol compatible with ISO standards and ITU-T recommendations.

TASE.2 Service and Agreement GB/T 20272 Information Security Technology Operating System Security Technical Requirements GB/T 25068.3 Information Technology Security Technology IT Network Security Part 3 GB/T 33607 Smart grid dispatching control system overall framework DL/T 476 Power system real-time data communication application layer protocol DL/T 550 Technical specification for regional power grid dispatching control system DL/T 634.5104 Telecontrol equipment and system Part 5-104. Transmission protocol adopts IEC 60870-5-101 of standard transmission protocol set Network access DL/T 814 Technical Specification for Distribution Automation System DL/T 890 Energy Management System Application Program Interface (EMS-API) DL/T 1080.3 System interface for integrated distribution management of power enterprise applications. Part 3: Grid operation interface DL/T 1649 Technical Specification for Dispatching Control System of Distribution Network Regulations on the Safety Protection of Power Monitoring Systems, National Development and Reform Commission Order No. 14 of 2014 Notice of the National Energy Administration on Issuing the Safety Protection Plan and Evaluation Specifications of the Power Monitoring System Safety Protection Overall Plan National Energy Security [2015] No. 36

3 Terms and definitions

The following terms and definitions apply to this document.

District power grid

Local power grids that are connected to the grid with 220kV and below voltage levels, including local power companies, incremental distribution networks, wholesale counties, and Power grids with parallel and off-grid switching and independent operation capabilities.

Control center of district power grid the internal organization of a power sales company established with the approval of the relevant state department, and the corresponding department for business contact with the relevant grid dispatching control organization Department, responsible for grid operation, monitoring, control, analysis and professional management within the local grid.

4 General requirements

4.1

The local power grid sales control center should realize the operation, monitoring, control, analysis and professional management of the power grid to ensure the safety and stability of the power grid Operation, and meet the technical and professional management requirements of relevant grid dispatching agencies for data interaction, information sharing, and comprehensive application.

4.2

The local power grid sales control center shall conduct professional configuration in accordance with the power grid business requirements, and conduct differentiated personnel configuration based on actual conditions.

4.3

The local power grid sales control center should have the necessary technical support. Under the premise of satisfying the basic function configuration, increase in accordance with business needs.

Add corresponding extended function configuration.

4.4

The local power grid sales control center shall transmit the dispatching business needs to the relevant power grid dispatching control agency through dispatching automation and communication systems the running real-time data.

4.5

The information network of the local power grid sales control center should meet the national power monitoring system safety protection regulations and related grid dispatching control agencies Implementation rules for network security protection.

5 Business scope

5.1

In accordance with relevant national laws and regulations, implement national and industry technical standards, and carry out related businesses in accordance with power market rules.

5.2

In accordance with the power grid dispatching regulations, accept the dispatch organization, command, coordination, professional management and business guidance of the power grid dispatching agency.

guide.

5.3

Responsible for formulating local power grid business related regulations and procedures, and report to the power grid dispatching agency where they are located for preparation before implementation.

5.4

Responsible for the implementation of relevant laws, regulations and related regulations and procedures of the dispatching agency, supervision, guidance and implementation of various safety Full production measures.

5.5

Responsible for the operation monitoring and abnormal handling of the local power grid, and responsible for the safe, stable and economic operation of the local power grid under its jurisdiction.

5.6

Responsible for the commissioning and start-up of power grid equipment in the locality under its jurisdiction; the commissioning of the regulation equipment involving the relevant grid dispatching agency shall be in accordance with the regulation Procedures, operate in accordance with scheduling instructions.

5.7

Responsible for the safety and stability analysis of the local power grid, and the depth of the safety and stability analysis should meet the requirements of the corresponding grid dispatching agency. Responsible for local electricity Network modeling and load modeling, coordinate with relevant grid dispatching agencies to complete the security and stability analysis of the associated power grid, and implement relevant security and stability control measures Shi.

5.8

Execute the power and power transmission plan issued by the relevant grid dispatching agency, and formulate the power generation output curve and power consumption index control in the local power grid.

System plan and organize implementation.

5.9

Responsible for organizing the preparation, approval and implementation of local power grid operation modes and equipment maintenance plans, and timely and accurate release of related maintenance outages information. For changes in the operation mode and equipment maintenance that affect the relevant power grid dispatching agency, the permission of the relevant power grid dispatching agency must be obtained in advance.