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Virtual power plant management specification

虚拟电厂管理规范

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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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Virtual Power Plant Management Specifications

1 Scope

This document provides the principles for the management of the entire life cycle of virtual power plants, and stipulates the planning and design, construction and implementation, access testing, and registration of virtual power plants.

The requirements for grid connection, operation, management, withdrawal and archive management are described, and the corresponding verification methods are described.

This document applies to the planning, construction, access, testing, operation and decommissioning of virtual power plants that are connected to the grid management or participate in electricity market transactions.

Other virtual power plants shall follow suit.

2 Normative references

GB/T 22239

GB/T 25058

GB/T 28448

GB/T 32672

GB/T 36572

GB 38755

GB/T 38969

GB/T 39786

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 Virtual power plant virtual power plant; VPP

Through advanced information and communication technology, intelligent metering and optimized control technology, distributed power supply, distributed energy storage, adjustable load, etc.

Distributed resources are integrated to form a system that can respond to grid demand, participate in power market operations or accept grid dispatch.

3.2 Virtual Power Plant Resources VPPresources

Distributed equipment or systems that can output electrical energy or provide electrical power regulation capabilities.

Note: Including but not limited to distributed power sources, distributed energy storage, adjustable loads and their combinations.

3.3 Virtual Power Plant Operator VPPoperator

The distributed resources and virtual machines with adjustable potential or power generation capacity are gathered together to participate in the power market or grid operation as a whole.

An institution that handles and represents related matters.

3.4 Virtual Power Plant Technical Support System VPPtechnicalsupportsystem

Operated by the virtual power plant operator, it provides technical support for its implementation of control strategies through two-way interactive communication of information, realizing information processing