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Technical specification for data platform of energy internet

能源互联网数据平台技术规范

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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.

This document is proposed and coordinated by the China Electricity Council.

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Energy Internet Data Platform Technical Specifications

1 Scope

This document specifies the platform architecture and technical requirements of the Energy Internet Data Platform and describes the corresponding verification methods.

This document applies to the design, construction and operation of the Energy Internet Data Platform.

2 Normative references

GB/T 36344

GB/T 42562

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 data platform

Components of the digital form of the Energy Internet system.

Note. The data platform consists of information system software and hardware infrastructure, carries the data resources of the energy Internet system, and provides data management and sharing services.

Services, supporting energy Internet business applications.

4.1 Data Objects

4.1.1 Data objects should at least cover the following data categories.

a) System operation data, such as collected real-time measurement data and historical data, including voltage, current, air pressure, temperature, and humidity;

b) Equipment asset data, such as equipment name, manufacturer, commissioning date, and equipment owner;

c) Network interconnection data, such as topology, geography, and boundaries;

d) Business application data, such as process data, temporary data, result data, and role data;

e) Controlling transaction data, such as instructions, strategies, prices, demands, rules and time periods;

f) Platform operation data, such as hardware conditions, data size, and network conditions;

g) Platform configuration data, such as hardware environment, software environment,

communication network configuration, and data service list.

4.1.2 Data objects should support at least the following data formats.

a) Model data, such as structured data such as static power grid topology data;

b) Image data, such as equipment photos taken during inspections and charts generated by statistical calculations;

c) Video data, such as video recordings of incidents and operation monitoring records;

d) Voice data, such as conversation records and equipment operation noise.