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Energy internet system - Terms

能源互联网系统 术语

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Table of Contents

- 1 Scope
- 2 Normative references
- 3 Terms and Definitions
- 3.1 General terms

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 of Standardization Documents" drafted. Please note that some content of this document may be patented. The issuing agency of this document assumes no responsibility for identifying patents. This document is proposed and managed by China Electricity Council. This document is drafted by: State Grid Shanghai Energy Internet Research Institute Co., Ltd., Tsinghua University, China Electric Power Research Institute Co., Ltd., State Grid Corporation of China, Jicheng Energy Co., Ltd., Beijing Zhizhong Energy Internet Research Institute Co., Ltd., Ganghua Energy Investment Co., Ltd., Shanghai Jiaotong University, Xinneng Boan Technology (Beijing) Co., Ltd., State Grid Shandong Electric Power Company, and State Grid Co., Ltd. North China Branch. The main drafters of this document. Ma Junhua, Liu Haitao, Kang Chongqing, Yuan Wenguang, Wang Lei, Yanxing, Lu Yiming, Yu Hui, Liu Riliang, Zhao Wei, Cheng Lin, Lu Guangxian, Huang Wenrui, Lin Jin, Hu Zechun, Sun Kai, Xia Xia, Tian Hao, Liu Qiyang, Liu Dong, Huang Yuhui, Zheng Weijie, Wang Bo, Li Min, Liang Mingliang. Energy Internet System Terminology

1 Scope

GB/Z 41237-2022 is the Chinese national standard on energy internet system - terms, in the field of generalities, terminology and documentation. The /Z suffix marks it as a guiding technical document: it does not prescribe requirements that can be certified against, but sets out the technique, the method or the state of the art that the standards bodies recommend following. It was issued on 9 March 2022 by the State Administration for Market Regulation; Standardization Administration of China. As a guiding technical document it carries no separate date of entry into force: it applies from publication. Classification: ICS 01.040.29, CCS F10. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in

the document itself, which is delivered complete in English translation.

This document defines the terms, definitions and abbreviations of the Energy Internet System. This document applies to the planning, design, construction, operation and transaction of the Energy Internet System.

2 Normative references

There are no normative references in this document.

3.1 General terms

3.1.1 energyinternet; EI Taking electric energy as the core, integrating heat, cooling, gas and other energy sources, comprehensively utilizing technologies such as the Internet, and deeply integrating energy systems and information and communication systems system to coordinate the production, transmission, distribution, storage, conversion, consumption and transaction of multiple energy sources, and an open energy system featuring high efficiency, cleanliness, low carbon and safety. source internet. The regional comprehensive energy supply network formed by the coupling and interconnection of various energy sources, such as cooling, is one of the forms of the energy Internet, and it has the function of "connecting the previous and the next". integrated urban energy supply network. Note

3. The park energy internet (PEI) is a system that includes multiple types of renewable energy, combined cooling, heating and power systems, electricity/cooling/heating energy storage systems system, ground source heat pump system, etc.

3.1.2 microenergygrid; MEG One of the forms of energy internet. The energy Internet built in a relatively small and well-defined area can operate independently. Yes, it can also be interconnected.

3.1.3 energy-internetofthings; E-IoT Through the sensor and ubiquitous IoT communication network, the operation, environment, working conditions and other data of the energy terminal system are obtained, and the analysis and optimization are carried out to achieve Improve energy system efficiency and create value for customers.

3.1.4 multi-energycomplementary Rational use of local energy resources, using a variety of energy sources to complement each other, improve energy utilization efficiency, and achieve better economic and environmental Efficient way of using energy.

3.1.5 It is a comprehensive utilization method in which primary energy and secondary energy are transformed and complemented each other in order to improve the utilization efficiency of energy.