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

GB/T 20625-2024

Special environmental conditions - Terminologies

特殊环境条件 术语

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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. This document replaces GB/T 20625-2006 "Terms of special environmental conditions". Compared with GB/T 20625-2006, except for structural adjustments and In addition to editorial changes, the main technical changes are as follows:

--- Added terms and definitions such as "state and location", "mechanical conditions" and "biochemical conditions" (see 3.2,

--- Modified the following sections. "Environmental conditions", "Environmental factors", "Environmental parameters", "Environmental adaptability", "Special environmental conditions", "Climate environmental conditions", "Special terms such as "special climatic and environmental conditions", "plateau climate", "dry and hot climate", "sand", "dust", "sandstorm", "solar radiation" and "sunshine hours" and definitions (see 3.1.1, 3.1.2, 3.1.3, 3.1.4, 3.1.7, 3.1.9, 3.1.10, 3.1.18, 3.1.19, 3.3.9, 3.3.10, 3.3.18, 3.3.25, 3.3.28, 2006 edition 2.3, 2.11, 2.12, 2.13, 2.4, 2.5, 2.6, 2.19, 2.20, 2.26, 2.27, 2.35, 2.44, 2.46);

--- Added "Severity Level", "Hot and Wet Climate", "Hot and Wet Marine Atmosphere", "Tropical Climate", "Extremely Cold Climate", "Relative Humidity", "Absolute Humidity" and other terms and definitions (see 3.1.5, 3.1.21, 3.1.22, 3.1.23, 3.1.24, 3.3.2, 3.3.3);

--- Deleted "salinity" (see

2.39 of the 2006 edition). 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 Electrical Equipment Industry Association. This document was drafted by: China Electric Power Research Institute Co., Ltd., Weikai Testing Technology Co., Ltd., China Southern Power Grid Electric Power Technology Co., Ltd. Co., Ltd., Hainan Power Grid Co., Ltd., Shanghai Quality Supervision and Inspection Technology Research Institute, State Grid Fujian Electric Power Co., Ltd. China Academy of Mechanical Science, China Special Aircraft Research Institute, Hainan Electric Power Industry Development Co., Ltd., China Southern Power Grid Co., Ltd. Electric Power Research Institute of Ultra-High Voltage Transmission Company, Jiangsu Goldwind Technology Co., Ltd., and Guangdong South China Home Appliance Research Institute. The main drafters of this document are: Liu Xin, Gu Zebo, Li Xin, Shi Yu, Zheng Shengjun, Wang Tingting, Lin Deyuan, Fang Lianhang, He Weiping, Guo Yuansheng, Pan Zhicheng, Wu Dalei, Wang Guofu, Mu Xianlian, Deng Dafan, Zhu Bin, Lai Jing, Cao Siyang, Zhou Quan, Zhong Fei. The previous versions of this document and the documents it replaces are as follows:

---First published in.2006 as GB/T 20625-2006;

---This is the first revision. Terminology for special environmental conditions

1 Scope

GB/T 20625-2024 defines the vocabulary of special environmental conditions - the conditions outside the temperate, sheltered, sea-level normality that ordinary product standards assume. High altitude, extreme cold, extreme heat and humidity, salt fog, sand and dust, industrial atmospheres, mould: each changes what equipment must withstand, and each is invoked constantly in specifications, tenders and type approvals. The trouble is that the terms are used loosely - 'plateau', 'tropical', 'coastal', 'heavy pollution' - and a requirement written with an undefined term cannot be verified. Since these conditions determine derating, materials and protection ratings, an ambiguity here becomes equipment that fails in service in a place it was sold as suitable for. This document defines the terms and definitions relating to special environmental conditions, and is intended for use when writing and reading standards and technical documents that refer to them. Under ICS 01.040.29 and CCS K04, it is the reference underneath the special environment product standards, and is written for the technical committees drafting them, for equipment manufacturers, and for the buyers specifying equipment for demanding locations.

This document defines terms and definitions related to special environmental conditions. This document is applicable when writing and reading standards and technical documents related to special environmental conditions.

2 Normative references

This document has no normative references.

3.1 General

3.1.1 The external physical, chemical and biological conditions to which a product is subjected within a specific period of time.

Note. Environmental conditions generally include natural environmental conditions and environmental conditions generated by the product itself or from external sources. [Source: GB/T 4796-2017, 3.1]

3.1.2 Environmental factors A physical, chemical, or biological influence (e.g., heat, vibration) that, alone or in combination, creates an environmental condition. [Source: GB/T 4796-2017, 3.2]

3.1.3 One or more physical, chemical, or biological characteristics that describe an environmental factor (e.g., temperature, acceleration). Example. Environmental factors Vibration is characterized by parameters such as vibration type (sinusoidal, random), acceleration and frequency. [Source: GB/T 4796-2017, 3.3]

3.1.4 It reflects the ability of a product to achieve all its intended functions, performance and/or performance under the various environmental conditions that it is expected to encounter during its life cycle. The ability to be destroyed is one of the important quality characteristics of the product.

3.1.5 Severity A set of parameter values used to condition a test sample. [Source: GB/T 2422-2012, 4.9]

3.1.6 Research conducted and various protective measures taken to ensure that the product can effectively perform its functions under various environmental stresses. [Source: GB/T 11804-2005, 2.1.3]