

ICS 29.020
CCS K00



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

GB/Z 32500-2016

**General requirements of data interface for user side system of
smart grid**

智能电网用户端系统数据接口一般要求

Issued on: February 24, 2016

Implemented on: February 24, 2016

**Issued by: State Administration for Market Regulation;
Standardization Administration of China**

Table of Contents

Foreword	I
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Interface data model and service specification	2
5 Content and requirements of commissioning	14
Annex A (normative) Basic data structure of the master station	18
Annex B (normative) Uniform coding of the data classification	29
Annex C (informative) Index of the data table fields	42
Annex D (informative) Brief analysis of use cases	52
Annex E (informative) Reference material and description of the data tables	55
Bibliography	59

Foreword

The core content of the smart grid is the two-way interaction between the client and the power supply side, as well as the full exploitation and utilization of distributed energy at the client end. International and domestic research and development of communication systems to achieve interoperability between client devices and systems is growing, with many exemplary applications, but not yet Have formed a unified international standards. This Guidance Document defines the names, formats, and generalizations of various types of data for smart grid client systems Code, data transfer model This guideline is for reference only. The suggestions and opinions on this technical document are directed to the standardization administration under the State Council Department reflected. This guidance document is proposed by China Electrical Equipment Industry Association. The guidance of technical documents by the National Electrical Equipment Network Communication Interface Standardization Technical Committee (SAC/TC411) centralized. The main drafting of the technical guidance of this document. Shanghai Electric Institute of Science and Technology, Yantai East Weisidun Electric Co., Ltd.. The guidance of technical documents to participate in the drafting unit.China Electric Power Research Institute, Shanghai Electric Power University, Shanghai An Kerui Electric Co., Ltd. the company. The main drafters of this guidance document are Wu Xiaodong, Cai Zhongyong, Tan Wei, Xi Peifeng, Tian Shiming, Jiang Long, Zhang Wei Hong, Li Chang, Ruan Yu Dong, Li Wenjuan, Gao Chunlei, Zhang Hang, Li Hui, Xie Ruobing, Yan Lan, Shan Ming. Smart Grid Client System Data Interface General Requirements

1 Scope

GB/Z 32500-2016 is the Chinese national standard on general requirements of data interface for user side system of smart grid, in the field of electrical engineering. 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 24 February 2016 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 29.020, CCS K00. 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 Guidance Document specifies the data model of the communication interface between the master station and subsystem of the smart grid user and the sub-users, the interface service Specifications, commissioning content and requirements, and energy management related data formats, data classification unified coding. This Guidance Document is applicable to energy management of various client systems such as industrial enterprises, commercial buildings, public buildings and residential buildings.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version applies to this article Pieces. For undated references, the latest edition (including all amendments) applies to this document. GB /Z 32501 Smart Grid Client Communication System General Requirements

GB/T 2260 People's Republic of China administrative divisions code

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 Demand demand The average power over a specified period of time.

3.2 The maximum demand maximumdemand The maximum amount of demand recorded during the prescribed time period.

3.3 Demand cycle demandinterval Measure continuous, equal time intervals of average power.

3.4 Freezing freeze Storage of important data at a specific time.

3.5 Timeconsumption 24 hours a day divided into a number of time periods. Generally

divided into sharp, peak, flat, valley period.

3.6 Rate And electricity consumption period corresponding to the calculation of electricity price system is called the rate.

3.7 RDF format ResourceDescriptionFramework A markup language used to describe Web resources, an XML application that handles metadata.

chinastandards.org · PREVIEW