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

GB/T 19882.31-2007

**Automatic meter reading system -- Part 3-1: Application layer
data exchange protocols -- Object identification system**

自动抄表系统 第3-1部分：应用层数据交换协议 对象标识系统

(English Translation)

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Foreword

"Automatic Meter Reading System application layer data exchange protocol" is divided into three parts.

--- Part 3-1. Object identification system (IEC 62056-61:2002, IDT);

--- Part 3-2. Interface classes (IEC 62056-62:2002, IDT);

--- Part 3-3. COSEM application layer (IEC 62056-53:2002, IDT).

This section "Automatic Meter Reading System application layer data exchange protocol" Part 3-1.

This section identical with IEC 62056-61:2002.

"Automatic Meter Reading System application layer data exchange protocol" is an important part of the national standards system of "automatic meter reading system." under Listed below "Automatic meter reading system" and is expected to promulgate national standards with international standards and the corresponding structure.

a) GB/T 19882.1-2005 "General automatic meter reading system."

b) "automatic meter reading system meter reading system".

--- Part 2-1. Low-voltage power line carrier meter reading system;

--- Part 2-2. Wireless communication meter reading system;

--- Part 2-3. IP-based network meter reading system.

c) "automatic meter reading system application layer data exchange protocol".

--- Part 3-1. Object identification system (IEC 62056-61:2002, IDT);

--- Part 3-2. Interface classes (IEC 62056-62:2002, IDT);

--- Part 3-3. COSEM application layer (IEC 62056-53:2002, IDT).

d) GB/T 19897-2005 "Automatic Meter Reading System Lower Layer Communication Protocol".

--- Part 1. Direct local data exchange (IEC 62056-21:2002, IDT);

--- Part 2. LAN-based twisted pair with carrier signaling (IEC 62056-31:1999, IDT);

--- Part 3. physical layer connection-oriented service processes asynchronous data exchange (IEC 62056-42:2002, IDT);

--- Part 4. Based on the HDLC link layer protocol (IEC 62056-46:2002, IDT).

This section of Appendix A normative appendix.

This part is proposed by China Machinery Industry Federation.

This part of the National Electrical Instrument Standardization Technical Committee.

This section is drafted. Harbin Electrical Instrument Research Institute, Northwest Electric Power Research Institute, Xi'an Huitong Control Technology Co., Sichuan Power Meter Company of Sichuan, Beijing Watchdata Intelligent Technology Co., Ltd., Guangzhou Branch Li General Electric Company, Hangzhou-Electronics Co., Ltd., Beijing Power Supply Bureau, Holley Group, Zhejiang Chint Instrument Co., Ltd., Changsha Weisheng Instrument Co., Ltd., Shenzhen Kaifa Technology Co., Nanjing Automation Research Institute.

Introduction

Competition in the electricity market to use energy and timely information related to the increasing demand, recent technological developments allow us to Intelligent manufacturing static metering equipment, which is able to capture, handle such information, and to communicate with all the associated equipment.

To further analyze the information, to carry out the purpose of billing, load management, user management, and contract management, it is necessary to pass all Local or remote data exchange manual or automatic collection of data taken with the manufacturer-independent method for unique identification.

Defined identifiers based on DIN-43863-3:1997 "Electrical Instrument Part 3. Measurement as additional equipment electrical instrumentation rates Means EDIS Energy Data Identification System. " GB/T 19882.31-2007/IEC 62056-61:2002 Automatic meter reading system - Part 3-1. Application layer Data exchange protocol object identification system

1 Scope

Object Identification System (OBIS) for the electrical metering equipment commonly used in the definition of the data item identification code (ID code). This section provides identification the overall structure of the system and the mapping of all data items with the corresponding identification code.

OBIS for the metering device all data provides a unique identification code, including not only the measured values, but also the instrumentation equipment Get abstract data configuration or instrumentation equipment operating status. This section defines the ID code for identifying.

- various instances of an object or the logical name of the interface class, which is defined in GB/T 19882.32-2007;
- data communication transmission lines (see A.1);
- metering equipment data displayed (see A.2).

This section applies to all types of electrical measurement equipment, such as. Fully integrated electronic meter, modular meters, tariff attachments, data collection the like.

In addition to electrical energy in order to cover other metering devices, combined metering apparatus for measuring a variety of physical energy or more measurement channels, for this reason the introduction of the concept of channels and the transmission medium. This section allows data from different sources are identified. Although this part of the standard to other media Structure identification system was complete definition, non-energy items and the mapping ID code needs to be done independently.

NOTE: CENTC294 in prEN13757 draft "Communication systems and remote meter reading table" has been implemented in a number of non-energy data identifiers.

2 Normative references

The following documents contain provisions which, through reference GB/T 19882 in this section constitute provisions of this section. For dated reference documents Member, all subsequent amendments (not including errata content) or revisions do not apply to this section, however, encouraged to reach under this section Parties to research agreement to use the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

GB/T 17882-1999 Class 2 and Class 3 Alternating current static var-hour meter (eqv61268.1995) GB/T 19897.1-2005 Automatic Meter Reading System Lower Layer Communication Protocol Part 1. Direct local data exchange (IEC 62056-21:2002, IDT) GB/T 19882.32-2007 automatic meter reading system - Part 3-2. Application layer data exchange protocol interface class (IEC 62056-62:2002, IDT) IEC 60050-300:2001 International Electrotechnical Vocabulary - Electrical and electronic measurements and measuring instruments the basic terms related to measurement. Part 311 Basic terms relating to electrical measurements. Part 312 Types of electrical measuring instruments. Section 313 Part 314. Specific terms according to the classification of the instrument IEC 62051:1999 Electrical Measurement Glossary

3.1 Terms and Definitions

IEC 60050-300 and IEC 62051 as well as established the following terms and definitions apply to this section.

GB/T 19882.31-2007/IEC 62056-61:2002