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**Guidelines for electromagnetic compatibility requirements of
equipments constituting and access to smart grid**

对构成及接入智能电网设备的电磁兼容要求导则

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Foreword

This guidance technical document was drafted in accordance with the rules given in GB/T 1.1-2009. This guidance document is proposed and managed by the National Radio Interference Standardization Technical Committee (SAC/TC79). This guiding technical document is drafted by: Shanghai Electric Apparatus Research Institute. This guiding technical document was drafted by: China Electric Power Research Institute, Weikai Testing Technology Co., Ltd., China Household Appliance Research Research Institute. The main drafters of this guiding technical document. Chen Wei, Ye Qiongyu, Zhao Mingmin, Zeng

Bo, Zhang Yanyan, Zheng Junqi, Zhang Jiangong, Xing Lin. For the construction and access to smart grid equipment Electromagnetic compatibility requirements

1 Scope

This guiding technical document specifies the electromagnetic compatibility (EMC) requirements and the test conditions for the equipment that makes up and connects to the smart grid, specifically for smart grid customer-domain equipment and for the secondary equipment of power plants and substations. This guiding technical document applies to the equipment that makes up and connects to the smart grid (the dashed box of Figure 1), mainly smart grid customer-domain equipment and the secondary equipment of power plants and substations. The smart grid customer domain includes but is not limited to: equipment used at the smart grid customer end; equipment of smart grid measuring, protection or control modules (for example smart meters or auxiliary equipment installed at the customer end); and area generation or energy storage equipment at the customer end (for example a smart grid power conversion device). This guiding technical document does not apply to the primary equipment of power plants and substations or to equipment with a rated voltage higher than 1 000 V.

This guidance document specifies electromagnetic compatibility (EMC) requirements, test conditions, etc. for the components of the smart grid equipment. For smart grid customer premises equipment and secondary equipment for power plants and substations. This guidance document applies to equipment that forms and accesses the smart grid (see the dotted line box in Figure 1), primarily including smart grid users. End equipment, power plants and substation secondary equipment. Among them, the smart grid user terminal includes but is not limited to.

---The equipment used by the smart grid client;

---Smart grid measurement, protection or control module equipment (such as smart meters or auxiliary equipment installed on the user side);

--- Regional power generation or energy storage devices (such as smart grid power conversion devices).

Note. This guide focuses on the dotted line in the figure. Figure

1 Conceptual model of the smart grid domain This guidance document does not apply to primary equipment and equipment with rated voltages above 1000V in power plants and substations.

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only dated versions apply to this article.