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

GB/T 33982-2017

**Technical specification for grid connection protection of
distributed resources**

分布式电源并网继电保护技术规范

(English Translation)

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Foreword

This standard was drafted in accordance with the provisions given in GB/T 1.1-2009.

This standard proposed by the China Electrical Equipment Industry Association.

This standard by the National Measurement Relay and Protection Equipment Standardization Technical Committee (SAC/TC154) centralized.

This standard was drafted unit. China Electric Power Research Institute, the State Power Dispatching Control Center, State Grid Zhejiang Power Company, Xuchang Cape Electric Gas Research Institute, State Grid Jiangsu Provincial Power Company, Xu Ji Group Co., Ltd., Xuchang Cape Detection Technology Co., Ltd., Nanjing NARI insurance Electric have Co., Ltd., Beijing Sifang Automation Co., Ltd., Xu Ji Electric Co., Ltd., State Grid Shandong Power Company, State Grid Hunan Province Power Company, Guodian Nanjing Automation Co., Ltd., Beijing Ziguang Measurement and Control Co., Ltd., Evergreen Shenzhen Rui Bao Automation Co., Ltd., plot Electronics Co., Ltd., Eastern Electronics Co., Ltd., State Grid Electric Power Research Institute, Hebei Beheng Electric Technology Co., Ltd., Jiangsu gold Technology Co., Ltd., ABB (China) Co., Ltd., State Power NARI Technology Co., Ltd., Schneider Electric China Co., Ltd., Jicheng Energy Co., Ltd., Baoding and easy to France Electric Technology Co., Ltd., Nanjing due Taylor Electric Co., Ltd., Beijing Tianneng following insurance power Technology Co., Ltd.

1 Scope

This standard specifies the distributed power access 35kV and below the protection of the power grid should meet the technical requirements.

This standard applies to the configuration and setting of distributed power supply side protection when access to the 35kV and below voltage level power grid.

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/T 14285 relay protection and safety automatic device technical regulations GB/T 19939 photovoltaic system and network requirements GB/T 20046 Photovoltaic (PV) system grid interface characteristics GB/T 29319 photovoltaic power generation system access distribution network technical requirements GB 50054 low-voltage power distribution design specifications DL/T 584 3kV ~ 110kV power grid protection device operation setting procedures NB/T 32015 Distributed Power Distribution Network Technical Requirements

3 Terms and definitions

The following terms and definitions apply to this document.

Distributed power distributedresources; DR in the user's premises or nearby construction and installation, operation mode to user-side spontaneous use-based, excess power access, and in the distribution network Balanced regulation of the power generation facilities or energy output of the power integrated cascade use of multi-supply facilities.

Converter

Electrical equipment for converting electrical power into one or more forms of electrical power suitable for use by the electrical grid or user. Including rectification Inverter, AC converter and DC converter.

Converter Type Power converter-typepowersupply all or part of the power connected to the grid through the converter.

Rotary motor type Distributed power rotating-machine-typeDR Distributed power generated by rotating electrical machines.

Pointofinterconnection for the distributed power supply with booster station, the network connection point is the busbar or node on the high-voltage side of the booster station for distributed power supply; for the booster station without distribution