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

GB 26860-2011

**Safety code of electric power industry - Electric part of power
plants and transformer substations**

电力安全工作规程 发电厂和变电站电气部分

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Foreword

Chapter 5 of this standard

7.3.4 are recommended, the rest are mandatory. This standard was drafted in accordance with GB/T 1.1-2009 given rules. The standard proposed by China Electricity Council. This standard by the National Standardization Technical Committee of high voltage electrical safety (SAC/TC226) centralized. This standard was drafted. State Grid Corporation, China Southern Power Grid Co., Ltd., China Datang Corporation, Zhejiang Energy Group Limited. The main drafters of this standard. it became Chen, Tsai Chung-ho plot, Liu Heng Ming, Zhang Lei, Lu Maode, Dai Keming, Wang Shangshun, Hu Xiang Yu Nie present, Lin

Yonggang, He along Kun, Zhao Yawei, Li Zhiyong, Lu Jianming, Ge Naicheng. Electrical safety work order Power plants and substations electrical parts

1 Scope

The stations half of China's mandatory safety code for electric power work - the rulebook that governs every job carried out inside a power plant or a substation, from the switching order to the last earth removed before energising. It sets the basic safety requirements for electricity production units and for the people working at their sites, and it applies to generating enterprises with equipment at 66 kV and above, to transmission, substation and distribution enterprises with facilities at 35 kV and above, and to power using units with equipment at 220 kV and above; other power enterprises may apply it by reference. Apart from a single recommended provision, the whole document is mandatory. It covers the requirements on the work, the organisational safety measures - work ticket, permit, supervision, transfer and closing - and the technical safety measures - switching off, verification of absence of voltage, earthing, barriers and warning signs. It then takes the work type by type: the operation of electrical equipment, work on the lines inside plants and substations, live working, the overhaul and maintenance of generators and high voltage motors, work on sulphur hexafluoride (SF₆) equipment, work on low voltage switchgear and low voltage conductors, work on the secondary system, electrical testing, work on power cables, and a closing clause of supplementary safety requirements. Seven annexes give the forms the system runs on: the first and second electrical work tickets, the live working ticket, the emergency repair ticket, the switching order, the shape of the nameplates, and the normative table of test items, intervals and requirements for insulating safety equipment. Issued on 29 July 2011 and in force since 1 June 2012, it is proposed by the China Electricity Council, held by SAC/TC 226 and drafted by State Grid, China Southern Power Grid, China Datang and Zhejiang Energy. Its companion documents are GB 26859-2011 for electric lines and GB 26861-2011 for high voltage laboratories.

This standard specifies the electrical power production units and basic safety requirements for power staff in the workplace. This standard is applicable to a 66kV and above voltage level of the power generation business facilities all use electrical equipment and related sites; Transmission has 35kV and above voltage grade facilities, substation and distribution companies all use electrical equipment and related sites; having Power units using 220kV and above voltage level of electrical equipment in facilities and related sites. Other power companies and power unit Also available for reference.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

GB/T 2900.20-1994 Electrotechnical terminology voltage switchgear (

IEC 60050 (IEV).1994, NEQ)

GB/T 2900.50-2008 Electrotechnical terminology Generation, transmission and distribution of generic terms (IEC 60050-601-1985, MOD)

3 Terms and Definitions

GB/T 2900.20-1994, GB/T 2900.50-2008 defined and the following terms and definitions apply to this document.

3.1 Power [station] electrical generating station By the building, energy conversion equipment and all the necessary auxiliary equipment consisting of electrical energy production plants. [GB/T 2900.50-2008, in the definition of 2.3 601-03-01]

3.2 Substations (Power Systems) substation (of a power system) Part of the power system, which is concentrated in a designated place, including terminals, switches and control equipment transmission or distribution lines, Buildings and transformers. Typically include power system security and control of the necessary facilities (such as protective devices).

Note. Depending on the nature of the system contains a substation can add a prefix to define the word in front of the substation. For example .(a transmission system) Transmission and Distribution Stations, power distribution substation, 500kV substation, 10kV substation. [GB/T 2900.50-2008, in the definition of 2.3 601-03-02]

3.3 Power lines electric line Between two o'clock in the system for transmission and distribution wires, insulation and annexes facilities. [GB/T 2900.50-2008, in the definition of 2.3 601-03-03]

3.4 Breaker circuit-breaker Can closing, carrying, breaking the normal current run loop, but also within the specified closing time, carrying and breaking provisions of the overload current (including Short-circuit current) of the switching device, also known as switches. NOTE. rewrite GB/T 2900.20-1994, definitions 3.13.

3.5 Isolation switch disconnecter At the location, between the contacts have to meet the requirements of insulation distance and visible sign off; when the closing position, can carry a normal circuit Current and abnormal conditions (eg short circuit) under the current switching apparatus within a predetermined time under the conditions. [GB/T 2900.20-1994, the definition 3.24]

3.6 Low [electricity] Presser low voltage; LV For AC power distribution system voltage 1000V and below grade. [GB/T 2900.50-2008, the definition of 2.1 601-01-26]

3.7 High [electricity] voltage high voltage; HV (1) usually means over-pressure voltage levels. (2) In certain cases, it refers to the power system transmission voltage level. [GB/T 2900.50-2008, the definition of 2.1 601-01-27]

3.8 The use of electrical equipment operating electrical equipment All with a voltage, a portion of the electrical equipment with a voltage or via the operation that is supplied with a voltage.

4.1 Staff

4.1.1 physician identified, without prejudice to working condition (medical examination at least once every two years).

4.1.2 have the necessary safety knowledge and skills of personnel engaged in electrical work should have a shock first aid rescue method.

4.1.3 have the necessary electrical knowledge and business skills, familiar with the electrical equipment and systems.

4.2 Job site

4.2.1 job site production conditions, safety, work tools and safety equipment shall comply with the national standards or industry requirements, Safety equipment and labor protection products before use should be qualified available.

4.2.2 appropriate breaks and construction vehicles often working on someone with first aid kits, first aid supplies store, and designate a person check, supplement or replace.

4.3 Job measures

4.3.1 should work to ensure the safety of electrical equipment on the institutional measures may include job applications, work arrangement, written security requirements, work Licensing, monitoring work, and the work stopped, and the end of the transfer and other procedures.

4.3.2 carry out all or part of power outage work on electrical equipment, equipment operation and maintenance unit should be made to apply power outages by scheduling Need of competent jurisdiction to apply in advance outage scheduling mechanism, arrangements for maintenance work only after consent.

4.3.3 repair work should be carried out before the work is arranged, clear place of work, tasks, responsible person, work environment, work programs and books Surface safety requirements, division of tasks and working class members.

4.4 Other Requirements

4.4.1 The workers should be informed of their risk factors and preventive measures exist job site.

4.4.2 found directly endanger the safety of emergency, the scene shall have the authority to stop work and to organize the evacuation job site.