ICS 29.240.20
CCS K47

NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 19185-2008

Replacing GB/T 19185-2003

Calculation method of live working minimum approach distance on a.c.transmission line

交流线路带电作业安全距离计算方法

Issued on: September 24, 2008 **Implemented on: August 1, 2009**

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Standardization Administration of China

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Foreword

This standard replaces GB/T 19185-2003 "AC Live Line Work Safety Distance Calculation Method." The main difference compared with the standard GB/T 19185-2003 as follows:

--- On the "Terms and Definitions" chapter "occupying an intermediate potential conductor length", "a combination of a minimum clearance", "statistical safety factor", "middle Conductor potential influence coefficients "and other terms were added;

--- In the "Calculation Method" chapter complements the "minimum clearance combination" is calculated;

--- In the "coefficient calculation and values" chapter complements the "occupying intermediate potential conductor length", "middle conductor potential impact factor" of Value method;

--- On the "Calculation examples" chapter "Table 3 security clearance from the combination calculated value" added "a combination of minimum clearance" list. The standard proposed by China Electricity Council. This standard by the National Standardization Technical Committee work and live under the jurisdiction responsible for the interpretation. This standard was drafted. State Grid Wuhan High Voltage Research Institute, Henan Province Pingdingshan Electric Power Bureau. The main drafters of this standard. Hu Yi, Zhao Jiang, Wu Weining, Yi Hui, Zhang Lihua, Hujian Xun, Shu, the peak. This standard replaces the standards previously issued as follows:

--- GB/T 19185-2003. AC Live Line Work Safety Distance Calculation

1 Scope

GB/T 19185-2008 is the Chinese national standard on calculation method of live working minimum approach distance on a.c.transmission line, in the field of electrical engineering. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up -

which in practice is how most foreign buyers meet it. It was issued on 24 September 2008 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 August 2009. Classification: ICS 29.240.20, CCS K47. 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 standard specifies the calculation method of the exchange of live line work and combination safe distance gap, risk assessment criterion, the gap coefficient, sea Stubbs correction coefficient. The result of the calculation for the design and testing research reference. This standard applies to 110kV ~ 750kV AC live line work safe distance and gap combination calculating and checking. In the substation located Combination safe distance and prepare for live working gap calculation check, but also can refer to use.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB/T 18037 live working tools Technical requirements and design guide Overvoltage protection and insulation coordination DL/T 620 AC electrical installations

3 Terms and Definitions

The following terms and definitions apply to this standard.

3.1 RMS maximum operating voltage under normal operating conditions, the system appears (phase - phase). 3.2 2% probability of occurrence of overvoltage.

3.3 Insulation presents a 50% probability of flashover impulse voltage peaks.

3.4 Insulating render 90% probability withstand impulse voltage peaks.

3.5 To ensure that the job presents minimal clearance gap 90% probability impulse withstand distance.

3.6 The projected length of the body is part of the job gap on the gap axis.

3.7 Clearance operation minimum allowed value of the distance from the minimum safe distance from electrical body composition range of activities.