

ICS 33.100
CCS L 06



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

GB 15707-1995

**Limits of radio interference from high voltage AC overhead
power transmission lines
(English Translation)**

Issued on: December 29, 2017

Implemented on: July 1, 2018

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of the People's Republic of China, Standardization
Administration of the People's Republic of China**

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Foreword

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

This standard replaces GB/T 15707-1995 "high voltage AC transmission line radio interference limit." This standard and GB/T 15707-1995 compared to the main technical changes are as follows.

--- Increased 750kV and 1000kV AC overhead transmission line radio interference limits.

--- The original Appendix A and Appendix B merged into Appendix A.

--- Removed the original Appendix C on the calculation method.

--- Appendix A limit correction, delete the original formula (A.1) and its explanatory text.

--- The unit of variation of radio interference is dB, and the unit of radio interference is dB ($\mu\text{V/m}$).

This standard is proposed and managed by the National Radio Disturbance Standardization Technical Committee (SAC/TC246).

This standard was drafted unit. China Electric Power Research Institute, State Grid Electric Power Research Institute of Wuhan NARI limited liability company, Jiangsu NARI constant Chi Electric Equipment Co., Ltd.

1 Scope

This standard specifies the radio interference limit and measurement of high voltage AC overhead transmission line in normal operation.

This standard applies to 110kV ~ 1000kV AC overhead transmission line generated by the frequency of 0.15MHz ~ 30MHz radio interference.

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 4365 Electrotechnical terminology Electromagnetic compatibility GB/T 7349 high voltage overhead transmission lines, substation radio interference measurement methods

3 Terms and definitions

GB/T 4365 defined and the following terms and definitions apply to this document.

Radio interference limits limitsofradiointerference Radio interference field strength 80% of the time, with 80% confidence does not exceed the specified value.

Note The unit is $\mu\text{V/m}$ and is usually expressed in dB ($\mu\text{V/m}$) ($1\mu\text{V/m}$ corresponds to 0dB).

Good weather fairweather no rain, no snow, no foggy weather.

4 Radio interference limit

4.1 20m away from the side of the wire projection, the frequency of 0.5MHz, high-voltage overhead transmission line radio interference limits listed in Table 1.

Table 1 AC overhead transmission line radio interference limits (20m from the side of the wire projection, 0.5MHz)

Voltage

110 220 ~ 330 500 750a 1000a Radio interference limit dB ($\mu\text{V/m}$) 46 53 55 58 58 a For radio-frequency transmission lines of 750kV and 1000kV AC, the radio interference in good weather should not exceed 55dB ($\mu\text{V/m}$).

4.2 0.15MHz ~ 30MHz range of other frequencies high voltage AC overhead transmission line radio interference limit in accordance with Appendix A A.1 amendment.

4.3

Other distance measurements of radio interference values in accordance with Appendix A,

A.3 amendment.