INTERNATIONAL STANDARD

IEC 60826

Third edition
2003-10

Design criteria of overhead transmission lines

*This **English-language** version is derived from the original **bilingual** publication by leaving out all French-language pages. Missing page numbers correspond to the French-language pages.*

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

DESIGN CRITERIA OF OVERHEAD TRANSMISSION LINES

FOREWORD

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International Standard IEC 60826 has been prepared by IEC technical committee 11: Overhead lines.

This third edition cancels and replaces the second edition which was issued as a technical report in 1999. It constitutes a technical revision and now have the status of an International Standard.

This revision consists mainly of splitting the standard into two sections, normative and informative, in addition to simplifying its contents and improving some specific design requirements in accordance with recent technical advances.

The text of this standard is based on the following documents:

FDIS	Report on voting
11/175/FDIS	11/177/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until 2008. At this date, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

DESIGN CRITERIA OF OVERHEAD TRANSMISSION LINES

1 Scope

This International Standard specifies the loading and strength requirements of overhead lines derived from reliability based design principles. These requirements apply to lines 45 kV and above, but can also be applied to lines with a lower nominal voltage.

This standard also provides a framework for the preparation of national standards dealing with overhead transmission lines, using reliability concepts and employing probabilistic or semi-probabilistic methods. These national standards will need to establish the local climatic data for the use and application of this standard, in addition to other data that are country specific.

Although the design criteria in this standard apply to new lines, many concepts can be used to address the reliability requirements for refurbishment and uprating of existing lines.

This standard does not cover the detailed design of line components such as towers, foundations, conductors or insulators.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60652:2002, *Loading tests on overhead line structures*

IEC 61089:1991, *Round wire concentric lay overhead electrical stranded conductors*

IEC 61773:1996, *Overhead lines – Testing of foundations for structures*

IEC 61774:1997, *Overhead lines – Meteorological data for assessing climatic loads*

IEC 61284:1997, *Overhead lines – Requirements and tests for fittings*