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C411.7-16

Composite insulators for guy wires

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Preface

This is the second edition of CSA C411.7, *Composite insulators for guy wires*. It supersedes the previous edition, published in 2011.

This Standard is based on the requirements of Canadian Electricity Association (CEA) LWIWG-03 (96), *Guy Composite Insulator for Guy Wires* (used with permission from CEA).

The co-operation of CEA and the contribution of its members are gratefully acknowledged.

This Standard was prepared by the Technical Committee on Insulators, under the jurisdiction of the Strategic Steering Committee on Power Engineering and Electromagnetic Compatibility, and has been formally approved by the Technical Committee.

Notes:

- 1) Use of the singular does not exclude the plural (and vice versa) when the sense allows.
- 2) Although the intended primary application of this Standard is stated in its Scope, it is important to note that it remains the responsibility of the users of the Standard to judge its suitability for their particular purpose.
- 3) This Standard was developed by consensus, which is defined by CSA Policy governing standardization — Code of good practice for standardization as “substantial agreement. Consensus implies much more than a simple majority, but not necessarily unanimity”. It is consistent with this definition that a member may be included in the Technical Committee list and yet not be in full agreement with all clauses of this Standard.
- 4) To submit a request for interpretation of this Standard, please send the following information to inquiries@csagroup.org and include “Request for interpretation” in the subject line:
 - a) define the problem, making reference to the specific clause, table, and where appropriate, include an illustrative sketch;
 - b) provide an explanation of circumstances surrounding the actual field condition; and
 - c) where possible, phrase the request in such a way that a specific “yes” or “no” answer will address the issue.Committee interpretations are processed in accordance with the CSA Directives and guidelines governing standardization and are available on the Current Standards Activities page at standardsactivities.csa.ca.
- 5) This Standard is subject to review five years from the date of publication. Suggestions for its improvement will be referred to the appropriate committee. To submit a proposal for change, please send the following information to inquiries@csagroup.org and include “Proposal for change” in the subject line:
 - a) Standard designation (number);
 - b) relevant clause, table, and/or figure number;
 - c) wording of the proposed change; and
 - d) rationale for the change.

C411.7-16

Composite insulators for guy wires

1 Scope

1.1

This Standard covers the requirements for guy composite insulators used in guy wires on overhead distribution lines operating at nominal voltages up to and including 75 kV. Guy insulators insulate or isolate guy wires for corrosion protection, higher insulation levels, clearances for maintenance and normal operation, and safety for the public and workers (joint-use). Guy composite insulators are subjected to tensile and torsional loads.

The composite insulators are intended to operate in a service environment within a temperature range of –50 to 50 °C.

1.2

This Standard defines terms, prescribes test methods, and specifies acceptance or failure criteria. Clauses 4 to 8 specify the material, product qualification, construction, and test requirements applicable to these insulators.

1.3

This Standard deals with guy composite insulators having a core with metal fittings and a coating. The core of the insulator has resin-impregnated glass fibres and is protected with a UV resistive coating.

1.4

In this Standard, “shall” is used to express a requirement, i.e., a provision that the user is obliged to satisfy in order to comply with the Standard; “should” is used to express a recommendation or that which is advised but not required; and “may” is used to express an option or that which is permissible within the limits of the Standard.

Notes accompanying clauses do not include requirements or alternative requirements; the purpose of a note accompanying a clause is to separate from the text explanatory or informative material.

Notes to tables and figures are considered part of the table or figure and may be written as requirements.

Annexes are designated normative (mandatory) or informative (non-mandatory) to define their application.