



STUDY COMMITTEE B2

Terms of reference of Working Group WG B2.40: 2008- 2010

Working Group title: Calculations of the electrical distances between live parts and obstacles for OHL : Preparatory studies for revision of IEC standard (IEC61865 –IEC60826 –EN50341)

Convenor:

Robert Lake (New-Zealand)

Needs of Target Groups: (ref. SC B2 Strategic Plan of March 2006):

- Update of IEC & CENELEC Standards: IEC 616865, IEC 60826, EN 50341 (§ 4.4)
- Factors to determine the reliability of existing lines (in collaboration with IEC & CENELEC) (§ 7.3.7)
- Methods that will increase the reliability of lines (in collaboration with IEC & CENELEC) (§ 7.3.8).

Terms of reference

Review of electrical and mechanical loading combinations for maximum ground / obstacle and Right-of-Way impact considerations, and update the method of calculation of electric distances between live parts and obstacles for update of IEC and EN standards. This WG would deal with the loading (electrical and mechanical) combinations for the various along-span clearance situations – maximum operating temperature, ice/snow loading, maximum wind, radial and horizontal/vertical clearances, land use variations. For completeness, the actual corresponding clearances would be noted to allow for comparison between the various country requirements.

Background

IEC TC11 MT1 has scheduled the revision of IEC 61865 “Calculation of the electrical distance between live parts and obstacles” in 2012. It is therefore necessary to prepare a draft report for 2010. The new WG will extend the new approaches developed for internal clearances to external clearances.

The mechanical loading relates to wind, ice/snow and temperature combinations, whilst the electrical relates to electrical current load levels relevant to determining conductor temperatures and EMF/AN/RFI levels.

Deliverables and Time Schedule

- Prepare a questionnaire to obtain relevant information about what loading combinations organisations use for determining easement widths and for the various clearance checks for along-span obstacles – 2008;
- Compile and analyse for the preparation of a TB and Electra report;
- Technical Brochure / Electra Report: 2010;
- Tutorial will be available just after issuing the relevant Brochure.



Countries that already expressed their interest to contribute:

Belgium, Ireland, New-Zealand, Poland, UK

Links with other SCs:

**CIGRE SCs: C3, C4;
CIGRE SC B2 : AGB2.07, AGB2.04
IEC: TC 11, TC 11/MT1;
CENELEC: TC 11, TC11/WG 08;
ASCE 74;
IEEE.**

***Approval by Technical Committee Chairman: Klaus Fröhlich
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