



## STUDY COMMITTEE B2

### Terms of reference of Working Group WG B2.22: 2008- 2011

<b>Working Group title:</b> Mechanical security of overhead lines with effective failure containment measures : design loading cases and strategies for effective anti-cascading supports	
<b>Convenor:</b> Prof. Ghyslaine McClure (Canada)	
<b>Needs of Target Groups: (ref. SC B2 Strategic Plan of March 2006):</b> <ul style="list-style-type: none"><li>• Are the Standards adequate as far as Public Safety and Continuity of Service are concerned ?</li><li>• How can we improve continuously the probabilistic design methods of OHL, including security, safety and continuity of service ? (§ 4.1)</li><li>• Dynamic behaviour of transmission lines under unbalanced loads or failure loads. (§ 7.3.19)</li></ul>	
<b>Terms of reference</b> Mechanical security measures for overhead lines : Review the literature, past CIGRÉ work and current utility practices on failure containment measures. Assess the effectiveness of practices. Recommend improvements to OHL support loading cases and strategies taking into account the static and dynamic effects of component failures in adjacent supports. Suggest OHL mechanical design criteria and strategies to limit cascades.	
<b>Background</b> This work will answer the <b>Target group needs for the increase of the continuity of power delivery by improving the mechanical security of overhead lines with effective (support) failure containment measures.</b> This has been confirmed and highlighted in TB and ER on “ <i>Big Storm Events – What we have learned</i> ” and “ <i>How Overhead Lines respond to Localised High Intensity Winds – Basic Understanding</i> ”.	
<b>Deliverables and Time Schedule</b> <ul style="list-style-type: none"><li>• Technical Brochure / Electra Report: June 2011;</li><li>• Tutorial will be available just after issuing the relevant Brochure.</li></ul>	
<b>Countries that already expressed their interest to contribute:</b> Brazil, Canada, France, New-Zealand, USA	
<b>Links with other SCs:</b> CIGRE SCs: C1, D1; CIGRE SC B2 AGB2.05, AGB2.07 IEC: TC 11, TC 11/MT1; CENELEC: TC 11, TC11/WG 08; ASCE 74; IEEE.	
<b>Approval by Technical Committee Chairman: Klaus Fröhlich</b> <b>Date: 15-02-2008</b>	