

Technical Advisory Group
B2.04 Report
Electrical Performance of
Overhead Lines

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Paris, France
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Meetings of TAG B2.04

- Met in Iraklion, Greece – April, 2009
- Met in Seoul, Korea – October, 2009
- Met in Stockholm – May 2010
- Typically 15 to 20 members attending
- WG's 36, 38, 41, 42, 43 associated
- WG 26 Completed Work

Tutorials Given in 2010

- TB 299 – Selection of Weather Parameters for Line Rating
- TB 217 – Field Connector Evaluation

Next TAG4 Meeting

- Las Vegas, Nevada
- 16-18 February, 2011
- Wednesday Joint Panel Sessions with IEEE
- Several Tutorials

Present WG assoc with TAG 4

- ~~TF B2.20 - Management of risks due to load-flow capacity increases in Transmission Overhead Lines. Complete 2009. FOURIE (FR)~~
- ~~WG B2.26 - A Guide to Field & Asset New Types of Overhead Conductor incl. the ... Final Edits Complete 2010. ... T. SEPPA~~
- WG B2.36 Guide for Application of Direct real time monitoring systems on Overhead Transmission lines. R. STEPHEN Draft report complete 12/09 – Completion date 12/10
- WG B2.38 Evaluation of HSIL Solutions for Increased Natural Capacity of OHTL OSWALDO REGIS (BRA) Draft report complete 12/09 – completion date 12/10

Present TAG4 Activities 2010-2013

- We support 2 existing and 3 new WGs
 - WG36 – Real-time Ratings (completion 2011)
 - WG 38 – High SIL line design (completion 2011)
 - WG 41 - Ac/dc Conversion of lines incl Tri-pole (2013)
 - WG 43 – Thermal Rating Calculations (2012)
 - WG 42 – Operation of Conductors >100C (2012)

Development of New Work Groups

- We recognize multiple sources guiding new WG topics:
 - CAG Survey results
 - Knowledge & experience of 20-30 TAG members
 - Liaison with other Professional Engineering Groups (IEEE, IEC, ANSI)
 - Review of previous documents in light of new materials & methods

TAG B2.04 CAG Subjects

Relevant to us

- Shield wire selection, grounding issues, short circuit current & structure earthing, potential rise of structure
- Conversion of AC to DC, voltage line upgrades, compact lines, cable/line joint use, reduced esthetic impact lines
- Application of HTLS conductors

Possible Future Activities in TAG4

- Economic analysis of reactive component alternatives to compact high SIL electrical losses in lines.
- Shield Wire Selection, fault current limit calculations, earthing of structures.
- XWG3 - Compact Line/Voltage Upgrade colloq w C4
- Extend TB 244 HTLS Conductors for Uprating Existing Lines