



Study Committee No : B1
WORKING BODY FORM

Group No : WG B1.35

Name of Convener : F.H. De Wild (NL)

TITLE of the Working Group : Guide for rating calculations of HV Cables

Background:

Cable ratings are generally determined by using IEC standards such as IEC 60287 and IEC 60853, but these documents do not cover all situations. As examples, HVDC cables, deep burial, horizontal drilling, multiple circuits are presently not included in these standards though these situations are more and more faced. Then, it is clear that in accordance with IEC TC 20, CIGRE SC B1 should address missing calculations and send the results to IEC for further consideration.

Terms of Reference:

- To collect experiences and information from different countries
- To assess and interpret the results from the inquiries and to make conclusions and recommendations on how to make a cable rating study
- To set up a general framework to guide the user to calculate the current rating of a cable circuit in any situation
- To report potential difficulties and problems with the methods, as well as to report recent developments in the methods

Scope:

All AC and DC cables with emphasis on HV and EHV cables, when possible extended to MV as well

The WG will also take into account :

- the crossings between cables and other heat sources
- the temporary ratings

Deliverables: The WG will deliver :

- a technical report to be published as a technical brochure and an executive summary in Electra
- a tutorial presenting the results

Created: 2010, Duration 3 years

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WG members from: Australia, Belgium, Brazil, Canada, Denmark, Finland, France, Germany, Italy, Japan, Korea, Netherlands, Norway, Poland, South Africa, Spain, Sweden, Switzerland, United Kingdom, United States

Other stakeholding SC's: IEC TC 20 WG 19

Approval by TC Chairman : Klaus Fröhlich

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