



# CIGRE A3 TC report to IEEE switchgear committee

Spring 2016 meeting, Hilton Heads

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# What is Study Committee A3?

Founded in 1921 as SC 3 studied design and developments on circuit breakers. In 2002 the scope was extended to all substation equipment.

Includes MV and HV equipment



72.5kV 31.5kA 2500A VCB



145kV 31.5kA 3150A CO<sub>2</sub> GCB



1100kV Series-capacitor bank



800kV DC Bypass Disconnect



1200kV AC MOSA



800kV DC MOSA



550kV LT-GCB



Internal arc failure



12kV, 800A Superconducting Fault Current Limiter

# CIGRE A3 committee

- <http://a3.cigre.org/WG-Area>

- A3.25: MO varistors and surge arresters for emerging system conditions (active)
- A3.26: Capacitor bank switching and impact on equipment (disbanded TB 624)
- A3.27: The impact of the application of vacuum switchgear at transmission voltages (disbanded TB 589)
- A3.28: Switching phenomena and testing requirements for UHV & EHV equipment (disbanded TB 570)
- A3.29: Deterioration & ageing of HV substation equipment (active)
- A3.30: Overstressing of HV substation equipment (active)
- A3.31: Instrument transformers with digital output (active)
- A3.32/ CIRED: Non-intrusive methods for condition assessment of distribution and transmission switchgears (active)
- A3.33: Experience with equipment for Series / Shunt Compensation (active)
- A3/B4.34: Technical requirements and specifications of state-of-the-art DC switching equipment (active)
- A3.35: Guidelines and best practices for the commissioning of controlled switching projects based on knowledge and worldwide experience (active)
- A3.36: Application and benchmark of Multi Physic Simulations and Engineering tools for Temperature Rise calculation (active)
- A3/B5/C4.37: System Conditions for and probability of Out-of-Phase (active)

# Future CIGRÉ Meetings

## •2016 Events

- USNC Annual Meeting – July (IEEE PES Summer Mtg)
- Paris – CIGRE Session 46 – August 21-26
- Philadelphia – Joint GOTF/Colloquium – Late October or Early November



# 2016 Synopses Selection Process

- 48 Abstracts Received
- Abstracts Reviewed and Scored with Following Criteria:
  - Relevance to SC Preferential Subjects
  - Technical Content
  - Clarity of Synopsis
  - Avoid Commercialism
- 30 Synopses Submitted to Paris; 26/30 (87%) Accepted for 2014 and 83% Accepted for 2012

Interested to learn more?

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