



# CIGRÉ

## International Council on Large Electrical Systems

Liaison Report on SCA2 Transformers for  
IEEE Transformers Committee- Fall 2018 Meeting

October 15, 2018

Jacksonville, FL

Prepared by Craig Swinderman

# Study Committees

SC A1: Rotating Electrical Machines

**SC A2: Transformers**

SC A3: High Voltage Equipment

SC B1: Insulated Cables

SC B2: Overhead Lines

SC B3: Substations

SC B4: HVDC and Power Electronics

SC B5: Protection and Automation

SC C1: System Development and Economics

SC C2: System Operation and Control

SC C3: System Environmental Performance

SC C4: System Technical Performance

SC C5: Electricity Markets and Regulation

SC C6: Distribution Systems and Dispersed Generation

SC D1: Materials and Emerging Test Techniques

SC D2: Information Systems and Telecommunication

# SC A2 WG Activities

No.	Working Group	Topic	Status
1	A2.43	Bushing Reliability	In process
2	A2.45	Transformer Failure Investigation	In process
3	A2/D1.46	Field Experience with transformer solid insulation	In process
4	D1/A2.47	New Frontiers of DGA Interpretation for Power Transformers and Their Accessories	In process
5	A2.49	Condition Assessment of Power Transformers	In process
6	A2/D1.51	PD Measurements	In process
7	A2/C4.52	HF Transformer and Reactor Models	In process
8	A2.53	FRA Interpretation	In process
9	A2.54	Audible Sound Requirements	In process
10	A2.55	Transformer Life Extension	In process
11	A2.56	Transformer Efficiency	In process
12	A2.57	Effects of DC Bias	In process
13	A2.58	Site Installation and Pre-commissioning of Power Transformers and Shunt Reactors	In process
14	A2.59	On-site assembly, On-site Rebuild, and On-site Testing of Power Transformers	In process

# TF and AG activities

- Task Force (TF) Activities
  - Insulation Condition at End of Life: reference paper
- Advisory Group (AG) Activities
  - Green Book A2.6: Transformer Procurement Process
    - Developed for Users of Power Transformers
      - Specification Development
      - Factory Qualification
      - Design Review
      - Transportation
      - Site Installation
    - Publication by 2020

# Upcoming New Working Groups

- **A2-60:** Dynamic Thermal Performance of Power Transformers
  - Completion 2023
- **A2-61:** Best Practices for On-Load Tap Changers (OLTC)
  - Completion 2022
- **A2-62:** Analysis of Transformer Reliability
  - Completion 2022
- **A2-63:** Transformer Impulse Testing
  - Completion 2023

If interested in contributing, please contact your appropriate CIGRÉ National Committee Representative.

# Possible Future Working Group

- On-site Measurement of Sound Level
  - Installation Recommendations
  - Measurement Guidelines
  - Retrofit Mitigation Techniques
    - DC blocking
    - Sound panels
    - Etc.
  - WG anticipated to start in 2020

# Upcoming Events

- CIGRÉ US Committee 2018 Grid of the Future
  - Reston, VA, October 28-31, 2018
- IEC/ CIGRÉ Conference on EHV-UHV AC and DC
  - Hakodate, Japan, April 23-26, 2019
  - Topics: Systems and T-Lines, Design of Equipment, Operational Experience, Testing
  - November 20, 2018 deadline for paper submission
- CIGRÉ A2 Colloquium “Transformer Research and Asset Management”
  - Zagreb, Croatia, October 9, 2019
  - Topics: Numerical Modeling, Materials, Components and New Techniques, and Transformer Life Management
  - Paper Abstracts due by April 1, 2019
  - Full Paper submission by September 10, 2019
- A2/B3 Study Committee Colloquium
  - Delhi, India November 2019
- CIGRÉ Session 48
  - Paris, France, August, 2020



# IEEE Liaison Report



# THANK YOU!