

# Report to ADSCOM

**C37.100.1**

**Common Requirements for AC  
High-Voltage Power Switchgear  
Rated Above 1000 V**

## Revision of 1<sup>st</sup> edition

- 1<sup>st</sup> edition published in 2007
- Current project began with 1st meeting in Fall of 2011 in Nashville
- 10<sup>th</sup> meeting held yesterday

# State of the Project

- Second ballot completed in January 2016
  - 155 members of the ballot group
  - 87% approval
  - Approval now approaching 94%
- Third ballot expected by July
- RevCom submittal anticipated in 3<sup>rd</sup> qtr.
- Good prospects that it yesterday's was the final meeting

# Purposes of the standard

- To serve as a common reference to high voltage standards
  - Addressing specifications that are common to more than one switchgear standards
  - Similar to:
    - C37.100.2 on common specs on capacitor switching
    - C37.100.5 on common terms and definitions
    - IEEE 4 on high voltage testing

## Purposes of the standard

- Promote harmonization between switchgear standards on specifications that are **common**:
  - Service conditions
  - Ratings
  - Testing

# Purposes of the standard

- Provide a template for switchgear standards
  - Clause numbering
  - Clause organization
  - Clause subject matter

# Purposes of the standard

- Promote harmonization between IEEE and IEC switchgear standards

# What is new of different?

- **Clause numbering:**
  - Hanging paragraphs eliminated  
(created new subclauses)
  - Decision to conform to IEEE Style Manual  
(more on this later)
- **Organization**
  - Some material relocated in document
  - (example: Temp rise table now in test clause)



# What is new of different?

- Treatment of service conditions:
  - Specifications are confined to clear and simple definitions of the environment in which the swgr is to operate
  - Statements or notes on how to address the service conditions in the design have been removed or moved to the construction section.

# What is new of different?

- Allowable temperature rise table
  - Reference now made to surrounding medium as OG (oxidizing gas) or NOG (not oxidizing gas)
  - Some allowable temperature rise limits have been increased based on IEC studies.
  - More information at this afternoon's technical session

# Clause numbering change

- 1<sup>st</sup> edition followed clause numbering of IEC 62271-1
  - Did not conform to IEEE Style Manual
  - Had permission from IEEE
  - Permitted easy comparison of the two documents
- IEEE will now require that we follow Style Manual
  - If not now with edition 2, by certainly later with edition 3
  - Decision: DO IT NOW!

Clause No.	IEEE Style Manual 2014 - 10.3	C37.100.1-ed. 2 Common Req'ts	C37.100.1-ed. 1 Common Req'ts 2007
1.0	Overview or Scope	Scope	General
1.1		not used	Scope
1.2		not used	Normative References
2.0	Normative references	Normative References	<b>Service Conditions</b>
3.0	Definitions	Definitions	Definitions
4.0	Not defined	<b>Service Conditions</b>	Ratings
5.0	Not defined	Ratings	Design & constr.
6.0	Not defined	Design & constr.	Design tests
7.0	Not defined	Design tests	Routine tests
8.0	Not defined	Routine tests	not used