

# **WORKING GROUP STATUS OF IEEE PC57.132 “GUIDE FOR VIBRATION TESTING OF OIL- IMMERSED HIGH-VOLTAGE DIRECT CURRENT (HVDC) CONVERTER TRANSFORMER ( $\pm 160$ KV DC TO $\pm 1100$ KV DC)”**

---

**Jun Deng**

**Working Group Chair**

**March 5<sup>th</sup> 2025**

# CURRENT STATUS OF WORKING GROUP

**Date and Location of Last Working Group Meeting:  
19<sup>th</sup>, October 2024, Nanjing, China (Third WG meeting)**



# CURRENT STATUS OF WORKING GROUP

During the second WG meeting, **28** experts participated, from China Southern Power Grid, State Grid Corporation of China, North China Electric Power University, etc. )

| IEEE PC57.132 Working Group discuss Meeting Sign-In Sheet [19/10/2024]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                              |                                                                |                      |                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|----------------------------------------------------------------|----------------------|-----------------|
| By choosing to attend and sign in to this meeting, you acknowledge and agree that your personal data will be documented for IEEE standards development purposes to comply with policies and procedures, legal and accreditation requirements, and evaluation of patent claims by patent offices. IEEE must capture your personal data for these purposes, and will provide information about activities related to standards development groups in which you participate. IEEE standards development participation is documented through various methods, e.g., rosters, submission documents, email reflectors, records of meeting attendance, responses to ballots, publicly available participation lists, and declaration of affiliations. See the IEEE Privacy Policy at <a href="https://www.ieee.org/security-privacy.html">https://www.ieee.org/security-privacy.html</a> . |                                              |                                                                |                      |                 |
| Name                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Employer                                     | Affiliations                                                   | E-Mail Address       | Sign-in         |
| Li Gang                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | China Southern Power Grid                    | China Southern Power Grid                                      | 32863140@qq.com      | Li Gang         |
| Zhi Wang                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | China Southern Power Grid                    | Guangdong Power Grid Co., Ltd.<br>Dongguan Power Supply Bureau | 553554828@qq.com     | Zhi Wang        |
| Liao Shaoji                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | China Southern Power Grid                    | Dongguan Power Supply Bureau                                   | 553554828@qq.com     | Liao Shaoji     |
| Huang Daichun                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Wuhan University                             | Wuhan University                                               | huangdc99@163.com    | Huang Daichun   |
| Deng Jun                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | China Southern Power Grid                    | China Southern Power Grid                                      | 13822116195@159.com  | Deng Jun        |
| Xie Zhichang                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | China Southern Power Grid                    | China Southern Power Grid                                      | 13926236261@139.com  | Zhichang Xie    |
| Zhang Yongzhang                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Chongqing University                         | Chongqing University                                           | zhangyzl@cqu.com     | Zhang Yongzhang |
| Zhang Simin                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Xi'an XD Transformer Co. Ltd.                | Xi'an Xidian Transformer Co. Ltd.                              | 18092412796@163.com  | Zhang Simin     |
| Wu Tongyu                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Shenyang Transformer INS.                    | Development Dep.                                               | 913396608@qq.com     | Wu Tongyu       |
| Peng Yu                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Harbin University of Science and Technology  | School of Electrical and Electronic Engineering                | pengyu@hust.edu.cn   | Peng Yu         |
| Pulin Cao                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Kunming University of Science and Technology | School of Electrical Engineering                               | 398713321@qq.com     | Pulin Cao       |
| Zhonghuangsu                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | TBGA Heng Yang Transformer Co. Ltd.          | TBGA Heng Yang Transformer Co. Ltd.                            | zhonghuangsu@163.com | Zhonghuangsu    |

# CURRENT STATUS OF WORKING GROUP

---

- ◆ WG Chair Dr. Jun Deng introduce the Agenda, Minutes from Prior Meeting and IEEE Policies (include Call for Patents, copyright policy).
- ◆ Agenda and Minutes from Prior Meeting are approved by motion without opposition respectively.

# CURRENT STATUS OF WORKING GROUP

Jun Deng(CSG) and Zhicheng Xie(CSG) introduce the Draft of PC57.132 part by part, respectively. The draft has been fully discussed by WG members, some suggestions have been proposed:

- a) In the Chapter 5, it should point out that when conducting multiple vibration tests on the same transformer, it is advisable to maintain consistent sensor positions for comprehensive analysis.
- b) Supplement the requirements for fiber optic vibration measurement in Chapter 7, including sensor types and installation forms, as well as requirements for voltage and current measurement devices such as load rate, range, frequency response, etc.
- c) In Chapter 7, it is necessary to separately describe the internal vibration measurement and external vibration measurement of transformers.
- d) The technical requirements for vibration sensors require a clear distinction between steady-state and transient technical conditions.

# CURRENT STATUS OF WORKING GROUP

---

- e) Attention to copyright issues in the layout diagram of vibration testing points.
- f) The case in Appendix C needs to be supplemented with the basic information of the tested equipment, vibration distribution, vibration signal extraction and analysis, etc.

# CURRENT STATUS OF WORKING GROUP

---

**According to the comments of the last meeting (19<sup>th</sup>, October 2024 in Nanjing, China ), the WG has made revisions to the draft and plans to hold the 4<sup>th</sup> WG meeting for discussion in the near future(April 2025, Nanchang, China). Besides, we plan to go to Sweden and discuss with ABB company this year (this autumn).**

# NEXT PLAN

---

## ■ Next WG Meeting

**The next meeting is planned to be held at Nanchang China in April 2025.**

# THANK YOU

---

Dr. Jun Deng

WG Chair

China Southern Power Grid

[13822116195@139.com](mailto:13822116195@139.com)