



# SESEC V

## Annex 2

CEEIA Standardization Committee Assembly 2022 and Electrotechnical Standardization Development Forum

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Seconded European Standardization Expert in China  
(SESEC)

## CEEIA Standardization Committee Assembly 2022 and Electrotechnical Standardization Development Forum

On 25 July 2022, China Electrical Equipment Industry Association (CEEIA) convened their Standardization Committee Assembly 2022 and the Electrotechnical Standardization Development Forum in Hangzhou.

The below are the summary of the meeting:

1. **CEEIA Standardization Committee reconstituted its leadership and board.** WU Xiaodong, expert from the Shanghai Electrical Apparatus Research Institute, will be the new president of the committee for the next five years, and ZHANG Liang, expert from CEEIA, will be the new secretary general. Five European organizations, including Siemens, ABB, Schneider, entered the new board, while no American company was seen in the list.
2. **Achievements of the committee in the past five years were summarized.**
  - Developed standards to support Ministry of Industry and Information Technology (MIIT)'s policy: **Smart Manufacturing Development Plan (2016-2020)**. The standards included **Technical Guide for Intelligent Manufacturing of Lead Storage Battery, General Technical Conditions for Automatic Production Line of Small Circuit Breaker, Multi-functional Intelligent Low-voltage Circuit Breaker, General Technical Conditions for Low-voltage Intelligent Electrical Appliance Wide Area Network**, among others.
  - Developed standards to support **Made in China 2025** and MIIT's **Industrial Green Development Plan (2016-2020)**. The committee has developed more than 30 **Green Design Product Evaluation Technical Specifications** in 10 fields, including low-voltage electrical appliances, electrical appliances for household and similar uses, electrical accessories, rotating motors, transformers, and wind power generation electrical equipment.
  - Developed standards to support the National Development and Reform Commission (NDRC)'s **Guidance on Promoting the Development of Internet + Intelligent Energy**. More than 60 association standards in the fields of wind power generation, photovoltaic, and solar thermal were finished, including the **Test Procedure for Anti-islanding Effect of Wind Turbines** and **Technical Guidelines for Supervision and Manufacturing of Offshore Wind Power Equipment**, etc.
  - Formulated standards such as **Green Factory Evaluation of Lead Acid Storage Battery** and **Green Factory Evaluation of Boiler Manufacturing** to support the green development of the manufacturing industry.
  - Formulated the **Energy Efficiency Limiting Values and Energy Efficiency Grades for 6kV~35kV Transformers**, to support MIIT's **Distribution Transformers Energy Efficiency Improvement Plan**.
  - According to the **Guidelines for Implementation of Industrial Foundation Strengthening Project (2016-2020)**, the Committee focused on promoting breakthrough actions for power equipment, and carried out standardization for large hydraulic turbine forging and casting materials, large hydraulic turbine main shaft forging materials, ultra-supercritical power generation equipment safety valves, and 1E-class cables for high-temperature gas-cooled reactors of fourth-generation nuclear power, with the main technical indicators being stricter than those in national standards or industry standards.
  - To fill the blank in emerging industry standards, the Committee issued the **General Technical Conditions for High Voltage Power Supply Shore Power Supply Units, Ammonia Resistant Refrigerant Motor Insulation System, Off-grid Microgrid** series standards, **PV Electrical Cabinet** series standards, etc.
  - To regulate the technical evaluation activities of the industry, the Committee issued four technical evaluation standards, including **Guidelines for Evaluating the Quality of Dry-type Power Transformers, Guidelines for Evaluating the Quality of Oil-immersed Power Transformers, and Technical Comparison Evaluation of Standards for Electrical Industry Enterprises**.
3. **Work Plan for the next five years were proposed.**
  - Establish and improve the standard system for industrial transformation and upgrading. Specifically, implement the **Action Plan for Carbon Peak in 2030**, establish and improve the standards system of carbon peak and carbon neutrality for the electrotechnical sector, and focus on the development of standards for electrical equipment and non-fossil energy generation equipment, new power system equipment, new energy storage equipment, energy efficiency, green carbon reduction technologies and resource recycling. Continue to carry out standardization for intelligent manufacturing and green manufacturing and explore the service-oriented manufacturing standards.

- Improve the coordination with other standardization systems. Specifically, enhance association TCs' technical coordination with corresponding national and sector TCs and improve. Strengthen cooperation with other associations in the development of standards for cross-cutting areas through jointly developing and publishing association standards.
- Continuously improve participation in international standardization. Focus on promoting the standards development in major areas such as full electrification and connected society, new and renewable energy, new power systems, circular economy and zero carbon. Strengthen the conversion of domestic standards to international standards in emerging areas where China has advantages.
- Improve the quality and application of association standards. Facilitate association standards to be adopted by government departments, users, and testing and certification bodies; and promote high-quality association standards to be converted to government standards and international standards.

**4. Experts from industry made several presentations in the Electrotechnical Standardization Development forum**, which was held in the afternoon, introducing the latest development of electrotechnical standardization in China. The presentations include:

- *Promotion of internationalization of China's electrotechnical standards*
- *Association Standardization of China Electricity Council (CEC)*
- *Status quo and trend of intelligent manufacturing standards*
- *Association standardization of CEEIA*
- *Standardization for "Carbon Peak and Carbon Neutrality" Objectives*

Some key points of these presentations are summarized as below.

- a) China has carried out standardization cooperation with 55 national and regional standardization organizations and signed 98 standardization cooperation documents with them in the past five years. During the same period, China took up the positions of president and vice-president in 77 ISO/IEC technical bodies, held the secretariats of 79 such bodies, and led the development of 917 ISO/IEC standards.
- b) China now holds 12 IEC/TCs/SCs secretariats, including 2 in electrotechnical sector. Chinese experts assume president positions in 14 IEC/TCs/SCs, 4 of which are from electrotechnical sector.
- c) The number of Chinese experts registered in IEC keeps growing rapidly. In 2022, there are 7130 Chinese experts registered in IEC, including 1496 from the electrotechnical sector, a 16% increase from 1290 in 2021.
- d) In power sector, China has established 22 national TCs and 54 sector TCs, mirroring 20 IEC/TCs in China. CEC has also established 38 TCs to develop association standards.
- e) By the end of 2021, there are 4708 effective standards in power sector, including 576 national standards and 3460 sector standards. Apart from these government standards, CEC (China Electricity Council) also developed 763 association standards. These standards will be the basis of developing government standards in the future.
- f) CEEIA has carried out mutual recognition of association standards with CEC, China Machinery Industry Federation (CMIF), Chinese Society of Electrical Engineering (CSEE), China Electrotechnical Society (CES), China Foundry Association (CFA), China Welding Association (CWA), and China Association of Machinery Industry for Environment Protection (CAMIEP).
- g) CEEIA has 3 association standards that have been converted to national standards, 10+ to sector standards of the Ministry of Industry and Information Technology (MIIT) and the National Energy Administration (NEA). The organization has also developed 30+ green product evaluation standards, 9 of which have been adopted by MIIT's green product evaluation system (voluntary).
- h) China's standards system for carbon peak and neutrality in electrotechnical sector will include three sections: energy transformation and carbon reduction, electrification, environment-friendly technologies. A bunch of TCs and key technologies have been identified and will be the focuses of electrotechnical standardization in the next step. More information can be found in the presentations attached to this report.

## Introduction of SESEC Project



The Seconded European Standardization Expert in China (SESEC) is a visibility project co-financed by the European Commission (EC), the European Free Trade Association (EFTA) secretariat and the three European Standardization Organizations (CEN, CENELEC and ETSI). Since 2006, there has been three SESEC projects in China, SESEC I (2006-2009), SESEC II (2009- 2012) and SESEC III (2014-2017). In April 2018, SESEC IV was officially launched in Beijing, China. Dr. Betty XU was nominated as the SESEC expert and will spend the next 36 months on promoting EU-China standardization information exchange and EU-China standardization cooperation.

The SESEC project supports the strategic objectives of the European Union, EFTA and the European Standardization Organizations (ESOs). The purpose of SESEC project is to:

- **Promote European and international standards in China;**

- **Improve contacts with different levels of the Chinese administration, industry and standardization bodies;**
- **Improve the visibility and understanding of the European Standardization System (ESS) in China;**
- **Gather regulatory and standardization intelligence.**

The following areas have been identified as sectorial project priorities by the SESEC project partners: Internet of Things (IoT) & Machine-to-Machine(M2M) communication, communication networks & services, cybersecurity & digital identity, Smart Cities (including transport, power grids & metering), electrical & electronic products, general product safety, medical devices, cosmetics, energy management & environmental protection (including eco-design & labeling, as well as environmental performance of buildings).

## SESEC IV China Standardization and Technical Regulation Newsletter

SESEC IV China Standardization and Technical Regulation Newsletter is the gathering of China regulatory and standardization intelligence. Most information of the Monthly Newsletter was summarized from China news media or websites. Some of them were the first-hand information from TC meetings, forums/workshops, or meetings/dialogues with China government authorities in certain areas.

### In this Newsletter

In this Newsletter, some news articles were abstracted from Chinese government organizations. All new published standards, implementation or management regulations and notice are summarized; original document and English version are available.