

# IEEE Power and Energy Society Entity Annual Report

2025

**Entity:** IEEE PES China Satellite Technical Committee-Renewable Systems Integration Committee

**Website:**

**Chair:** Liangzhong Yao, Yitao Liu

**Vice-Chair:** Gangui Yan, Chao Hong, Lin Ye, Weidong Li

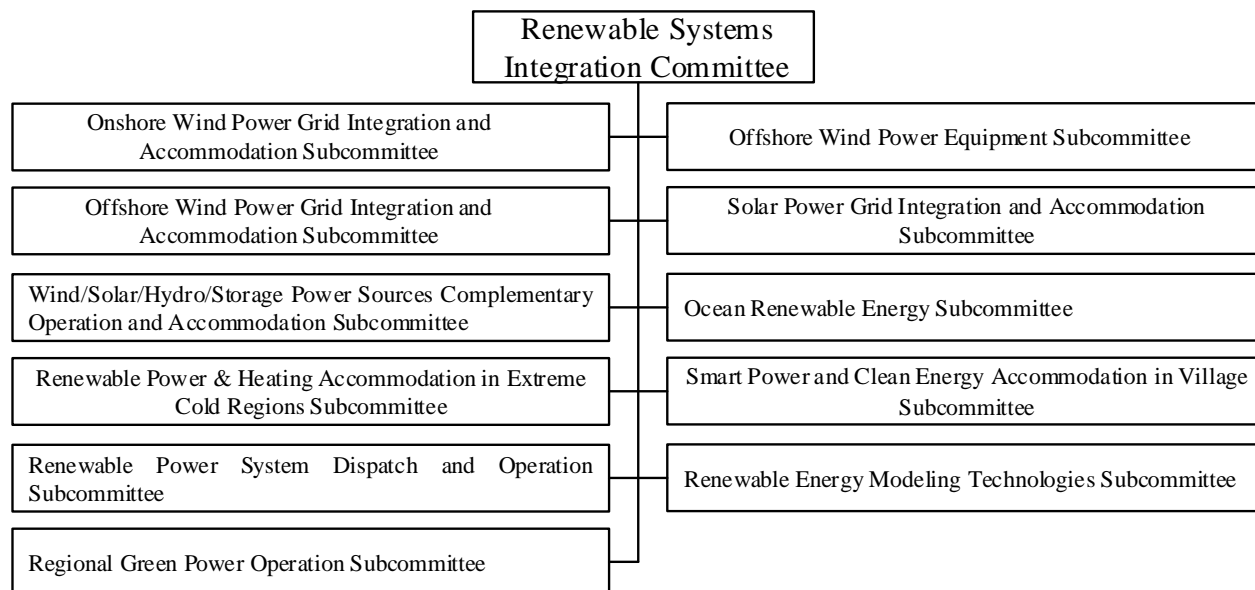
**Secretary:** Ping Li

**Immediate Past Chair:**

## 1. Significant Accomplishments:

### 1.1 *Introduction of Committee Structure*

IEEE PES China Satellite Technical Committee - Renewable Systems Integration consists of 11 subcommittees, as detailed in the following figure.



**Figure 1:** Renewable Systems Integration Committee & Subcommittees List

### 1.2 *Annual Meeting*

2025 Annual meeting of Renewable Systems Integration China Satellite Committee was held in Foshan, Guangdong, from March 28-29, 2025. There are over 150 experts and scholars who had attended the meeting. Discussions of the meeting had focused on cutting-edge topics such as offshore wind power grid

integration and renewable power generation equipment manufacturing, etc. A closed-door meeting was also held to discuss the committee's future development plans and opportunities for operational optimization.



**Figure 2:** 2025 Annual Meeting of IEEE PES Renewable Systems Integration China Satellite Technical Committee

### ***1.3 Committee Awards***

In order to recognize the contributions of each subcommittee, the committee formulated and implemented the "IEEE PES Renewable Systems Integration Committee Outstanding Performance Evaluation Guidelines", including outstanding teams and individuals across all subcommittees, with six annual award categories recognized and rewarded by committee in 2025 committee meeting.



**Figure 3:** IEEE PES China Renewable Systems Integration Committee- Outstanding Performance Evaluation of Subcommittees

### ***1.4 International Conference Participation***

Committee members participated in the "2025 IEEE Conference on Smart Power & Energy Technology (IEEE SPET 2025)" held in Wuhan from September 19-20, 2025, engaging in academic exchanges and showcasing the committee's achievements.



**Figure 4:** 2025 IEEE Conference on Smart Power & Energy Technology (IEEE SPET 2025)

### ***1.5 China Satellite Technical Committees Meeting Participation***

The committee had played an active and prominent role in the 2025 IEEE PES China Satellite Technical Committees Annual Exchange Meeting, held in Beijing, December 26-27, 2025. The meeting was co-organized by the IEEE PES China Satellite Technical Committees.

- Meeting Focus: The forum centered on cutting-edge topics critical to the future energy landscape, including new power systems, power electronics, renewable energy integration, and energy storage technologies, facilitating extensive technical exchanges and achievement sharing.
- Committee's Key Contribution: A representative from the Power System Technology Research Institute delivered the official work report on behalf of the IEEE PES Renewable Systems Integration Committee. The report comprehensively summarized the committee's trajectory and impact since its establishment five years ago.
- Highlighted Past Work & Impact: It emphasized the committee's consistent role in fostering industry advancement through a series of well-organized activities such as technical seminars, standards training sessions, and visits to demonstration projects, all of which have significantly promoted technical exchange and talent development within the field.
- Recognition Received: The report acknowledged the growth and recognition of its members, noting that the committee member Jiaoning Jiao was honored with the "Outstanding Volunteer" award at this conference.

- Strategic Reporting: Beyond reviewing past accomplishments, the committee's report proactively outlined its work plan for 2026, focusing on several strategic directions: managing committee leadership transition, enhancing the technical exchange platform, and compiling authoritative industry reports.



**Figure 5:** 2025 IEEE PES China Technical Committees Annual Exchange Meeting

## **2. Benefits to Industry and PES Members from the Committee Work:**

The committee collaborated with various subcommittees to focus on systematic work in core areas such as grid integration of marine renewable energy, R&D of intelligent equipment, and industrial applications. Through organizing quarterly seminars, cross-disciplinary research groups, and industry-academia-research activities, it addressed technical bottlenecks, fostering industry development and engineering practice.

## **3. Benefits to Volunteer Participants from the Committee Work:**

In order to encourage and recognize the contributions made by team and individual members to the development of the IEEE PES Renewable Systems Integration Committee, after strict evaluation by the Committee, six annual awards have been selected: Outstanding Volunteer, Outstanding Female Science and Technology Worker, Outstanding Secretary General, Outstanding Sub Technical Committee, Outstanding Young Talent, and Outstanding Individual Contribution.

## **4. Recognition of Outstanding Performance:**

The committee was awarded "Outstanding Technical Committee of the IEEE PES China Satellite Technical Committees" in 2021, 2022, 2023 and 2024, respectively.

2025 award recipients included:

- Outstanding Secretary General: Weixing Li.
- Outstanding Young Talents: Lidi Wang
- Outstanding female workers: Fenyan Yang.
- Outstanding Volunteers: Jiaoning Jiao.

#### **5. Coordination with Other Entities (PES Committees, CIGRE, standards, etc.):**

The Renewable Systems Integration Committee carried out a lot of academic exchanges among its 11 subcommittees, and the Renewable Systems Integration Committee cooperated fully with other IEEE PES China Satellite Technical Committees. Furthermore, the committee has been very actively participating the activities of IEC, CIGRE, etc.

#### **6. Coordination and Involvement with Young Professionals:**

The subcommittees actively organized young professionals to participate in various academic exchange activities, such as Youth Forums and Doctoral Seminars, and encouraged their involvement in external academic conferences and specialized lectures.

#### **7. New Technologies of Interest to the Committee:**

Related topics include but are not limited to:

- Onshore Wind Power Grid Integration and Accommodation
- Offshore Wind Power Equipment
- Offshore Wind Power Grid Integration and Accommodation
- Solar Power Grid Integration and Accommodation
- Wind/Solar/Hydro/Storage Power Sources Complementary Operation and Accommodation
- Ocean Renewable Energy
- Renewable Power & Heating Accommodation in Extreme Cold Regions
- Smart Power and Clean Energy Accommodation in Village
- Renewable Power System Dispatch and Operation
- Renewable Energy Modeling Technologies
- Regional Green Power Operation

#### **8. Problems and Concerns:**

The problems on how to implement the diversify of the annual meeting and attract more committee members attending the meeting, are needed to be considered.

#### **9. Significant Plans for the Next Period:**

- Deepen exploration and cooperation on technological frontiers, strengthening international academic exchanges.
- Expand member services and capacity building, improving the training system and regional activities.
- Optimize standard development and industry guidance, promoting the establishment of international standards and the release of technical white papers.
- Enhance the influence and platform value of conferences, fostering open and inclusive academic exchange platforms and encouraging participation from young scholars.
- Promote the utilization of core advantages by subcommittee secretariat units to deepen subcommittee activities and ensure the sustainable development of the committee.
- Improve the organizational structure and member mobility mechanisms of subcommittees to attract more outstanding talents.

**Submitted by: The Renewable Systems Integration Committee Secretariat**

**Date: 2025-1-27**