

IEEE Power and Energy Society Entity Annual Report

2023

Entity:	Power System Communications and Cybersecurity Committee
Website:	https://site.ieee.org/pes-pscc/
Chair:	James Formea
Vice-Chair:	Marc Benou
Secretary:	Craig Palmer
Immediate Past Chair:	Craig Preuss

1. Significant Accomplishments:

At the start of 2023, the incoming chair shared high level goals with the Committee members, aimed at helping to secure the future of the Committee and its Subcommittees, while expanding the visibility and availability of/accessibility to the Committee and its activities to more participants:

- Focus on consistency
 - Develop familiarity with new/existing manuals
 - Identify and correct deviations from our P&P and O&P
 - Provide training and mentoring for SC and subgroup leaders
- Strive for openness and accessibility
 - Establish hybrid/virtual meeting access as a standard expectation
 - Increase visibility of meetings occurring outside of face-to-face events
 - Improve compliance with meeting notices and minutes reporting requirements
- Develop a leadership pipeline
 - Identify and develop leaders for future sub-group, SC, and MC officer positions

With the support of the Committee, Subcommittee, and Sub Group officers, along with all of the participants in the Committee's activities, much progress has been made toward the realization of these goals, with the PSCCC completing another year of successful hybrid meetings for nearly every face-to-face meeting held in 2023. Continued progress is expected in 2024.

In addition to our organizational accomplishments, the Committee celebrated the completion of the following IEEE-SA projects in 2023:

- F0, Fiber Optics Subcommittee
 - IEEE Std 1591.1, IEEE Standard for Testing and Performance of Hardware for Optical Ground Wire (OPGW)
- P0, Protocols and Communication Architectures Subcommittee
 - IEEE Std C237.238a, IEEE Standard Profile for Use of IEEE 1588™ Precision Time Protocol in Power System Applications Amendment 1: Adding a Type-Length-Value (TLV) to Indicate the Latest International Earth Rotation Service (IERS)-Specified Universal Time Coordinated (UTC) Leap Second Event
- S0, Cybersecurity Subcommittee
 - IEEE Std 1615, IEEE Recommended Practice for Network Communication in Electric Power Substations

- IEEE Std 1547.3, IEEE Guide for Cybersecurity of Distributed Energy Resources Interconnected with Electric Power Systems

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

The PSCCC has enjoyed increased engagement from electric utility personnel, enabled by hybrid meeting support which allows utility personnel who are unable to secure funding and time to attend an entire multi-day meeting series to attend specific subgroups of interest, sometimes at the direct request of their colleagues who attend more regularly. This has allowed a number of our subgroups to receive valuable input and contributions from individuals who would otherwise not be able to participate.

The Committee continues to take on work that directly relates to challenges faced in the industry and is committed to developing new standards to address up and coming challenges while maintaining the portfolio of existing standards that are used heavily throughout the industry.

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

Volunteer participants in PSCCC activities benefit greatly from the networking opportunities afforded by participation in our activities. The Committee has fostered an environment in which even first-time attendees feel welcome to propose ideas, challenge positions, and participate in discussions. These opportunities to engage in technical discussion with other highly knowledgeable and experienced individuals serve to broaden our participants' views and better equip them for similar discussions and activities outside of the Committee.

4. **Recognition of Outstanding Performance:**

The three active past chairs of the Committee deserve recognition for their continued engagement in the activities of the Committee. Craig Preuss, Ken Fodero, and Mike Dood all remain highly engaged in Committee activities, and each has continued to serve in formal liaison roles for initiatives such as IEEE Digital Privacy, PES Roadmap, and EPM Committee. Mike Dood has also taken on the role of Standards Coordinator for the Committee. The experience and advice of these three past chairs has been invaluable to me and the other committee officers.

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

PSCCC regularly coordinates and collaborates with the PES Power System Relaying and Control Committee, Standards Committee 21, PES Transformers Committee, IEC TC57 Working Groups, NERC, ISA99, and NFPA.

6. **New Technologies of Interest to the Committee:**

PSCCC Participants have been investigating virtualization of protection and control functions for electric power systems, which is intertwined with the expansion of centralized protection and control systems. The Committee has also started to consider new work related to quantum-safe cryptography and the impact on the use of encryption and authentication technologies in electric power systems.

7. **Global Involvement**

The PSCCC has little participation from regions 8, 9, and 10. Attempts have been made to better coordinate with the PSCCC Satellite Committee in China.

8. Problems and Concerns:

- Identification and preparation of future leaders/officers for Committee, its Subcommittees, and its Sub Groups
 - E0 subcommittee currently has no volunteers to take vacant chair position
 - Other Task Forces and Working Groups have had to delay or pause their work due to resigning leaders
- Decreased face-to-face participation of more experienced participants who have retired, or whose employers can/will no longer support participation, leaving the financial burden up to the participant
- Increased workload on the Committee and its volunteers as a result of no longer being able to reaffirm existing standards that do not require revision
- Increased demand on volunteers to serve as liaisons to other groups (coordinating committees, ad hoc initiatives, etc.)

9. Significant Plans for the Next Period:

In 2024, the Chair intends to continue working on the goals communicated at the beginning of 2023. The Committee will work to get new Standards Committee and Individual Method Working Group P&P documents approved, as well as submit an updated O&P manual to Technical Council for review. A number of open IEEE-SA projects are expected to be moved into balloting and/or publishing in 2024. The officers will prepare for transition of officers in early 2025, with hopes of bringing a utility representative into the Secretary role.

Submitted by: James Formea, PSCCC Chair
Date: July 23, 2024