

IEEE Power and Energy Society Entity Annual Report 2019

Entity: Smart Buildings, Loads and Customer Systems
Website: <https://site.ieee.org/pes-sblc/>
Chair: Ron Melton
Vice-Chair: Johanna Mathieu
Secretary: Yashen Lin
Immediate Past Chair: Shawn Chandler

1. Significant Accomplishments:

Two new working groups established in 2019:

- Multi-Energy Systems Working Group proposed by Renee Cinar. This working group was formed under the Architecture Subcommittee and is exploring the topic of multi-energy systems for the purpose of determining whether a sub-committee should be established within SBLCS.
- The Task Force on Load Control was established. It is led by Jianming (Jamie) Lian and is under the Loads Subcommittee

The SBLC Blockchain WG established in 2018 doubled in size in 2019 and is coordinating activities to support continued work within the IEEE SA's P2418.5 working group.

Leadership of the Committee transitioned with Ron Melton becoming chairman, Johanna Mathieu becoming vice-chair, and Yashen Lin becoming Secretary.

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

The committee, through its subcommittees, task forces and working groups addresses specific topics of concern related to the edge of the grid and integration at grid boundaries, for example, building to grid integration, and the related technologies. These activities are often interdisciplinary and based on a variety of technologies, so there is a rich interaction between the SBLCS groups and related groups in IEEE PES and beyond.

3. Benefits to Volunteer Participants from the Committee Work:

Volunteer participants are able to engage in the interdisciplinary work of the committee and to help shape the activities through the panel sessions organized for the PES GM.

4. Recognition of Outstanding Performance:

Recognition of outstanding performance for Dr. Johanna Mathieu, in her highly successful tenure as Vice-Chair of the Committee.



Recognition of outstanding performance for Dr. Yashen Lin, in his highly successful tenure as TCPC of the Committee, and now also as the new Secretary of the Committee.

Recognition of Dr. Jihzong Zhu for his contributions to the Loads Subcommittee and working group leadership.

Recognition of outstanding performance for Renee Cinar for her tremendous energy in organizing and chairing the Multi-Energy Systems Working Group under the Architecture Subcommittee.

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

There has been strong coordination with the IEEE Blockchain efforts, for example the IEEE SA’s P2418.5 working group.

The committee serves as the PES Technical Council liaison with the IEEE Smart Grid and IEEE Smart Cities committees.

There is a new coordination with the US Department of Energy’s GridWise® Architecture Council on the IEEE PES Transactive Energy Systems Conference. SBLC is one of the sponsoring PES technical committees for the conference.

6. New Technologies of Interest to the Committee:

The committee is interested in new technologies related to distributed systems integration, integration and interconnection of distributed energy resources at the edge of the electric power system or on or within customer premises, technologies associated with automation of building energy systems and controls (“smart buildings”) including commercial and residential buildings and loads, associated technologies for implementing such systems, for example, communications technologies and computer technologies including machine learning and distributed ledgers.

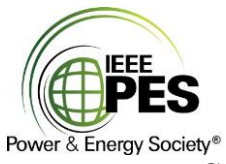
7. Global Involvement

PES is looking to increase involvement with members from Regions 8, 9 and 10 (Africa, Europe, Middle East, Latin America, Asia and Pacific). Please provide the following information.

Total Number of committee members ~110	Officers from regions 8,9 and 10	Subcommittee officers from regions 8, 9 and 10 2	Subcommittee members from regions 8,9, and 10 52
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8. Significant Plans for the Next Period:

- a. Continuation of effort for IEEE P2781 – Load Modeling and Simulation
- b. Continuation of effort for IEEE P2783 – Quick Response Systems
- c. Continuation of effort for Industry review of smart buildings, loads, customer systems stakeholders, community, and methods and techniques
- d. Active participation in Organizing Committee for IEEE PES Transactive Energy Systems Conference



- e. Completion of Multi-Energy System working group drafting of charter to transition to a subcommittee

Submitted by: Ron Melton, Committee Chair

Date: March 9, 2020