

Smart Buildings, Loads and Customer Systems Committee (SBLCS)

Who We Are

The Smart Buildings–Loads–Customer Systems Technical Committee is an IEEE Power & Energy Society (PES) entity that works to develop knowledge base and standards in the fast-growing area of consumer and prosumer energy services and systems behind the meter. We also seek to refine the processes and business models that expand and clarify the relationship between the grid and emerging distributed energy resources.

Committee Scope

- The integration of consumer-side and grid planning, dispatch operations, and transactive systems
- Customer-sited power and energy system functions and performance management
- Methods for communication integration with utility and other energy service provider business systems

Subcommittees

- Architecture Subcommittee
- Smart Buildings & Customer Systems Subcommittee
- Loads Subcommittee

Join Us!

Are you interested in working in one of the fastest evolving areas of grid systems? Please contact Committee Secretary (Dr. Qun Zhou Sun, University of Central Florida; Email: qz.sun@ucf.edu). PES-SBLC Technical Committee is seeking your input! We have committee activities structured in subcommittees, working groups and task forces, including four active standard oriented efforts.

Objectives

- To develop and maintain plans, concepts, and structural views related to architectural issues associated with the integration and coordinated operation of distributed energy resources (DER– responsive distributed generation, storage, and loads) related to consumer energy services.
- To study the integration of smart buildings and other customer systems with up-and down-stream energy processes and applications such as building energy management; energy facilities management; fire, safety, and security systems in regards to energy systems; microgrids and smart grid.
- To study the modeling, deployment, and operation of customer loads, and the technology and standards to support the functions of these consumer interests, including processes and models that may expand and clarify the relationship between the grid and load related energy resources and services behind the meter.

What's Next

- Continuation of effort on the development of IEEE P2783 (Guide for the Application of Quick Response Systems of Customer-Side Loads in Modern Power Grids) and P2418.5 (Blockchain in Energy).
- Expanding our efforts on Grid-interactive Efficient Buildings; Connected Communities; and Estimation, Uncertainty Quantification, and Control of Behind-The-Meter Distributed Energy Resources.
- Active participation in organizing IEEE PES Transactive Energy Systems Conference in collaboration with GridWise® Architecture Council.

