

Special Session 17
**Research on Key Technologies of Optimization Management and Energy Transaction
of the Distributed Resource Under the Electricity-Sold Side Liberalization**

Session Chair:

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Scope of the Session:

Distributed resources have the characteristics of high utilization efficiency, small negative environmental impact, reliable energy supply and good economy. Moreover, the types of energy that can be exchanged are more diverse, and the means of energy consumption are more abundant, which provide new opportunities for the marketization, liberalization and flexible trading of the distributed resources. At the same time, the market for the electricity-sold side is gradually opening up, and the independent and autonomy of the integrated energy-supply system for production, supply and consumption are greatly enhanced. Through the mutual complementarity between various energy sources such as electricity, gas and heat, the new energy sources with stochastic fluctuations can be used in the integrated energy system to increase the operational flexibility of the energy consumption side. Compared with the traditional single-energy market such as electric power, natural gas, and regional heat/cold, it is more important to realize the more efficient allocation of energy, and to promote the technology of energy Internet and realize the reform goal of China's energy system.

This special session aims to present the key technologies of optimization management and energy transaction of the distributed resource under the electricity-sold side liberalization, promote academic exchanges and technological advancement in this field, and share the latest results. Topics of presentations and research papers include but are not limited to:

- Modeling of the distributed resource characteristics and interaction potential under the electricity-sold side liberalization
- Optimization control technology of the distributed resource under the electricity-sold side liberalization
- Energy optimization management technology of the distributed resource under the electricity-sold side liberalization
- Mechanism and bidding strategy when the distributed resources participate in the electricity market under the electricity-sold side liberalization
- Ancillary service model when the distributed resources participate under the electricity-sold side liberalization