

Distributed Voltage Control Method of Active Distribution Networks based on Multi-Agent System

The utilization of renewable energy is of great significance to alleviate the current energy and environmental concern. However, due to the uncertainties and volatility of renewable energy, its higher-level integration brings numerous technical challenges to the active distribution network operations. Among them, the overvoltage issues due to the reverse power flow caused by the increased penetration of renewable energy are of particular attention.

The speech will brief the voltage issues of active distribution network that is embedded with renewable energies and present our recent works in multi-agent system-based distributed voltage control methods. Some cases will also be presented as examples.