

S4-2

Smart Grid Research & Practice in CEPRI

Guo Jianbao
CEPRI, Beijing, China

Keywords: strong and smart grid, DR, DSM, energy efficiency, research and testing

Abstract

Smart grid is a high integration of strong network & smart technologies, it enables: large scale integration of clean renewable, two-way interaction and smart energy consumption, and higher power grid flexibility and security. Due to unbalanced geological location of energy resources and load centers, growing power demand and environmental concerns in China, State Grid Corporation of China (SGCC) put forward the Strong and Smart Grid Strategy in 2009, and has launched two batches of smart grid demonstration projects.

As a comprehensive, multi-disciplinary research institute affiliated to SGCC, CEPRI has been involved from the start in many of the demonstration projects, and carried out whole range of researches on key smart grid technologies.

This presentation will provide an overview of smart grid development in China, and focus on CEPRI's research, testing and project application of smart grid technologies, especially in the fields of renewable energy integration, wind/solar power prediction, demand-side energy management, demand response, smart building, energy efficiency and energy storage.