

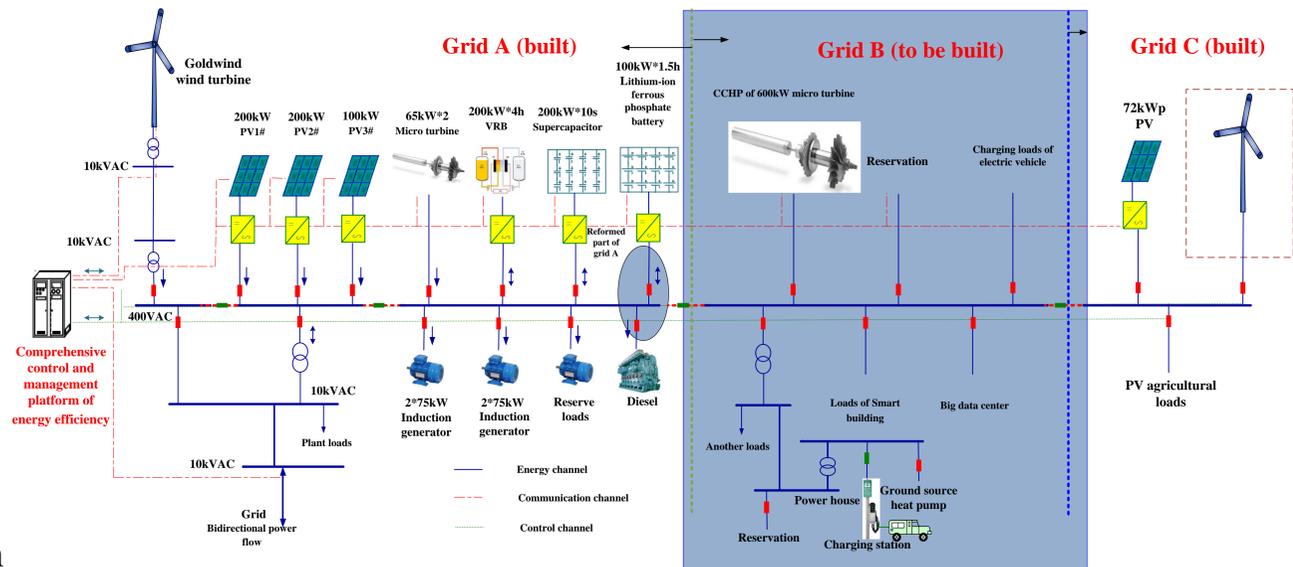
AC Microgrids

- Modeling
- Control
- Operation
- Electric energy storage
- Protection
- Load monitoring system
- Energy management system

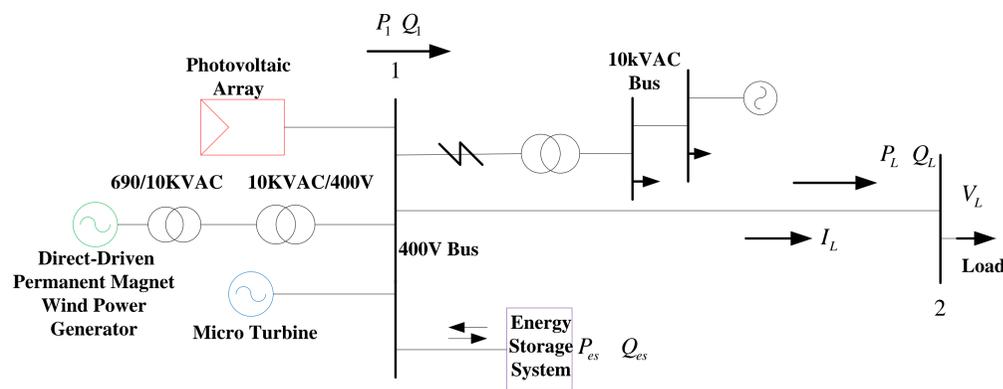
Goldwind Microgrid focus on the research of transient stable control and protection system.

The key technology of control system based on the electric energy storage system in fault condition and switching operations are studied.

Simulation results show that the electric energy storage system can effectively improve the transient power quality of the system.



The project topology of Goldwind Microgrid



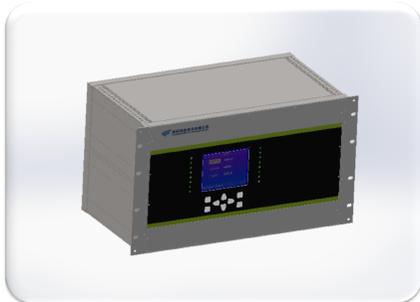
The single line diagram of Goldwind Microgrid experimental base

GOLDWIND MICROGRID PRODUCTS

MICROGRID TRANSIENT AND DYNAMIC STABLE CONTROL SYSTEM

-The mechanism of microgrid transient and dynamic control, converter and power quality monitoring are analyzed via this system

-Based on the current development trend of microgrid, it is the solution for the microgrid of preventing from transient and dynamic instability, poor power quality, and microgrid system seamless switching issues in various kinds of operating modes



SMART MICROGRID LOAD MONITORING AND CONTROL SYSTEM

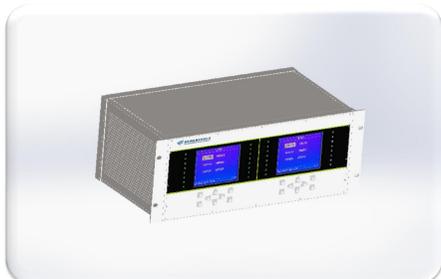
-distributed various kinds of loads monitoring and control system.

-provide the transducers, communication interface and secondary interface suitable for various loads, achieving the "plug and play"

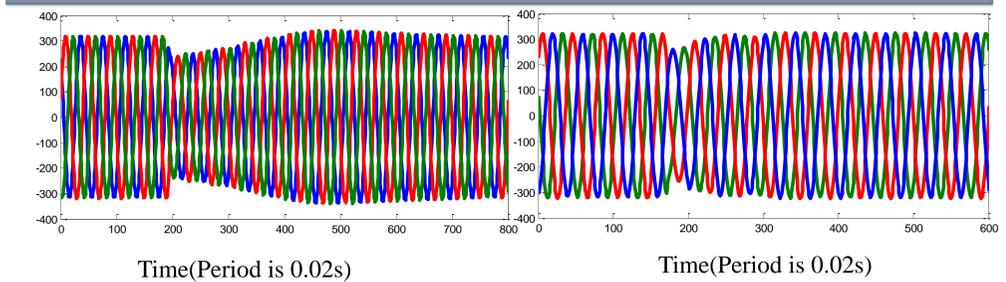
-consider to interface with the energy efficiency management big data platform and cloud platform

-classify the customer loads as various ones, accurately forecasted and optimally controlled by this system

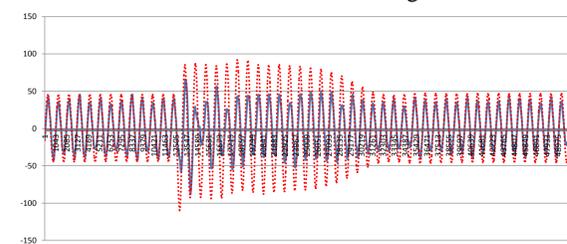
-achieve the optimal energy



Case 1: Improving system transient characteristic when motors start

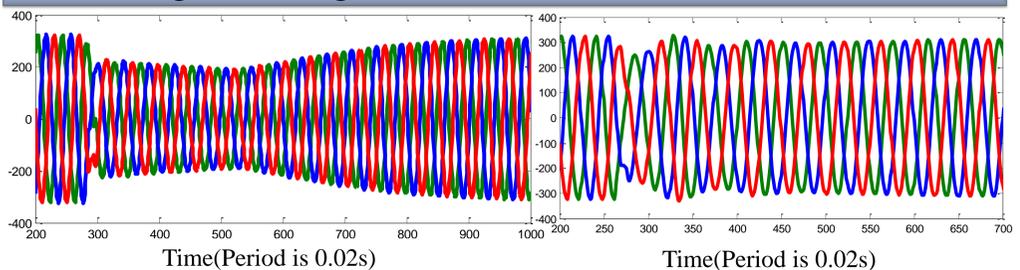


Voltage of 400V bus line **without** transient control Voltage of 400V bus line **with** transient control

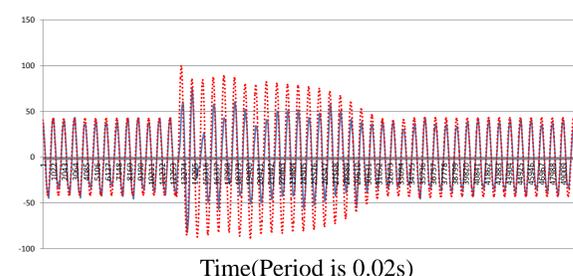


Contrast current curve of vanadium redox flow with and **without** transient control

Case 2: Improving system transient characteristic during mode transferring of microgrid



Voltage of 400V bus line **without** transient control Voltage of 400V bus line **with** transient control



Contrast curve of single phase current **with** and **without** transient control