

Fig. 1. My major researches.

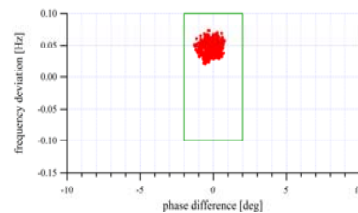


Fig. 2. Online monitoring.

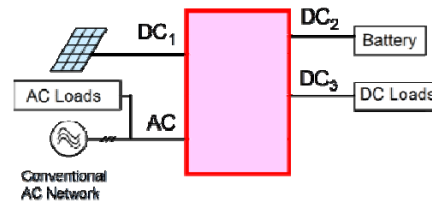


Fig. 3. Dc sources integration.

Content:

1. [Phasor measurements at demand sides and its applications](#)
Developing an online monitoring of power system by multiple phasor measurement units with monitoring voltages at the outlets on the wall.
2. [Management of distribution network with high penetration of photovoltaic generation units](#)
Investigating reasonable voltage regulation on high and low voltage distribution lines by cooperation of photovoltaic generation units and other apparatus.
3. [Advanced power conversion to integrate multiple dc energy sources](#)
Integrating multiple dc voltage terminals to connect solar cells, batteries and loads easily, based on multi-level converter topology with flying capacitors.
4. [Power modulations of distributed energy resources for frequency control](#)
Developing a voltage phasor modulation of grid-connected converters to regulate the system frequency as much as possible.

Keywords: smart grid, reliability, stability, quality, electric vehicles, renewable energy resources

E-mail: hojo @ ee.tokushima-u.ac.jp

Tel. +81-88-656-7452

Fax: +81-88-656-7452

