

**Preparation of Abstract for  
IERE TIS-Asia Meeting 2013**

**Energy Storage System with Large-sized Lithium-ion Battery**

Tsutomu Hashimoto

Mitsubishi Heavy Industries, LTD. Power Systems Headquarters, Yokohama City, Japan

**Keywords :** (several keywords to be listed)

Energy Storage

Lithium (Lithium-ion)

Battery

Renewable Energy

**Abstract**

To decrease amount of carbon dioxide emissions, we must more adopt renewable energy. Mitsubishi Heavy Industries, Ltd. (MHI) has been developing large-capacity lithium-ion batteries for many years. We started shipping 50Ah-class batteries produced in our verification plant in 2010. This battery has several superior performances such as high energy density, high power density and long life. We have developed 120 kW-class energy storage systems (ESS) for stabilizing a mega solar power with New Energy and Industrial Technology Development Organization (NEDO) and Kyushu Electric Power Co., Inc. (KEPCO). MHI also developed MW-class energy storage systems (ESS) using our lithium-ion batteries. The new product is can be used to reduce renewable power oscillations and make it more stable. In 2013, MHI will start verification test of MW-class ESS for transmission congestion relief in England and for stabilizing wind farm power in China.