NOVEMBER 19, 2015

TMEIC Receives Order for Large-Capacity Lithium-ion Storage Battery System (TMBCS)

Toshiba Mitsubishi-Electric Industrial Systems Corporation ("TMEIC") President and CEO Kiyotaka Machida recently received an order for its large-capacity lithium-ion storage battery system (TMBCS) from Sanyu Electric Corporation (Maibara City, Shiga Prefecture).

Sanyu Electric Corporation has been considering peak cut adjustments of power using a battery storage system as part of its measures to curb electricity costs and address global environmental issues in an effort to optimally manage energy. TMEIC's TMBCS was selected in recognition of its excellent reputation, high efficiency, and quality of the overall system and safety.

By utilization of a "Subsidy for the Project for Helping Introduce Stationary Lithium-ion Storage Batteries" in the supplementary budget for fiscal 2014, this system enables a significant reduction in the customer's cost burden at the time of installation. Together with certification from a third-party institution, the system sufficiently takes into account safety as well. The battery storage system has a 200kWh capacity and is scheduled for full-scale operation by the end of 2015.

While demand for lithium-ion storage batteries is anticipated to grow in the future as a promising energy device, TMEIC aims to increase total sales from 1MWh for its lithium-ion storage battery system to 100MWh by fiscal 2017 in seeking to expand its business to support our commitment to promote energy efficient technology to contribute to the global environment.

Characteristics of TMBCS

1. High power, large-capacity, and high efficiency:
   - Employs high-efficiency PV inverters that are among the highest level in the industry and realizes a power conversion efficiency of 98.5% (average for charge and discharge)
2. Safety and reliability:
   - Controls charge/discharge based on the real-time data of all of the battery cells
   - Realizes a long product life through discharge processes that takes into account the properties of batteries
3. Grid connection protection functions for isolated operation detection.
4. Peak cut and peak shift applications.

PCS

PCS: Power Conditioning System

Grid connection inverter to connect battery power to the grid. Features bidirectional power flow for charge/ discharge of the batteries.

FBCS

FBCS: Front Battery Control System

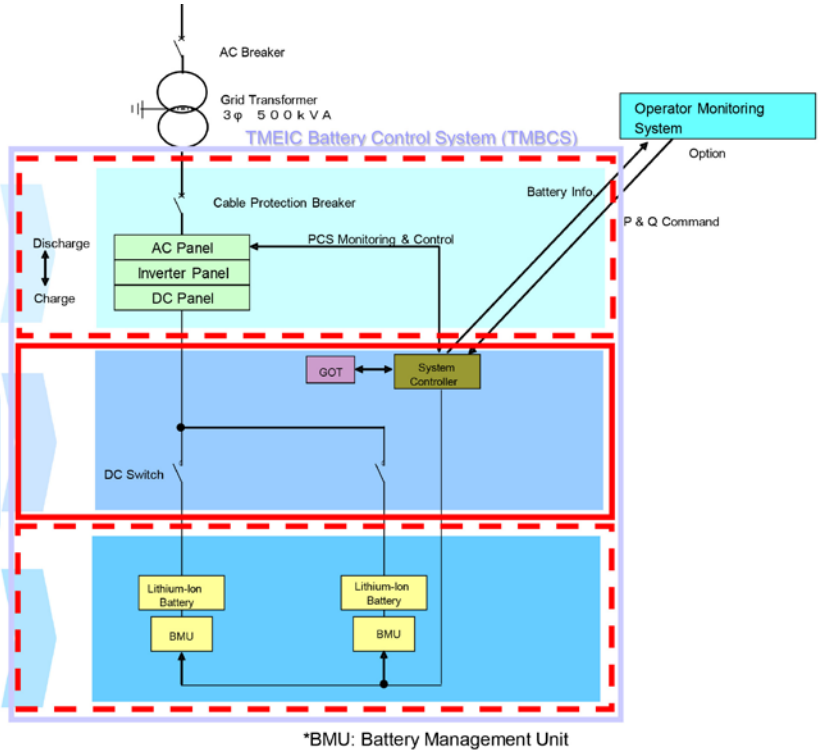
Monitoring and control system for inverter and battery. Gives charge/ discharge commands to the inverter. Optimizes battery control to achieve higher performance and longevity.

Battery

Installation with lithium-ion battery storage modules required.

Max. 200MWh

Indoor/Outdoor solution available.



Media inquiries:

For further information, please contact the Business Development & Corporate Branding Department at TMEIC.
Tokyo Square Garden, 1-1, Kyobashi 3-chome, Chuo-ku, Tokyo 104-0031, Japan
Tel: +81-3-3277-4645; Fax: +81-3-3277-4578

In order to respond to the needs of manufacturing sites that serve as a foundation for supporting society, TMEIC always sets its eyes on the future of industry, society and the environment as an industrial systems integrator striking a balance between the development of society and a beautiful global environment. TMEIC will contribute to manufacturing and environmental management through leading-edge technologies based on its core technologies of rotating machinery, power electronics and engineering.