

ABSTRACT

CHARGING FACILITY AND ENERGY MANAGEMENT METHOD FOR
CHARGING FACILITY

A charging facility collects DC power supplied from a plurality of power supply devices in a DC bus, and then uses the DC power to charge an on-board rechargeable battery for an electric vehicle. In an energy management method for a charging facility, each power supply device operates under independent automatic control according to a change in voltage in the DC bus. An upper-level control unit which collectively controls a plurality of power supply sources is not required, and a plurality of power supply devices can be combined with a simple configuration achieved by merely connecting respective output terminals to the DC bus. In addition, the entire charging facility can be operated flexibly. Thus, it is possible to achieve a simple configuration and to allow flexible operation while a plurality of power converters are combined with a system power supply.

FIG. 1