ECONOMIC STORAGE SYSTEMS WITH LITHIUM-ION BATTERIES

REQUIREMENTS OF THE “ENERGIEWENDE” FOR STORAGE SYSTEMS

Reliable and economic compensation of the fluctuations of renewable energy

KIT-SOLUTIONS FOR THE “ENERGIEWENDE”

- Highest transport and operational safety compliant with the KIT checklist
- Modular, cost-efficient battery design in units of 3 kWh – 3 MWh
- Target cost of 250 €/kWh by economies of scale until 2017
- Development of Li-ion cells particularly for stationary applications

Safe modular battery system based on high-quality Li-ion cells

- Cycle life of up to 7000 full cycles, suitable for 20 years in stationary use
- Development of control algorithms for an economic and grid-stabilizing system operation
- Independent self-learning forecasts for power generation and load
- Autonomous intelligent battery system control depending on forecasts for generation and energy demand

Compensation of solar power fluctuations by an intelligent battery system control

COST OPTIMIZATION

RENEWABLE ENERGY ON DEMAND

AUTONOMOUS SYSTEM CONTROL