CUSTOMER REFERENCE

BES/2018/001

On-grid energy storage system manages peak demands and integrates renewables

AEG Power Solutions has, jointly with Iberdrola Ingenieria y Construccion, a leading Spanish utility, and Tecnalia, a major innovation and R & D foundation, developed the prototype of a new battery energy storage station to help with peak load shaving in the electricity grid.
The project is called SAGER (Sistema de Almacenamiento de Energía a Gran Escala para la Red Eléctrica) and includes the design, installation, integration and validation of a new type of energy storage station through large batteries. The station is designed to be connected to the grid, to store energy (0.6 MWh) during low demand time, and to inject it to the grid at peak demand. It allows the utility to monitor the grid load closely and to integrate the locally-generated wind power efficiently, safely and at low cost. The system involved the construction of two pre-fabricated structures: one houses the battery, while the monitoring system, communications and power conversion are located in the other.
AEG Power Solutions' battery expertise was key in the project. Protect Line lead-acid batteries have been customized to fit the purpose and have been selected for their ruggedness, moderate cost and long life. The station features the latest components of AEG Power Solutions' range of advanced power systems (SC 600) designed for energy storage and renewable integration applications and wireless BMS (MoniStore). Their combination allows the 'Grid Friendly®' operation of a complete energy storage system.

CUSTOMER INFORMATION

IBERDROLA tecnalia Inspiring Business

Ingenieria y Construccion, Spain
Tecnalia

(TECHNICAL) SPECIFICATIONS

Location	Arquímedes Secondary substation, owned by Iberdrola, located in Júndiz, Vitoria, Spain
Application	Energy storage for Secondary substation
Architecture	Design, installation, integration and validation of a new type of energy storage station using large batteries
Products AEG PS	Wireless battery management system (MoniStore), storage converter (Protect SC), lead-acid batteries (Protect Line) and Local Monitoring Unit (LMU)