Convert SC Flex Chosen by swb to Equip the Battery Energy Storage System of a Major Automotive Equipment Production Site

- Convert SC Flex seamless transition from on-grid to off-grid and resynchronization to the grid first time operationally running in a battery energy storage installation
- Battery energy storage solution combining back-up with peak shaving capabilities

Zwanenburg, The Netherlands, February 27, 2020—AEG Power Solutions, a global provider of power supply systems and solutions for industrial, critical infrastructure environments and innovative power electronic applications, today announced that swb Erzeugung AG & Co. KG (swb) a Bremen-based German utility has chosen Convert SC Flex to equip the battery energy storage system that they provide to a major automotive equipment company.

The end customer produces premium plastic parts for the interior and exterior of a future-oriented automotive industry, using mostly injection moulded and electroplated processes. The company was looking for a solution for power backup for its highly sensitive chemical processes in one of its sites, and to minimize its energy costs by managing peak demands. A conventional UPS system would not have answered the full requirement, but a battery energy storage could. A proposal for a battery energy storage system was engineered by swb and AEG PS involved to provide the power electronics.

The solution comprises a Convert SC Flex V, a low voltage transformer and a PLC (programmable logic controller) based solution for grid fault detection and islanding as well as resynchronization feature once the supply is provided by the public grid again. SWB is combining these elements with a lithium-based battery incl. a battery management system and an overall control system to provide peak-shaving and back-up power supply for the industrial load.

The Convert SC Flex is a bi-directional power converter with IGBT technology. Converters are the core element of any battery energy storage system, as they charge and discharge batteries to store and provide power to meet the needs of plenty of applications. The latest option available features a seamless transition between on-grid and off-grid mode. This extends the battery energy storage system’s usage beyond its core functions to back-up in the event of a black-out.
system can also be provided as a turnkey solution including battery and medium voltage transformer.

“This project is our first commissioning for an application in which our Convert SC flex is using its on/off-grid seamless transition feature as well as its capacity to resynchronize to the grid”, explains Andreas Becker, Head of Grid & Storage inside AEG Power Solutions, “it’s one of the advanced features of our flagship energy storage converter that we are now proving on the field. Technically, it’s an achievement, and it is also opening great perspectives for the future as the demand for this type of application will definitely grow”.

About AEG Power Solutions
AEG Power Solutions ensures continuous power availability and the safe operation of critical applications thanks to with a wide portfolio of power supply systems and services: AC and DC UPS, battery chargers, rectifier systems, service and maintenance on 24/7 basis, as well as fully customized UPS systems to customer specifications.
AEG Power Solutions has developed a distinctive expertise and world-class engineering capacities that bridge both AC and DC power technologies and span conventional and renewable energy platforms. AEG Power Solutions has decades of experience with UPS and power electronics, and grid integration, and is leveraging its conversion expertise to engineer and deliver solutions for energy storage applications.

AEG Power Solutions is the sole subsidiary of the holding company 3W Power. For more information, visit www.aegps.com.