



Parker Hannifin Power Conversion System Selected by RWE for Solar PV Energy Storage System in Germany

LITCHFIELD, UK, August 14, 2015— Parker's Energy Grid Tie (EGT) Division, a division of Parker Hannifin the global leader in motion and control technologies, has secured an order from German utilities company RWE to help accommodate the rising amount of photovoltaic (PV) solar energy generated on its network. The solution, a Parker 890PX series grid-tie inverter paired with LG Chem Lithium-Ion batteries in a container-based energy storage system, will not only defer the otherwise necessary investment in distribution grid upgrades, but reduce solar PV generation curtailment and improve grid power quality in terms of voltage and frequency. Once installed, the solution will allow Westnetz, the distribution system operator of RWE in the relevant region, to defer previously planned distribution grid investment, reduce the probability to truncate solar PV generation, and ensure stable and consistent power for their customers. The project will be realized not only to test the system in critical grid situations, but also as a first showcase and pilot for a further development of the future market design and regulatory framework. The system is presently being manufactured with delivery and commissioning anticipated in September 2015.

Westnetz is the largest distribution system operator in Germany and faces huge challenges in rural grids due to the increasing levels of solar PV generation on its network, particularly in the peak summer months. Traditionally, stabilization efforts would require the operator to reinforce network infrastructure with new distribution lines and distribution transformers. Westnetz has found another, more satisfactory solution. The experienced Engineering team from Parker's EGT Division partnered with RWE from the concept stage to develop a grid level battery energy storage system which allows peak solar generation above the network limit to be stored during daylight hours and released later as required. The Parker system offers a 250kW system with a capacity of 1MWh energy storage, in a single 40' ft ISO shipping container. Combining the inverter, controls and battery in one container offers Westnetz the potential to relocate the system to a different area of the power grid in the future as required.

About Parker Hannifin

With annual sales exceeding \$13 billion in fiscal year 2014, Parker Hannifin is the world's leading diversified manufacturer of motion and control technologies and systems, providing precision-engineered solutions for a wide variety of mobile, industrial and aerospace markets. The company employs approximately 57,500 people in 50 countries around the world. For more information, visit the company's website at www.parker.com. To learn more about Parker's power conversion technology visit www.parker.com/gridtie

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