

## UniEnergy Technologies Strategic Partner to Deliver World's Largest Battery

MUKILTEO, Wash., May 31, 2016 -- UniEnergy Technologies (UET)'s strategic partner and affiliate Rongke Power will deploy the world's largest battery, rated at 800 Megawatt-hour (MWh). UET and Rongke Power have worked closely together since 2012 to develop large-scale Vanadium Flow Batteries (VFB's) to meet the challenges of grid modernization, renewable penetration, and resiliency.

The VFB battery will provide peak-shaving and enhance grid stabilization on the Dalian peninsula in northern China. Even more storage capacity is anticipated in the future to facilitate additional intermittent renewable energy deployment in the region. The China National Energy Administration approved the strategic application of Rongke's VFB into the utility grid due to its competitive price and lack of emissions, as well as demonstrated longevity, operational flexibility, and class-leading performance.

Flow batteries were originally invented by utilities in the United States to offer Megawatt (MW)-scale buffer capacity. After decades of development and deployments, only close collaboration between the US and China has yielded the scientific and engineering breakthroughs needed to meet stringent requirements for utility performance, reliability, and safety.

Collaboration between UET and Rongke Power will be memorialized in a US-China EcoPartnership signing ceremony attended by U.S. Secretary of State John Kerry in Beijing on June 7, 2016. UET will be represented by Rick Winter, UET's President and Chief Operating Officer.

The battery arrays approved by the China National Energy Administration will be made up of ten (10X) 20MW/80MWh VFB systems deployed on the Dalian peninsula, which during extreme weather events has experienced stress on the electricity grid. After full commissioning, the VFB battery will be able to peak-shave approximately 8% of Dalian's expected load in 2020. In addition, the large-scale battery will form an additional load center, which will enhance grid stabilization including securing the power supply and providing black-start capabilities in the event of emergency.

The VFB battery will be built at Rongke Power's new GigaFactory to be opened in the fall of 2016, with a phase 1 capacity of 300MW of VFB electrode stacks, a phase 2 capacity of 1GW, and a phase 3 capacity of 3GW. Both Rongke Power and UET's deployments of VFB systems will be supported by production from Rongke Power's GigaFactory.

UET President and COO Rick Winter stated: "This visionary project is a watershed moment for the energy storage industry, vaulting China's electric grid into the 21<sup>st</sup> century, supplying tremendous resilience and enabling seamless deep penetration of renewables. The massive scale of the project was made possible by years of reliable field performance of vanadium flow batteries, and allows us to rapidly optimize our supply chain across our product lines."

## **About UET**

UET manufactures its breakthrough MW-scale containerized advanced vanadium flow battery products in a 60,000 square foot manufacturing facility near Seattle, Washington. Prior to launching UET in 2012, its founders led the core technology development at Pacific Northwest National Laboratory in Washington State for 5 years with U.S. DOE Office of Electricity funding. The technology safely delivers the smallest bulk energy footprint in the industry with unlimited cycle life over 20 years. UET now has almost 20MW/80MWh of energy storage systems deployed, ordered, or awarded. Reference customers include the utility, microgrid, and commercial & industrial sectors. More information on UET is at www.uetechnologies.com.

## Rongke Power

Dalian Rongke Power Co., Ltd. is a vertically-integrated manufacturer of vanadium flow batteries. Jointly founded by Dalian Bolong Holding Group and Dalian Institute of Chemical Physics - Chinese Academy of Sciences in 2008, the company is located in the Dalian High-Tech Zone in Dalian, China. Rongke Power leads the way in producing key battery materials and providing turn-key energy storage solutions. With a strong intellectual property portfolio, the company has deployed almost 30 energy storage projects in market sectors such as renewable energy integration, microgrids, and isolated power systems. More information on Rongke Power is at <a href="https://www.rongkepower.com">www.rongkepower.com</a>.