



## **ZBB ENERGY CORPORATION ANNOUNCES ORDER FROM OREGON STATE UNIVERSITY AND NEW ZESS POWR SYSTEM**

MILWAUKEE, WI – July 1<sup>st</sup>, 2009 – ZBB ENERGY CORPORATION (**NYSE AMEX: ZBB**) announced today that it has received an order for a standard, modular ZESS 50 energy storage unit incorporating ZBB's new, proprietary, patent pending ZESS POWR PECC (power & energy control center), from Oregon State University (OSU). The ZESS power system will be used on campus at the Wallace Energy Systems and Renewables Facility. This fully integrated ZESS power system will be used in an on grid configuration with simulated wind and hydro electric sources. The ZESS POWR PECC system controls energy and power inputs from multiple power sources and then delivers energy out through an integrated inverter. The OSU project is supported by the Bonneville Power Authority and Central Lincoln Public Utilities District.

OSU Professor Alex Yokochi, stated "following our own exhaustive review of electrical energy storage systems capable of integration with an electrical grid, and given the performance characteristics we deemed essential (lifetimes in the order of many thousands of deep discharge cycles, rapid kinetics from charging to discharging state, simple scalability in both required power output and stored energy capacity, reasonable efficiency and minimal site requirements) we selected the Zinc Bromide flow cell technology as an excellent match. We expect to use the Zinc Bromide flow cell system to smooth power output excursions from the forecast level in time scales ranging from seconds to multiple hours, such as are frequently found associated with the output of a wind farm to lead to a more 'dispatchable' power source. Rather than building our own experimental flow cell battery, we decided to purchase a pre-integrated system from ZBB as a representative example of the technology available in the market today."

ZBB's Vice-President of Sales and Marketing, Mr. Kevin Dennis said "We are very pleased to be able to deploy a system solution to the OSU campus that their team will then be able to dynamically model the intermittent nature of wind energy. Wind has incredible potential to be a significant portion of the nation's energy supply, but to be a reliable resource, it ideally needs to be coupled with energy storage and to be flexible in how the power is managed and controlled out to the grid. The ZBB integrated solution provides ease and flexibility in configuring these types of systems to accommodate various sizes, numbers and types of generating sources while providing a single or multiple outputs for the customer's use; a true configurable controlled renewable energy power plant for either on grid or off grid systems."

The ZESS 50 regenerative fuel cell is a 50kWh advanced electrical energy storage device which has a high energy density and is constructed from environmentally friendly materials to provide long life and advanced performance when compared with traditional Batteries.

The ZESS POWR PECC is a hybrid power conversion system that is a modular, flexible and easily configurable unit which supports the integration of any combination of generating sources such as wind, Solar PV, hydro, electric and conventional generator sets, coupled with ZBB's, ZESS energy storage units to create a designed system configuration, that can be easily expanded for future needs. The ZESS POWR PECC is patent pending.

### **About ZBB Energy Corporation**

ZBB Energy Corporation (NYSE AMEX: [ZBB](#)) provides clean energy storage solutions based on proprietary zinc rechargeable energy storage technology that addresses requirements in multiple markets such as alternative energy applications, large electrical utilities and green residential and commercial architecture. A developer and



manufacturer of its modular, transportable and environmentally friendly Zinc Energy Storage Systems ("ZESS"), ZBB Energy was founded in 1998 and is headquartered in Wisconsin with offices also located in Perth, Western Australia. ZESS POWR is a ZBB registered trade mark.

**Safe Harbor**

Except for the historical information contained herein, the matters set forth in this press release, including the description of the company and its product offering, are forward-looking statements within the "safe harbor" provision of the Private Securities Litigation Reform Act of 1995. These forward-looking statements are subject to risk and uncertainties that may cause actual results to differ materially, including historical volatility and low trading volume of our stock, the risk and uncertainties inherent in the early stages of growth companies, the company's need to raise substantial additional capital to proceed with its business, risks associated with competitors, and other risks detailed from time to time in the company's most recent filings with the Securities and Exchange Commission. These forward-looking statements speak only as of the date hereof. The company disclaims any intent or obligation to update these forward-looking statements.

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