



# US&R Power Grid Partners

*Clean Technology for the Nations Power Grid*

**VIA USPS and email to [docket@energy.state.ca.us](mailto:docket@energy.state.ca.us)**

Thursday, June 12, 2008

California Energy Commission  
Dockets Office, MS-4  
1516-9t Street  
Sacramento, CA 95814-5512

<b>DOCKET</b>	
08-DR-1	
DATE	JUN 12 2008
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RE: Docket Number 08-DR-01, Load Management Standards: Rates, Incentives and Markets.

We appreciate the opportunity to provide written comment in this proceeding, Docket Number 08-DR-01, Load Management Standards: Rates, Incentives and Markets. We would like to take this opportunity to point out the value of bulk energy storage for load management and the effect that rates and incentives can have on deployment.

US&R Power Grid Partners is engaged in developing projects for bulk energy storage utilizing the advanced energy storage of the VRB Power Systems Energy Storage System (ESS). The VRB ESS is a clean technology flow battery, using a vanadium based electrolyte with no emissions or hazardous metals like lead or cadmium. The system can be sized to multi-megawatt capacity with many hours of energy storage and can be fully charged and discharged an unlimited number of times with a long life cycle exceeding 15 years.

One application being developed for the ESS is behind the meter at large energy users. This allows the ESS to provide important services to multiple customers, making for a compelling business case. For example, the energy user host receives the benefit of an uninterruptible source of power and emergency back-up. The ESS is able to provide ancillary services to the grid operator and demand response to the utility. The financial viability of the ESS is therefore dependent on the value received for these services.

As brought out in the meeting on June 10th, large industrials are limited in their ability to reduce load, even when offered compelling price signals. However, if a large ESS is installed behind the meter, the industrial can be much more flexible. A five megawatt ESS would provide the industrial customer the ability to drop five megawatts of load without interruption to their productivity.

The Energy Commission has conducted extensive research on advanced energy storage technologies like the VRB ESS and other commercially available systems and recognizes the many benefits such installations will bring to the grid. The scope of the current proceeding includes considering, "End use storage systems which store energy during off-peak periods for use during peak periods." We encourage the commission to consider rates and incentives like real time pricing, at least on a voluntary basis, as an option for large industrials. Such incentives will encourage progressive industrials to adopt efficiency and power shifting opportunities, like energy storage, and lead the way for other customers to follow.

Sincerely,

Charles R. Toca  
Manager

*Ancillary Services for the Regional Grid Operator through Advanced Energy Storage*

PO BOX 54346 Irvine, CA 92619-4346  
TEL. (949) 474-0511 FAX (949) 474-0516