



July 24, 2017

Board of Governors
California ISO
P.O. Box 639014
Folsom, CA 95630

Dear Governors:

The rapidly growing energy storage industry in California is eager to help address the ISO's challenges as we transform our electrical system to the clean, reliable and efficient grid of the future. The extremes of the "duck curve", occurring years ahead of predictions, impel everyone to bring to bear all feasible resources. To that end, this letter asks that the Board of Governors confirm its support for creating market-based signals to encourage the charging of energy storage, including stationary and electric vehicle systems, during excess supply times. Such signals would enable storage resources to act as a sink to absorb excess renewable generation, storing that renewable generation until it is really needed, further facilitating the state's ambitious clean energy goals.

Specifically, we urge the Board to address this key barrier in the Proxy Demand Resource (PDR) mechanism: the inability to participate in "load consumption". Behind-the-meter storage has been actively participating as a load decreasing resource with PDR for several years. While small in MW terms this participation has proven reliable in extreme grid conditions such as the heat wave California experienced in June, where one storage company dispatched seven different fleets of distributed storage across the state in the same day. Behind the meter storage resources have been called by the ISO more than 150 times in 2017, successfully responding to spikes in real time energy prices.

Currently, BTM storage resources charge their systems without regard to real time energy prices or system conditions because PDR does not allow compensation for increasing load, aka "load consumption", at times when this would be beneficial. These resources need to charge at some point during the day, but without an economic signal, cannot optimize their charging to best benefit the grid and the state's clean energy goals.

We understand that there are concerns regarding the interaction between a load consumption product and customers' retail bills, to the degree that load consumption will necessarily result in billing impacts. However, we do not believe this should preclude the CAISO from moving forward.

The storage industry is ready to respond to clear economic signals and our firms are well-positioned to manage potential tensions between retail impacts and wholesale market opportunities.¹ We are confident that storage resources would look to change their charging behavior soon after a load consumption product became available, without requiring any changes to retail tariffs.

¹ See the featured article in the July 24th edition of Utility Dive, "***Hiding in Plain Sight: Aggregated DERs in Wholesale Power Markets***," <http://www.utilitydive.com/news/hiding-in-plain-sight-aggregated-ders-in-wholesale-power-markets/446292/>.



Therefore, we respectfully request that the Board of Governors instruct ISO staff to develop a viable load consumption proposal for consideration by the Board no later than January of 2018. The storage industry is poised to help achieve California's ambitious goals for a renewable, reliable grid and thus strongly encourages the Board to create the market conditions that allow the state to utilize its energy storage assets to their fullest potential.

Signed,

/s/ Polly Shaw
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