



IID

A century of service.

www.iid.com

Since 1911

December 20, 2016

John Mathias
California Energy Commission
1516 Ninth Street MS-20
Sacramento, CA 95814

**Re: Assembly Bill (AB) 2514 – Imperial Irrigation District
Energy Storage Procurement Compliance Report**

Dear Mr. Mathias:

The California Public Utilities Code § 9506 requires local publicly owned electric utilities to report to the Energy Commission demonstrating that they have complied with the energy storage system procurement targets and policies adopted by the governing board pursuant to subdivision (b) of Section 2836 established by AB 2514. Imperial Irrigation District submits this report in compliance with this legislative requirement.

I. Imperial Irrigation District (IID)

IID's Energy Department provides electric power to more than 145,000 customers in the Imperial Valley and parts of Riverside and San Diego counties. As the third largest public power provider in California, IID controls more than 1,000 megawatts of energy derived from a diverse resource portfolio that includes its own generation, as well as long- and short-term power purchases.

As a consumer-owned utility, IID's Energy Department works to efficiently and effectively meet customers' demands at the best possible rates, tying the IID area's low-cost of living directly with low-cost utilities. This is accomplished by producing power supply locally, using efficient, low-cost hydroelectric facilities, steam-generation facilities, as well as several natural-gas turbines. Environmentally friendly operations are emphasized by employing as many renewable resources as available to effectively meet the state's Renewable Portfolio Standards (RPS). IID's diverse resource portfolio provides customers with some of the lowest cost rates in southern California and this standard of quality service will be a continued focal point of IID's future activities.

II. Background

On September 29, 2010, the California Legislature enacted Assembly Bill 2514 (Skinner). This legislation, considered the foremost statute relating to utility procurement of energy storage systems, asserted a number of findings regarding the value of energy storage and barriers that hinder timely implementation. The legislation directed the California Public Utilities Commission and governing boards of local publicly owned electric utilities to initiate proceedings to determine

targets for procurement of viable and cost-effective deployment of energy storage systems prior to March 1, 2012.

As required by California Public Utilities Code § 2835-2839, the IID Board of Directors passed and adopted Resolution No. 7-2012 on February 14, 2012, that initiated a proceeding to determine energy storage procurement targets, if any. Ultimately, the board passed Resolution No. 32-2014 on September 23, 2014, which adopted a target of "0" MW for the first compliance period. This determination was made in large part due to the fact that IID had engaged in significant planning of-high-priority physical-improvements-to help-insure-reliability pertaining-to-its-operation-of-the bulk electric system, including one of the largest battery energy storage projects in the western United States, the implication being that it would not be cost-effective to adopt an additional target at that time.

III. Battery Energy Storage Project

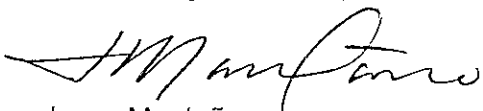
In the fall of 2013, IID began the planning and design process of a state-of-the-art, utility grade battery storage system in El Centro, California. In 2014, the district completed engineering studies for the 30-megawatt, 20-megawatt-hour battery energy storage system. The system was designed to provide operational support across IID's balancing authority through rapid response support capabilities that mitigate stability and power quality issues when energy from renewable sources are integrated into the local grid.

Construction of the facility began in the third quarter of 2015 and by the end of October 2016, electric industry leaders and local and state officials gathered to mark the effective start date of the system. The energy storage system will use environmentally-safe lithium-ion batteries manufactured by Samsung. The project is configured using General Electric's Mark VI plant controls, GE Brilliance MW inverters, GE Prolec transformers, medium voltage switchgear and is housed in a GE purpose-build enclosure.

IV. Next Steps

In-addition-to-the-reliability, environmental and economic benefits derived from project, IID now has the capability to provide ancillary services from the project and is exploring potential opportunities to provide these services to non-residential customers. Further, IID intends to analyze the impact of the storage project to fully assess the costs and benefits to determine whether additional investments in energy storage are warranted. These analyses will be incorporated into the re-evaluation of appropriate targets for procurement of viable and cost-effective energy storage. Findings from this effort will be presented to the IID Board of Directors for action prior to September 23, 2017.

Respectfully submitted,



Jesse Montañó
Engineering Consultant