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October 07, 2014

County of San Diego  
Planning and Development Services  
c/o Mark Wardlaw, Director  
5510 Overland Avenue  
San Diego, CA 92123

### **Energy Storage for Rugged Solar Major Use Permit**

Dear Director Wardlaw:

Soitec Solar Development LLC (Soitec) provides the following request on behalf of itself and Rugged Solar LLC to amend the Rugged Solar Farm Major Use Permit (MUP) Application, MUP 3300-12-007, and project description to include an optional 160 megawatt hour energy storage component. This optional component would consist of 40 megawatts of stored electricity with a discharge rate of approximately four hours (160 MW hours). Energy storage has become an important change in the way California produces and provides renewable energy to the grid. Equipping the Rugged solar farm project with energy storage provides greater benefit to the public by making it possible to store renewable energy generated during daylight hours, so that it can be supplied to electricity users later in the day when demand for electricity is higher, and to provide backup power to continue supplying renewable energy even if solar generation is interrupted by cloud cover.

On October 17, 2013, the California Public Utilities Commission (CPUC) adopted an order establishing a first-in-the-nation target for the state's three Independently Owned Utilities (IOUs), including Southern California Edison (SCE), Pacific Gas and Electric (PG&E), and San Diego Gas and Electric (SDG&E), to procure 1.3 gigawatts (GW) of energy storage by 2020. Order Instituting Rulemaking Pursuant to Assembly Bill 2514 to Consider the Adoption of Procurement Targets for Viable and Cost-Effective Energy Storage Systems, Rulemaking 10-12-007, at 2 (CPUC 2013), available at <http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M078/K912/78912194.PDF>.

The order seeks to use energy storage as one of many mechanisms for optimizing the electricity transmission grid, integrating renewable energy, and reducing greenhouse gas emissions.

Expanding the use of energy storage systems can assist electrical corporations, electric service providers, community choice aggregators, and local publicly owned electric utilities to integrate

increased amounts of renewable energy resources into the electrical transmission and distribution grid in a manner that minimizes emissions of greenhouse gases. Additional energy storage systems can optimize the use of the significant additional amounts of variable, intermittent, and off peak electrical generation from wind and solar energy that will be entering the California power mix on an accelerated basis from now through 2020.

Expanded use of energy storage systems can reduce costs to ratepayers by avoiding or deferring the need for new fossil fuel-powered peaking power plants and avoiding or deferring distribution and transmission system upgrades and expansion of the grid. Expanded use of energy storage systems will reduce the use of electricity generated from fossil fuels to meet peak load requirements on days with high electricity demand and can avoid or reduce the use of electricity generated by high carbon-emitting electrical generating facilities during those high electricity demand periods. This will have substantial co-benefits from reduced emissions of criteria pollutants.

This request is accompanied by an environmental analysis that demonstrates that amending the Rugged MUP to accommodate an optional 160 megawatt hour energy storage component will have no new significant environmental effects as compared to the project originally evaluated in the Soitec Solar Draft Programmatic Environmental Impact Report (issued for public review January 3, 2014). Aesthetic impacts would be minimal because energy storage containers would replace CPV trackers, and would be located internally within the Rugged solar farm and be surrounded by project components exhibiting a larger vertical scale and form. The energy storage system would also not result in any additional ground disturbance and as such, impacts to sensitive habitat and natural communities would be the same as discussed in the DPEIR.

If you have any questions about this request, please feel free to contact Patrick Brown at [Patrick.Brown@soitec.com](mailto:Patrick.Brown@soitec.com) or by phone 619-733-2649.

Best Regards,

A handwritten signature in black ink, appearing to read "Clark Crawford". The signature is fluid and cursive, with a long, sweeping tail on the final letter.

Clark Crawford,  
VP Sales and Business Development