



## Scripps Ranch Microgrid

### Scripps Ranch Community Recreation Center - San Diego, CA

The Scripps Ranch community was searching for a way to ensure sustainable back-up power for the community and surrounding area in case of power outages caused by brown-outs, wildfires, or grid failure. After carefully selecting the most practical location, Princeton Power provided an Optimized Energy Management solution, turning this Recreation Center into an "Emergency Command Center."

The Energy Storage System utilizes existing renewable resources at the facility, such as roof-mounted solar array, to allow a seamless transition of power from the electric grid to the local microgrid in the case of power outages. Princeton Power Systems is proud to have manufactured and provided Southern California's first Energy Management system of this size and with these capabilities.

"The solar-battery project [is] the first in Southern California, and one of the nation's first to integrate solar with an innovative battery back-up system of this size."

- Mayor Sanders  
City of San Diego

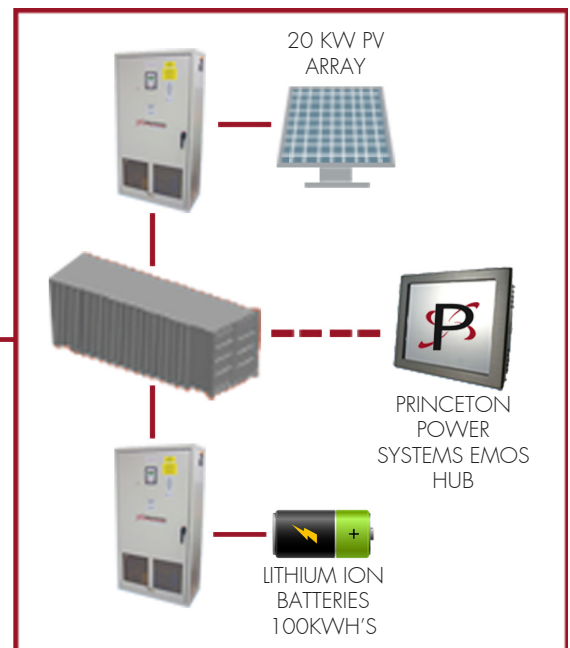


#### ENERGY MANAGEMENT SOLUTION

The Scripps Ranch Community was looking for a way to prevent black-outs caused by re-occurring wildfires in the San Diego area and additional strain to the grid. Princeton Power Systems provided an Energy Source Solution (ESS), for emergency preparedness and access to electricity for residents, comprised of Princeton Power Systems GTIB-100 inverters, a solar array, advanced lithium-ion batteries, and a Princeton Power Systems Site Controller.

First Step: The Recreation Center was chosen to become the Emergency Command Center. However, given the fact that it is a recreation center and community park, specific positioning to the ESS was tricky, as not to be unpleasing to the eye, or a safety hazard to the public. As the purpose of the system is for emergency preparedness, the ability to go off-grid was also a necessary feature.

Solution: The addition of the remote grid contractor allowed the building to disconnect from the grid as well as have it run as an islanded microgrid. In the case of an outage, when the power does return, the contractor is closed and the building returns to normal operation.



## NEXT STEP

As this was the first system of this size and scale in Southern California, it also serves as a learning platform to develop similar technologies throughout the nation. Following the Ribbon Cutting Ceremony in November 2012, Princeton Power Systems and the Site Owner began working on plans to incorporate demand response scheduling and grid support services.

Both teams are working together to develop a time-based solution to better enhance peak shaving capabilities using the energy storage system.



## Highlights

**System Size:** 30 kW Solar and 100kW/100kWh's

**Components:** (1) 20 ft. ISO Container, (2) Princeton Power Systems Grid-tied 100kW Inverters, Lithium-Ion batteries, 30kW PV array, and Princeton Power Systems Site Controller

**Installation Date:** September 2012

**Location:** San Diego, CA

**Back-up Capacity Supplied:** 135kW

## ABOUT PRINCETON POWER SYSTEMS

Princeton Power Systems, based in New Jersey and founded in 2001, designs and manufactures state-of-the-art technology solutions for energy management, microgrid operations and electric vehicle charging. The company is a global leader working with customers and partners across North America, Europe, Africa and the Caribbean. It manufactures UL and CE-certified power electronics that are used in advanced battery operations and alternative energy, with built-in smart functions for ancillary services. The company solves power issues to allow continued growth of distributed renewable energy by providing energy storage solutions that are proven to work, even in harsh environments. Princeton Power Systems builds integrated systems and designs, commissions and operates microgrids for leading organizations, including Fortune 500 automakers and industrials, and non-profit organizations. The company proudly manufactures its products in the USA. More information about Princeton Power Systems is available at [www.princetonpower.com](http://www.princetonpower.com).