Portable Charging Station Program

OVERVIEW: The County of San Diego’s Portable Charging Station Program can provide power to medical assistance devices anywhere in the region during prolonged electrical outages.

CHALLENGE: Residents who depend on battery-powered medical devices faced great challenges during the region’s 2011 power outage. This emergency highlighted an unmet need: adequate regional power resources for vulnerable community members in the event of an extended outage.

INNOVATIVE SOLUTION: To address this issue, the Office of Emergency Services (OES) investigated the logistical resources needed to create a Portable Charging Station Program. OES spent more than a year conducting field and site assessments in conjunction with the County’s Department of General Services (DGS) and Health and Human Services Agency (HHSA), as well as San Diego Gas & Electric and the American Red Cross of San Diego & Imperial Counties. OES met with representatives of school districts to evaluate potential emergency shelter sites, and worked with HHSA staff to identify County facilities to accommodate charging station sites. OES also worked with DGS to locate facilities throughout the region to house the generators for ease of deployment and regular maintenance.

Ultimately, OES pre-staged 14 portable generators at County maintenance facilities around the region. The generators are available for deployment wherever needed in the event of a prolonged power outage. In addition, 11 supply trailers support generator deployment, and are positioned at five area high schools designated as Red Cross shelter sites, four County HHSA facilities selected as stand-alone charging stations, and the County Operations Center.

Pre-Staged Locations Include:

- Shelter/charging stations: Five area high schools are pre-identified by the American Red Cross to serve as shelter/charging stations.
- Stand-alone charging stations: Four County HHSA sites are pre-identified to serve as stand-alone charging stations.
- Charging station supply trailers: These trailers are stored at 11 locations to support rapid operational deployment upon the arrival of a generator.

- Generators: 50kva generators are pre-positioned at County facilities for deployment within 1-2 hours and full operational set-up within 2-4 hours. Another three 25kva portable generators are stored at County facilities around the region.

ORIGINALITY: Because of the Portable Charging Station Program, those who depend on medical assistive equipment in San Diego County can better access power during a prolonged outage. The effort is already being recognized by Emergency Management professionals around the nation.

COST EFFECTIVENESS: The Regional Charging Station Project cost $645,175. To cover this, $500,000 in County funds purchased 11 generators, 11 charging station trailers and charging station supplies; a $71,200 donation from the San Diego Fire Foundation paid for three additional portable generators; and $73,975 in Urban Area Security Initiative grant funds were used to purchase spider boxes to transfer power from a generator to a central charging site to plug in medical assistance devices.

RESULTS: The County of San Diego has implemented a robust program that enhances the regional availability of power resources in the event of a prolonged outage. These resources, while pre-staged throughout the region, are portable and can go wherever power is most needed. With this program in place, the region is better prepared to help those who rely on power-dependent medical assistive equipment should a power-related disaster strike.

PROJECT CONTACT:

Michael Davis
Sr. Emergency Services Coordinator
County of San Diego Office of Emergency Services
5580 Overland Avenue, Suite 100
San Diego, CA 92123
858-715-2339
Michael.Davis@sdcounty.ca.gov