## SUNPOWER

# Las Vegas Valley Water District Generates Clean Energy with 6 SunPower Solar Electric Systems



The Las Vegas Valley Water District (LVVVD) provides water to one million people in Southern Nevada and leads water conservation initiatives in the community. In 2006, LVVVD partnered with the Nevada Power Company and SunPower Corporation to install a 3.1 megawatt solar project across 6 facilities. Utilizing SunPower's solar electric technology, the agency is now generating clean power to help distribute the region's scarcest resource - water.

#### **BENEFITS**

- Supplements on-site power operations
- Reduces strain on Las Vegas' utilities grid
- Helps conserve water and energy in the desert region
- Will reduce CO<sub>2</sub> emissions by 38,000 lbs. over 30 years, which is equivalent to planting 10,600 acres of trees, or removing 7,500 cars from our roads

### **PROJECT OVERVIEW**

Total Size: 3,100 kW (3.1 MW)
Products: SunPower® Tracker

SunPower® Fixed-Tilt Carport

#### **Location 1: Ronzone Reservoir**

Completed: March 2006 System Size: 821 kW

Energy Production (kWh/year): 1,595,715

Number of Solar Panels: 4,005

#### **Location 2: Apache Reservoir**

Completed: July 2006 System Size: 353 kW

Energy Production (kWh/year): 681,309

Number of Solar Panels: 1,695

#### **Location 3: Grand Canyon**

Completed: September 2006 System Size: 330 kW

Energy Production (kWh/year): 639,106

Number of Solar Panels: 1,590

#### **Location 4: Spring Mountain Reservoir**

Completed: November 2006 System Size: 537 kW

Energy Production (kWh/year): 1,037,039

Number of Solar Panels: 2,585

#### **Location 5: Luce Reservoir**

Completed: December 2006 System Size: 555 kW

Energy Production (kWh/year): 1,037,242

Number of Solar Panels: 2,670

#### **Location 6: Springs Preserve**

Completed: June 2007 System Size: 409 kW

Energy Production (kWh/year): 765,793

Number of Solar Panels: 2,200

"The District's mission is to provide reliable, quality water and to ensure the sustainability of our desert community. This project is part of our continuing commitment to serve our customers and protect our environment."

- Pat Mulroy, General Manager, Las Vegas Valley Water District

#### THE OBVIOUS CHOICE

LVVVD realized that only a solar-powered solution could efficiently utilize the abundant sunlight in the desert and at the same time, avoid using water in the power-generation process. After evaluating several offerings from other solar companies, LVVVD chose SunPower for its top-performing solar technology, proven track record of successfully-managed projects, and timely delivery and completion.



#### MAXIMIZING SOLAR INVESTMENT

Between March and April 2007, SunPower installed five solar power grids for LVVWD (the sixth was completed in June 2007). In addition to easy installation, SunPower® Tracker technology offers robust, reliable, and long-lasting resistance to corrosion and high winds while delivering up to 25% more energy than fixed-tilt systems. SunPower Tracker's unique single-axis design also encounters fewer space restrictions than dual-axis systems.

#### THE OPTIMUM RESOURCE MIX

As solar technology does not require water to produce electricity, LVVWD has been able to demonstrate its commitment to conserving water in the desert region. Today LVVVD's systems generate a significant amount of the company's electricity requirements, delivering powerful cost savings and reducing the strain on the community's power grid. Over the next 30 years, LVVVD's reduction in carbon dioxide emissions will be 38,000 lbs., which is equivalent to planting 10,600 acres of trees, or removing 7,500 cars from our roads

SunPower Corporation 1-866-737-6527

www.sunpowercorp.com