

Nellis Air Force Base Builds Largest Solar Photovoltaic Power Plant in North America with SunPower



More than 12,000 people live and work at Nellis Air Force Base, home to the largest advanced air combat training mission in the world. Thanks to a strong public/private partnership effort, Nellis now also houses North America's largest solar photovoltaic power plant. Demonstrating its commitment to energy conservation and energy security, in April 2007 Nellis partnered with SunPower to install a 14-megawatt plant covering 140 acres. The solar system meets 25% of the base's total electricity needs, and will reduce carbon emissions by 24,000 tons over 30 years—equivalent to planting more than 260,000 acres of trees. In addition to its environmental benefits, the system also offers Nellis financial benefits through a SunPower Access™ power purchase agreement, which includes project financing from MMA Renewable Ventures, LLC, and renewable energy credits from Nevada Power Company. In effect, Nellis only pays for the solar electricity the base consumes.

BENEFITS

- Estimated annual energy savings of \$1 million
- Meets 25% of the base's electricity requirements, serving over 12,000 people
- Significantly reduces environmental footprint while providing energy security
- Hedges against rising electricity prices
- Supports Nevada's Renewable Portfolio Standard
- Will reduce carbon emissions by 24,000 tons over 30 years, equivalent to removing over 185,000 cars from the roads or planting 260,000 acres of trees

PROJECT OVERVIEW

- Location:** Nevada
- Completed:** December 2007
- Installation Type:** Single-Axis Tracker
- System Size:** 14.2 megawatts
- Estimated Air Force Savings:** \$1 million annually
- Covered Area:** 140 acres
- Number of Panels:** 70,000
- Products and Services:**
 - SunPower® T20 Tracker
 - SunPower® Tracker
- Project Partners:**
 - Energy Purchaser & Site Host:* Nellis Air Force Base
 - Utility:* Nevada Power
 - Solar System Owner & Operator:* MMA Renewable Ventures, LLC
 - Solar System Designer & Integrator:* SunPower Corporation
 - Solar Panel Manufacturers:* SunPower Corporation, SANYO, SunTech Power Holdings, Evergreen Solar, Inc.
 - Inverter Manufacturer:* Xantrex Technology Inc.
 - Data Acquisition System:* Energy Recommerce, Inc.

"We're pleased that our solar plant enables the Air Force to demonstrate its leadership in reducing dependence on traditional forms of electric power."

—Major Don Ohlemacher
Operations Flight Chief and acting
Commander of the 99th Civil
Engineer Squadron
Nellis Air Force Base, Nevada

THE SUNPOWER ADVANTAGE

For several years, Nellis considered solar options from several companies. However, plans fell through due to high installation and solar power costs. Air Force regulations did not permit the base to invest in a power project that cost more than the electricity purchased from the local utility company. Finally, in an open bidding process in early 2007, SunPower emerged as the partner of choice by bringing its utility-scale European experience to the U.S., and by offering Nellis a premier system bid at a price below the local utility's rates.



A WISE FINANCIAL DECISION

The SunPower solar project did not require any out-of-pocket capital investment by the U.S. Air Force. Under the terms of the SunPower Access PPA, MMA Renewable Ventures, LLC financed and owns the system, selling power to Nellis at a guaranteed rate for the next 20 years. SunPower also helped Nellis broker Renewable Energy Credits (RECs) with Nevada Power, further reducing the project's cost.

MEASURES OF EXCELLENCE

The employees at Nellis take pride in the fact that the Air Force Base is home to the single largest solar power system in the U.S. Over the next 30 years, this solar system will help Nellis reduce carbon emissions by 24,000 tons, which is equivalent to planting 260,000 acres of trees, or removing 185,000 cars from the roads.

SunPower Corporation

1-866-737-6527

sunpowercorp.com