

Agua Caliente Solar Power Project

Loan Guarantee - \$967 million; closed August 2011

Jobs – Currently 646 workers on site, down from over 1,300 at peak construction. Listen to project workers describe the importance of finding work on the site by clicking [here](#), or read a past article about the need for workers to support the project in Yuma County, Arizona by clicking [here](#).

Expected Generation Capacity – 290 MW

Expected Clean Air Benefits – The project is expected to avoid over 370,000 metric tons of carbon dioxide annually, equivalent to the carbon dioxide emissions of over 70,000 vehicles.

Expected Homes Powered – The project is expected to generate enough clean electricity to power over 56,000 homes annually.

Power Purchase Agreements – PG&E will purchase the project's power and deliver it to customers in California.

Project Owners – NRG Solar, LLC and MidAmerican Energy Holdings Company

Awards – 2011 Solar Project of the Year by *Renewable Energy World's* Excellence in Renewable Energy Award Program; 2011 Photovoltaic Achievement of the Year by Solar Power Generation USA

Construction Update – The project is more than 70 percent complete. Over 3.3 million solar panels spanning in excess of 2,300 acres have already been installed. The project has started delivering more than 100 MW of clean, renewable energy to the power grid, making it the [largest](#) PV solar plant in North America. Read a past article on the massive initial construction phase by clicking [here](#).

Innovation – The project uses innovative inverters that incorporate fault-ride through (FRT) technology with dynamic voltage regulation (DVR). Typical inverters will trip off and shut down the plant when voltages on the grid vary outside of a small window. FRT inverters with DVR are able to withstand larger voltage variations and thus will allow the project to continue operating through expected voltage variations. The use of this technology will improve the reliability of

the grid and the power system, and will enable increased deployment of large scale intermittent renewable power generation projects, such as Agua Caliente.

Supply Chain – First Solar spent more than \$1 billion with U.S. suppliers across 38 states last year. Major domestic suppliers of steel fabrications and electrical equipment for the three DOE loan guaranteed-supported projects, including Desert Sunlight, include Phoenix-based Omco Solar, a division of Ohio-based Omco, Connecticut-based Highway Safety Corp., Texas-based Powerohm, and SMA Americas of Colorado. In addition, the Agua Caliente project uses approximately 39,000 tons of American steel.