

Solana Generating Station Project

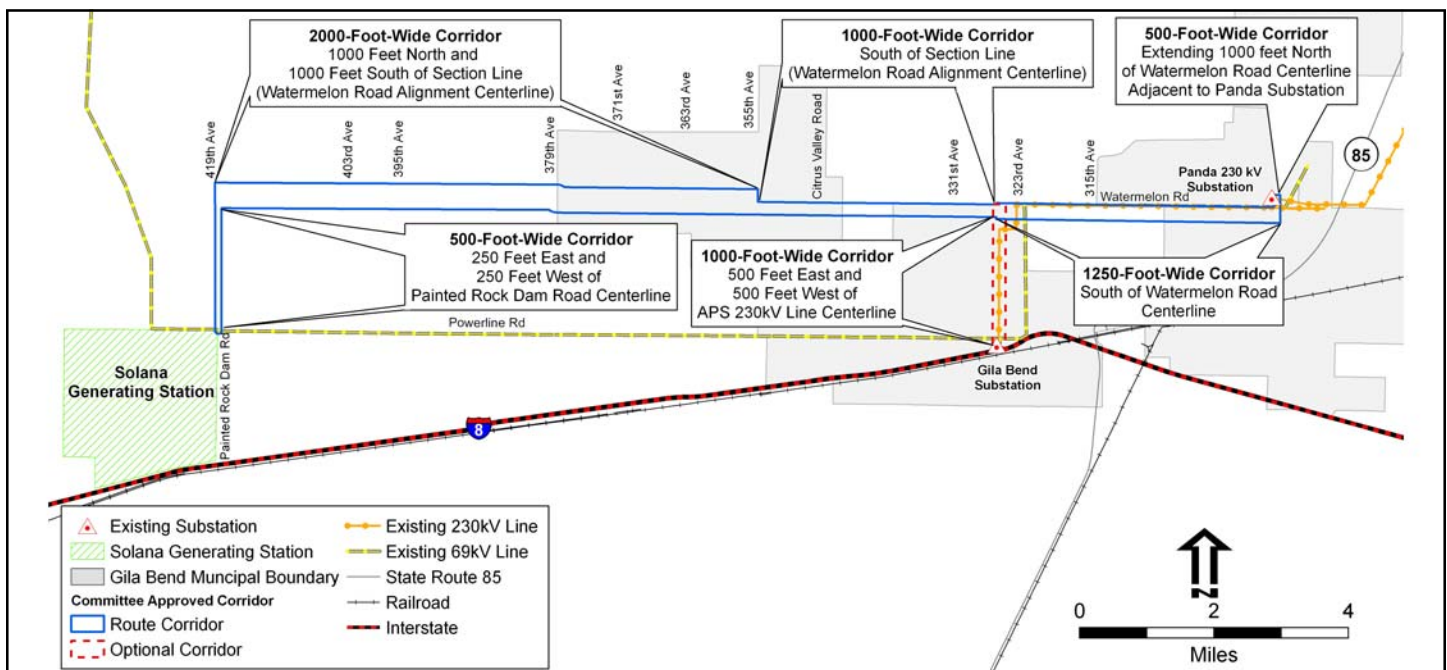
April 2009 Update

Accomplishments to Date

On December 17, 2008, the Maricopa County Board of Supervisors approved unanimously the Solana Generating Station Comprehensive Plan Amendment granting a land use change from Rural Development Area to Industrial.

On December 5, 2008, the Arizona Corporation Commission approved unanimously the Certificates of Environmental Compatibility (CECs) for the Solana Generating Station and the associated transmission corridor.

The 230 kilovolt (kV) transmission corridor (shown below) originates within the Solana Generating Station site and proceeds to Arizona Public Service Company's (APS's) existing Panda Substation. The transmission line will interconnect with the Panda Substation. On April 7, 2009, APS and Abengoa Solar Inc. executed a Facilities Study Agreement. The Facilities Study will be the third of three technical studies needed to complete the interconnection of the Solana transmission line with APS's electric system.



Project Details

- Solana plant size: 280MW gross output
- Generates electricity with conventional steam turbines
- Consumes ~85% less water than current agricultural land use
- "Solar Field" covers 3 square miles with approximately 2,700 trough collectors
- Collectors: ~25 feet wide, ~500 feet long, and ~10 feet in height
- Collector reflectivity focuses on receiver tubes, not upward
- Generating Plant profile is no higher than a three-story building
- Solana will employ 1,500-2,000 construction personnel and 85-100 permanent employees
- Thermal storage will allow up to 6 hours dispatchable energy
- Project is slated for operation in late 2011 or 2012
- APS will purchase 100% of the power output

What's on the Horizon

The next steps for the Solana Project include additional permitting, such as:

- Maricopa County approval of the Non-Title V (Minor Source) Air Permit, filed on July 29, 2008
- Submit Special Use Permit application
- Submit Aquifer Protection Permit application

One of the Largest Solar Power Plants in the World to be built near Gila Bend, Arizona



Project Need

In 2006, the Arizona Corporation Commission began regulating electric utilities to generate 15 percent of their energy from renewable resources by 2025. The electricity generated by the Solana Project will help fulfill renewable energy power demands in the State of Arizona.

Arizona is the fastest growing state, and APS is one of the fastest growing utilities in the U.S. Peak demand projected for 2008 is approximately 7200MW and is growing at approximately 1½% per year. The Solana Project allows for diversification of generation sources, reducing the reliance on fossil fuels.

The Solana Project will help the state meet some of its most critical needs:

- Address Arizona's energy independence needs
- Reduce the state's \$9.3B annual dollar outflow for energy imports
- Increase Arizona's energy surety by using in-state resources
- Leverages the state's most abundant resource
- Assist Arizona in meeting the 15 percent renewable energy standard

Project Benefits

The Project will provide many benefits to local cities and towns, Maricopa County, and the State of Arizona:

- Create 1,500 to 2,000 construction jobs
- Create 85 to 100 skilled permanent jobs
- Yield roughly \$1B of private investment
- Create \$300M to \$400M in 30 year tax revenues
- Add over \$1B in gross state product to Arizona's economy
- Provide power for 70,000 homes
- Introduce a large-scale renewable energy source



The Solana Project will harness Arizona's most abundant renewable energy resource.

Concentrating Solar Power: An Explanation

Solar energy is a renewable energy source. Renewable energy resources such as wind and solar energy are constantly replenished. In contrast, fossil fuels such as coal, oil, and natural gas resources are limited and will become more expensive to retrieve. Fossil fuel costs are variable and have been increasing in recent years while the price of solar power is fixed.

The Solana Project will use Concentrating Solar Power (CSP) technology to capture heat generated by sunlight and turn that heat into electricity. CSP works by using parabolic-trough

systems to concentrate the sun's energy through long curved mirrors. The mirrors are tilted toward the sun, focusing sunlight on a pipe that runs down the center of the trough. The heat transfer fluid (HTF) that is flowing through the pipe is warmed and is used to boil water in a conventional steam generator to produce electricity. In addition, the HTF flows into a molten salt storage tank which retains and stores heat. That means electricity can be produced on cloudy days or several hours after sunset.

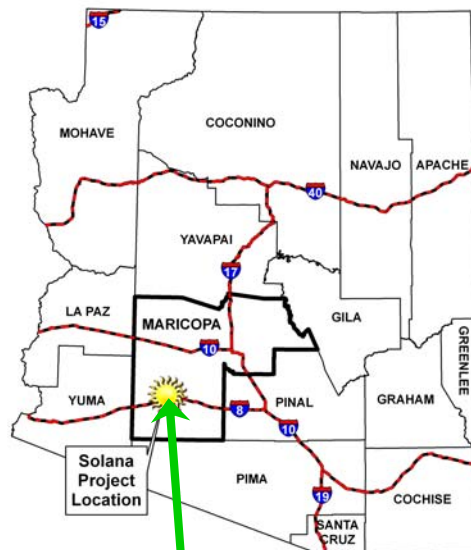
Who is ABENGOA SOLAR INC.?

Abengoa Solar is a solar technology and development company headquartered in Denver, CO. The project team for Solana is based in Phoenix. Abengoa Solar is committed to developing CSP, photovoltaic (PV) and industrial heat technologies for commercial, industrial, and utility applications.

A primary focus of Abengoa Solar is the use of research and development (R&D) as a means of continuous product improvement in manufacturing, installation, and operation. Based on the economic and technical foundation provided by investments in R&D, Abengoa Solar has transitioned into a pioneer in the construction of commercial CSP and PV power plants.

In 2007, Abengoa Solar opened the first commercial power tower. Abengoa Solar is building power plants in the USA, Spain, Algeria, and Morocco.

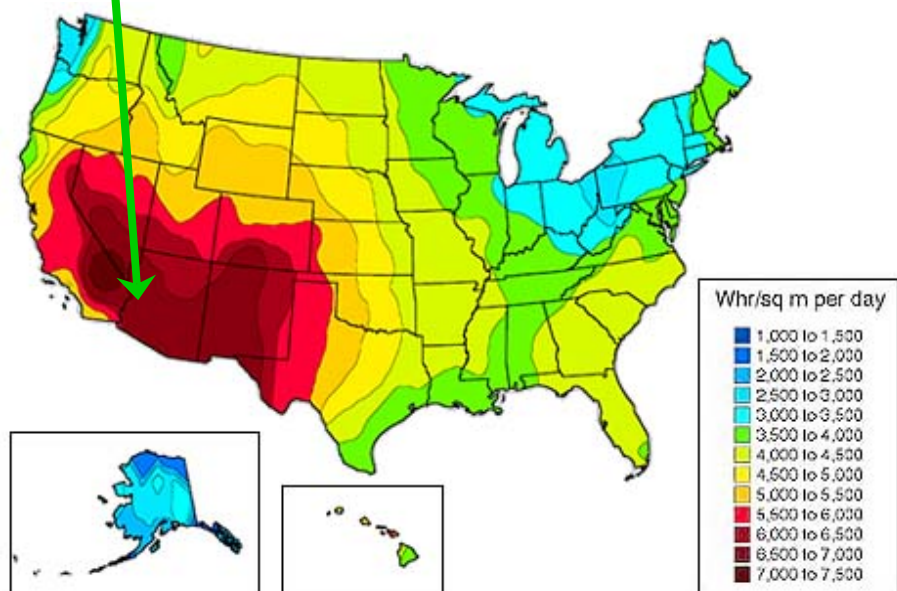
Information obtained from and available at:
www.abengoasolar.com



Project Location

The Solana Project is located west of Gila Bend, Arizona, approximately 70 miles southwest of metropolitan Phoenix.

Central Arizona has some of the best insolation (**Incoming Solar Radiation**) values in the United States, as shown on the map below.



Solar resource for a concentrating collector

Source: National Renewable Energy Laboratory (NREL)

**ABENGOA SOLAR INC. Invites You to
Learn More and Become Involved**



Abengoa Solar Inc. is proposing to construct a 280-MW solar power plant near Gila Bend, AZ. The Solana Generating Station Project will use concentrating solar power technology and if operational today would be the largest solar power plant in the world.

Please visit the Project Website or call the Project Information Line to learn more about this project and how to become involved. The Solana Project team invites comments, concerns, and questions.

**www.SolanaSolar.com
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