

Solana Generating Station

Leadership – APS has signed a long-term agreement to purchase all electricity generated from the Solana solar power plant.

Total Generation – 280 megawatts
Operating at full capacity it can serve 70,000 Arizona homes.

Community – 70 miles southwest of Phoenix, near Gila Bend, Arizona.

Construction – Siting and permitting are scheduled to begin in 2008 with a tentative completion date of 2011. During construction, the project will employ about 1,500 people.



Milestones – If Solana were operating today it would be the largest solar plant in the world, providing APS with more solar electricity per customer than any utility in the US. It will be APS' largest source of renewable energy.

Project Details – Concentrating Solar Power (CSP) technology with thermal energy storage. CSP technology uses heat from the sun to generate electricity. Solana's parabolic mirrors focus the sun's heat on a heat transfer fluid. The fluid can reach a temperature of 735 degrees Fahrenheit. To produce electricity, the hot fluid transfers its heat energy to water, creating steam. The steam is then used to run conventional steam turbines. The heat energy in the fluid also can be stored and used at a later time to generate electricity.

The Solana Generating Station will cover 3 square miles and contain 2,700 parabolic trough collectors. Located on what is currently agricultural land, the power plant will use 75 percent less water than the current use of the property.

When fully operational, the plant will employ 85 highly skilled technicians.

Partnership – APS selected Abengoa Solar as a partner in the project after years of investigation of the technology and a thorough consideration of prospective developers. Abengoa Solar will construct, own and operate the Solana Generating Station. Abengoa Solar is part of Abengoa. With more than 23,000 employees, Abengoa is present in more than seventy countries through its five business units: Solar, Bioenergy, Environmental Services, Information Technologies and Industrial Engineering and Construction.

APS, Arizona's largest and longest-serving electricity utility, serves about 1.1 million customers in 11 of the state's 15 counties. With headquarters in Phoenix, APS is the largest subsidiary of Pinnacle West Capital Corp. (NYSE: PNW).