

SOLMATES

*A publication for APS Solar Partners
Fall 2003*



From the Desk of Ed Fox
Yuma, APS Team Up
APS Solar Partner Production
Biomass Projects Heat Up

did you know...

Each year, in the course of producing 4,454 kW of solar energy, APS reduces the amount of harmful chemicals and particulates in our air by 11,544,323 lbs. That's 11,491,320 lbs. of carbon dioxide; 23,161 lbs. of sulfur oxides; 28,238 lbs. of nitrogen oxide; and 1,603 lbs. of particulates each year.

FROM THE DESK OF ED FOX

Vice President of Communications,
Environment and Safety

Taking a Leadership Role

Welcome to another issue of *Sol Mates*. As you can see by the breadth of the articles in this issue, APS is truly focusing on the development and implementation of renewable technologies.

While APS has been at the forefront of solar technology development for many years, we are also committed to furthering alternate technologies that will fuel tomorrow's economy.

Not only is APS involved in traditional solar projects such as the plant we are building with the City of Yuma at the city's West Wetlands Park, we are continually working to develop technologies that are environmentally friendly and have real-world applications.

From hydrogen and natural-gas blended fuels to finding wind resources across the state, to our participation in biomass projects, we understand the monumental need to continue expanding these technologies and look for new ways in which alternate fuels can someday supplant the use of fossil fuels.

We also continue to value the partnerships that foster an environment of learning and cooperation, such as the

partnership we share with you, our APS Solar Partners. It is with your help that APS will continue to explore these possibilities and look for new ways to power our economy while protecting the environment.

As a leader in the development of renewable energy resources in Arizona and nationally, APS is committed to furthering technologies that serve our customers and support our environment today and in the years to come.

But while we look for opportunities to develop all renewable technologies, our focus remains on solar generation. Arizona is now the largest producer of installed, grid-tied photovoltaic solar energy per capita in the United States. That is a major accomplishment that you should be proud of. As an APS Solar Partner you play an important role in helping us create opportunities for building solar power plants across the state, and in the growth of the renewable technologies industry.

I look forward to reporting on more renewable energy news and highlights in future issues of *Sol Mates* and as always, I want to thank you for your continued support.

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CREATING A SOLAR FUTURE

Customers and APS — Partners in Progress

Yuma, APS Team Up on Solar Project

The City of Yuma is one of the newest APS Solar Partners, teaming up with APS on a solar facility at the city's West Wetlands Park.

APS is building the solar plant, which will be a major attraction at the new 110-acre park being developed on the banks of the Colorado River near downtown Yuma.

The plant includes 24 APS Tilted-Trackers that will produce 86.4 kilowatts (dc) or 441 kilowatt hours of electricity per day.

In addition to the solar plant, the facility also will feature a ramada, fencing and interactive educational displays on renewable energy.

According to Yuma Parks Development Manager Roger Blakeley, "This solar plant and display will provide an excellent teaching tool for our schools and produce a lot of educational opportunities for the entire community."

The pollution-free generation source will feed electricity into APS' main grid, powering approximately 20 average-sized Yuma-area homes.

STAR Open House

Each spring and fall, APS hosts tours of the APS Solar Test And Research Center – STAR

To find out when the next STAR tour will take place, you can visit aps.com or call Janet Crow at 602-250-4990 for an advanced reservation. You can also send an e-mail to janet.crow@aps.com

STAR is located at 1500 E. University Drive, Tempe (west of McClintock).

Note: When touring, please wear comfortable shoes, not sandals, as the grounds of STAR are covered in loose gravel.

EHS Report Available Online

At APS and our parent company, Pinnacle West, we believe in the importance of environmental stewardship. Each year, we publish our Environmental Health and Safety report detailing our environmental and social performance. The most-recent version is available online at:

www.pinnaclewest.com/ehs

APS Takes a Step in Determining Arizona's Potential for Wind Energy

As a leader in renewable technology, APS has provided financial support for the mapping of the state to determine potential wind energy sites.

The next step in the process is measuring wind in various locations to test for viable wind energy sites.

APS is working in conjunction with industry experts and Northern Arizona University on this project. We will post the findings in future issues of *Sol Mates*.

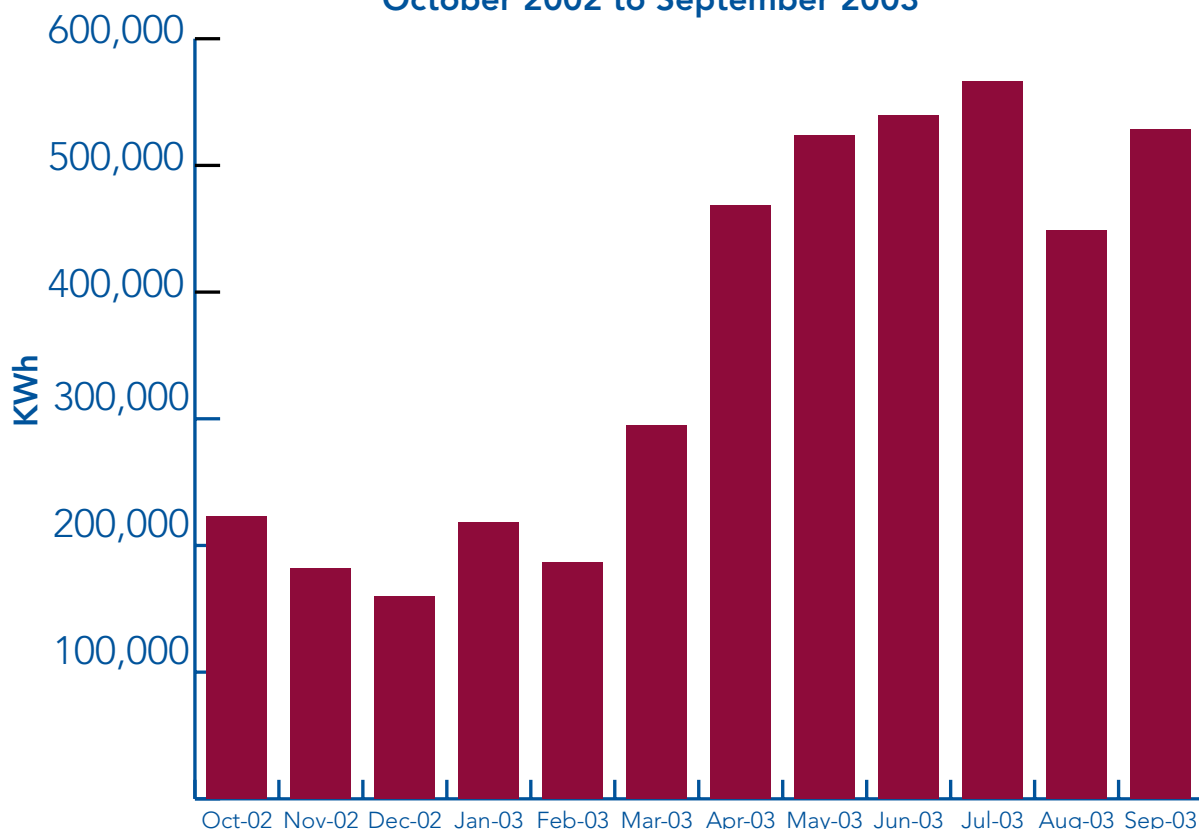
Biomass: Clean Energy and Healthy Forests

APS is a major participant in the three-megawatt biomass generating plant under construction in Eagar, Arizona. As the project nears completion, APS is evaluating potential locations for as many as three additional biomass plants in central and northern Arizona.

APS representatives have begun meeting with community leaders in Flagstaff, Heber, Joseph City, Prescott, San Carlos, Show Low, Tusayan and Whiteriver to explore the possibilities of building biomass plants in those communities.

The Rodeo-Chedeski fire, the bark beetle infestation and fire prevention forest thinning efforts are producing tons of forest waste in Arizona. These biomass plants will convert this and other vegetation waste into clean fuel to power generators. This clean fuel helps APS reduce its greenhouse gas emissions while helping reduce future forest fire threats. Biomass generating plants are just one aspect of the company's efforts to meet our Environmental Portfolio Standard, which requires 1.1 percent of retail energy to be derived from renewable generation by 2007.

APS Solar Partners Total Production
October 2002 to September 2003



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