

Wind power blows into Arizona

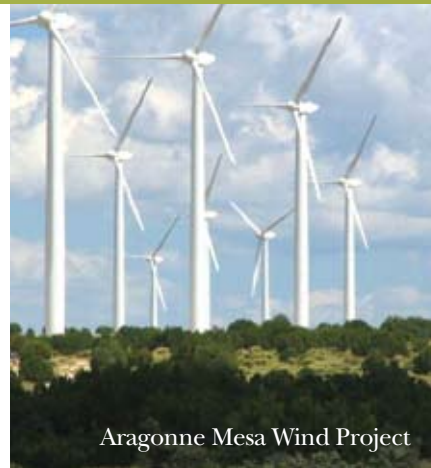
APS adds to its renewable portfolio

No bells, no horns, no streamers, just a simple green zero changing to a number one. That is how it started.

In a nearly empty 18th floor at APS corporate headquarters, sitting at the real-time trading desk, was **Joseph Sanchez**, senior real-time trader, Marketing and Trading Operations. It was Dec. 22, 2006, and most everyone was likely off, preparing for the holidays. Because the real-time desk must be monitored continually, Sanchez sat by himself in a sea of empty workstations. He was the only one around to witness one of APS' most important renewable milestones to date.

The Aragonne Mesa Wind Project, located on a desolate mesa, 40 miles southwest of Santa Rosa, N.M., contains 90 wind turbines, each with a one-megawatt (MW) capacity. Towering 227 feet into the air, each turbine harnesses the wind using three, 63-foot long blades. As APS' largest ever purchased power agreement for renewable energy, the project's entire 90 MW will be used by APS customers. This program is funded by APS customers and approved by the Arizona Corporation Commission.

A few months prior to that momentous December day, the project's 18-month construction



Aragonne Mesa Wind Project

slowly increased, stopping only for lack of wind. Today, with all the turbines online, the Aragonne Mesa Wind Farm has the capacity to provide enough electricity to power 22,000 Arizona homes.

In early May, APS and the owners of the wind farm, Babcock and Brown, officially dedicated the project.

"APS plans to offer more renewable energy," Robinson said. "In March we sent out a Request for Proposal (RFP) for near- and long-term new sources of renewable energy that can be delivered to the company's electrical system."

The RFP included solar, wind, hybrid wind and solar, biomass/biogas, landfill gas, hydropower, fuel cells that use renewable fuels and geothermal. The energy procured from this request, as well as the renewable energy brought online previously, will help the company fulfill its renewable standard (15 percent of the company's energy from renewables) which was set by the Arizona Corporation Commission.

— Steven Gotfried

soon to be brought online. APS previously had added 10 MW of geothermal capacity and was in the process of increasing its solar generation output to 10 million kilowatt-hours — a record for both the company and the state of Arizona.

Meanwhile, back on the trading floor that cool December day, the stale green zero blinked and turned into a one. The actual event was very low key when compared to its significance to the company.

From that moment on, Sanchez and the other real-time traders had a new source of power to take into consideration, wind.

During the next couple of days, the numbers on the computer screen

By the time 2006 became 2007, APS had increased its renewable energy output by nearly 1,800 percent.

One of the eight computers that surrounded Sanchez had a special window dedicated to renewable energy, more specifically the Aragonne Mesa Wind Project. It was from this window Sanchez and the other real-time traders would monitor the megawatts (MW) coming into the Four Corners Power Plant switchyard from the soon-to-be-running wind project. However, as Dec. 22 began, just like in the days past, this special window was relatively unimportant. Under the teal-colored words "Meter MW," sat a stale green zero, indicating there was nothing to monitor. With nothing to monitor, there was nothing for the real-time trader to take into consideration. By the time the day ended, however, that had changed.

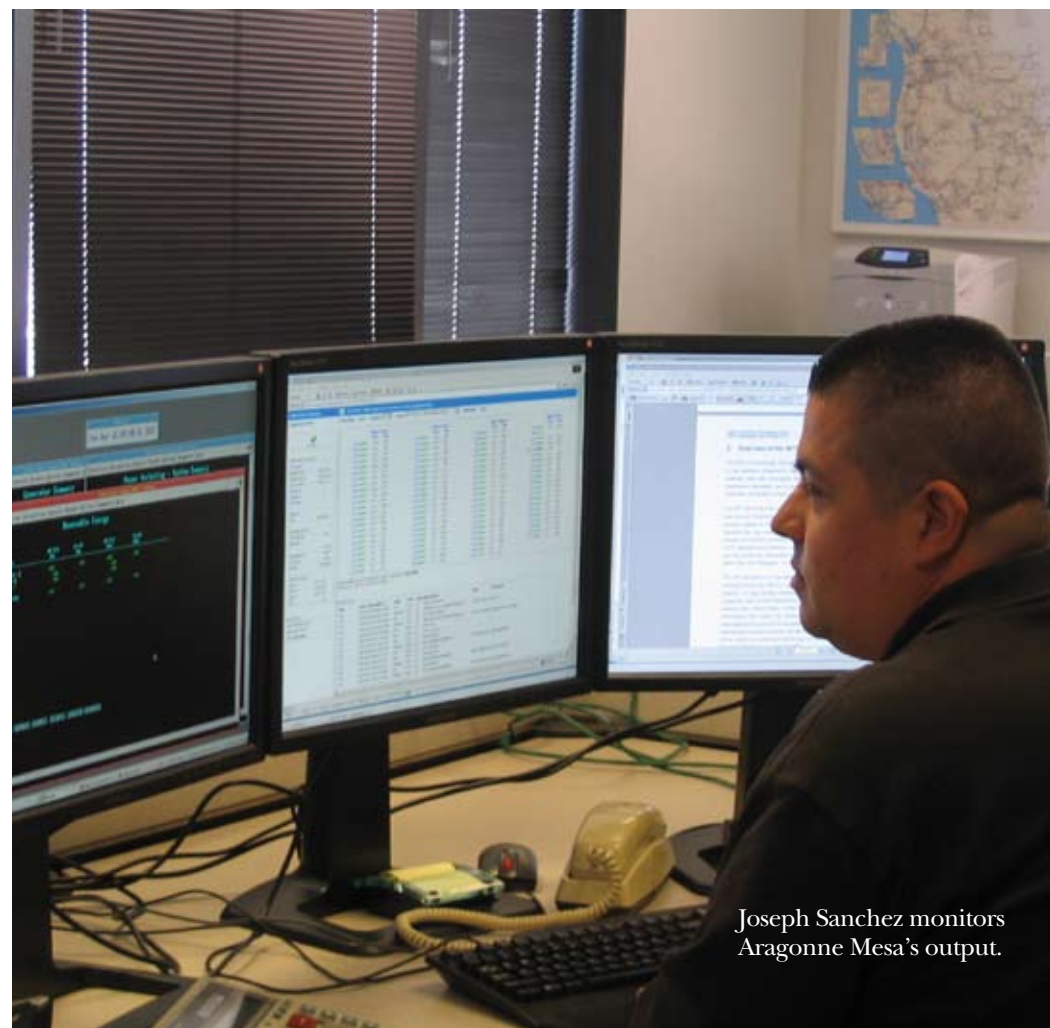
To appreciate the event's significance, it helps to know a little more about the company's renewable power program in general and the wind project in particular.

started winding down and the expectations for the new wind energy began to rise. **Don Robinson**, Vice President, Planning, noted the importance of bringing this power online.

"As APS looks to meet the growing need for power in this state, renewable energy will play an increasingly larger role," Robinson said. "This project marks a new phase in APS' renewable energy commitment and we have many more milestones ahead of us."

By the time 2006 became 2007, APS had increased by almost 1,800 percent the amount of renewable energy it uses to serve Arizona's burgeoning population. To put this into perspective, when 2006 started, APS offered its customers 6 MW of renewable energy capacity whereas by year-end, this number was close to 107 MW.

The sharp increase would come from the 90 MW of wind capacity



Joseph Sanchez monitors Aragonne Mesa's output.