

## Fired up – Yucca 5, 6 now on line

Power supports Yuma-area customer demand  
July 10, 2008

It took Yucca Unit 5 just nine minutes on June 2 to start up and reach full power. Unit 6 accomplished the same feat 11 days later.

Yucca Power Plant's newest additions (*bottom photo*) officially joined the APS generation fleet on those dates, respectively. Now they are helping the company meet the growing electrical demand of our Yuma-area customers.



"We're unusual in that our units operate year-round and not just primarily in the summer," **Robert Brooks**, Plant Manager, said.

That's because, in addition to the high summer demand that results from customers living and working in one of Arizona's hottest and driest areas, Yuma County also sees a large influx of winter visitors.

The units' permanent fuel source will be natural gas delivered by a pipeline out of Mexico. The pipeline still is under construction, however, and won't be completed until later this year.

Until it's done, the two 48-megawatt gas turbines are fueled from an El Paso Natural Gas pipeline. There's one problem, however. Its gas is delivered at much lower pressure than the units need.



As a temporary measure, leased gas compressors are boosting the pressure to the required level.

"We've had some challenges getting the gas compressors to operate fully and until they are, we can't operate both units at the same time," Brooks said. "But we believe we've got those issues resolved now."

The fuel delivered from the new pipeline will be at a pressure that will not require the continued use of the gas compressors. In addition, the units' heat rate is just a little more than half that of Yucca's older turbines. That translates to better efficiency and a considerable savings in gas costs.

And with the SCRs (select catalytic reduction), which are like the catalytic converters on motor vehicles, the units' emissions are one-tenth of what permitting allows, Brooks said.

Despite the gas compressor issue, one unit has run every day since the two were declared in-service.

"These are fantastic units," Brooks said.

The units' construction previously was featured in *On* and *Newsline*.