

# TECHNOLOGY DEVELOPMENT PROJECT FACT SHEET

## SP003: Scottsdale Water Campus Solar Power Plant

Solar power plants tend to be very land intensive. The APS Scottsdale Water Campus solar power plant shows what can be achieved with a little ingenuity. The surface of the two, one acre concrete covered water reservoirs at the campus could not be used for any practical purpose, so in 2002, APS built two 150 kW solar power plants on them! No additional land was required for the power plants and good use was made of the concrete reservoir covers.



Location: 8400 E. Union Hills Rd., Scottsdale, Arizona

Plant Output:	300,000 Watts DC 243,000 Watts AC
Reservoir #1 Module Manufacturers:	Kyocera, BP Solar, Sharp
Quantity of Modules:	936
Reservoir #1 Inverter Manufacturers:	Trace Technologies, AES Technologies
Inverter Power Rating (Trace):	30,000 Watts
Inverter Power Rating (AES):	33,000 Watts
Quantity of Inverters:	4
Reservoir #2 Module Manufacturer:	ASE Americas
Quantity of Modules:	512
Reservoir #2 Inverter Manufacturer:	Trace Technologies
Inverter Power Rating:	30,000 Watts
Quantity of Inverters:	4
Type of Tracking:	Single Axis
Projected Annual Energy Generation:	571,050 kWh AC

**Estimated emissions avoided as a result of operating this solar power plant based on APS' 2003 fuel mix:**

CO <sub>2</sub>	725,234 lb/yr
SO <sub>x</sub>	799 lb/yr
NO <sub>x</sub>	1,485 lb/yr
Particulates	103 lb/yr



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