

A Generational Shift

SOLAR-POWERED GENERATORS OFFER A GREEN ALTERNATIVE AT THE JOB SITE

Story by Christopher Warren

It turns out there is something new under the sun. Phoenix, Ariz., residents Dan Jones and his sister, Debra, recently opened a new business that produces custom-built, mobile solar-powered generators capable of producing enough energy to meet demands for any construction site.

Spirit of the Sun Solar Systems' solar-powered generators are capable of producing energy for power saws, drills, vacuums, sanders, planers, routers, lighting, fans — even refrigeration units.

What Spirit of the Sun Solar Systems' custom built generators don't produce is noise. Or fumes. And because they are solar-powered, the generators are completely silent and, of course, eco-friendly.

Dan and Debra started Spirit of the Sun Solar Systems last June. Dan was inspired to open the business after spending a decade living in Upstate New York — without the benefit of having his home's power provided by a public utility service. "While I was living off the grid, I became interested in using solar power for my home," he said. "I installed my own solar system during this time."

But it wasn't until 1995, when Dan was building remote hunting camps, that he began thinking about solar-powered generators. A longtime woodsman who enjoyed spending time outdoors, Dan found it disconcerting that gas-powered generators were being used to provide energy to the remote camps. Not only were the generators loud, it was a chore to bring gas to the camps to power them. And the sound and fumes of a gas-powered generator's

motor were an awkward contrast to the otherwise serene surroundings.

"The noise from my gas-powered generator was enough to make me want to find another solution," Dan said, "let alone the cost and hassle of feeding it gas." Dan began thinking about developing a mobile solar generator that would be able to quietly power camps — and construction sites.

Apparently, Dan was ahead of his time. Today, the notion of living "off-grid," or relying on alternate sources of energy to power homes and businesses, is a lot more common. In a 2006 *USA Today* article, *Home Power Magazine* Publisher Richard Perez noted that 180,000 families were living off-grid. And every year, that number is increasing.

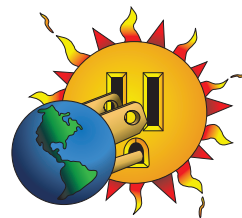
Using solar panels to provide power isn't new, either. In fact, solar panels are well on their way to being mainstream.

- In Times Square in New York, Ricoh recently installed a billboard powered by wind turbines and solar panels.

- In Bonita Springs, Fla., a company named Gulf City Solar has begun installing solar panels on the roofs of golf carts; the solar energy powers the carts.

- In Monterey, Calif., the Monterey Public Library recently announced that its newest Bookmobile will feature a solar-powered generator for lighting and electricity.

"Any way we can harvest the energy of the sun to do things we would normally do using fossil fuel is a step in the right direction," said Debra Jones. "And making solar power mobile is a contribution to expanding the use of renewable energy."



Spirit of the Sun Solar Systems (S.O.S.) is a heart-felt organization committed to help restore the Earth and assist humanity by providing custom, mobile, solar systems and education about solar energy. S.O.S. systems are custom designed and crafted to meet individual customer needs.

S.O.S. is dedicated to help in the shift toward low environmental impact, self-reliant power units that work in harmony with the Earth and the Spirit of the Sun.



"All of us at Spirit of the Sun Solar Systems are interested in the environment and renewable energy," she said.

any industry's needs, including homebuilding, plumbing, mechanical, heating, ventilation and air conditioning.



"Solar generators require very little maintenance," she added, "and they're totally silent, and ready to use at a moment's notice." And because they're silent, solar-powered generators are ideal for industries that cannot use noisy, gas-powered generators.

High Res Media, an Arizona-based company that specializes in residential and commercial low-altitude and twilight photography, recently purchased a generator from S.O.S. Solar Systems. Typically,



ABOUT S.O.S. SOLAR SYSTEMS

■ **Dan Jones:** A former electrical technician with IBM for more than 20 years, Dan is president of S.O.S. Solar Systems

■ **Debra Jones:** Chief Financial Officer and Dan's sister

■ **Julia Hutton:** Vice President, Marketing

■ **On the Web:** www.sossolarsystems.com

■ **Phone:** (480) 226-7018

■ **Average time it takes to build a custom solar-powered generator:** Approximately 6 to 8 weeks; every generator is custom built

■ **Incorporated:** April 2008

The goal of S.O.S. Solar Systems is to produce generators that are more efficient than gas-powered generators. In addition to being just as powerful as their gas-powered counterparts, S.O.S. Solar's generators are less expensive to operate; there's no cost to recharge a solar generator by sunlight.

S.O.S. Solar System's generators can store solar energy for up to three months, Debra said. "One of the questions we are always being asked is: 'What happens when there is no sun?'"

"In Upstate New York, where Dan lived, they only had about two and a half hours of 'solar sun' (the best type of sunlight for powering a solar generator) a day. This would power the solar generator for eight hours. In Phoenix, we get five to six hours of solar sun. That's enough sunlight to recoup all energy used the previous day," she said. And S.O.S. generators can store energy in a battery pack for future use, Debra said.

"If you are using a gas-powered generator to do any of your work, you can easily substitute that generator for a solar generator. Solar generators are just as powerful as gas-powered generators. And solar generators can handle

High Res Media takes its photographs in residential areas at a time of day when homeowners are usually at home — right around sunset.

Kris Shane, co-owner of High Res Media, said the company required a generator that was quiet so residents wouldn't be disturbed when High Res was setting up for the photo shoots. The company does a lot of photo shoots in gated residential communities, Shane said. And when his crew arrives to set up, guards at the gated communities — who are always concerned about noise — have been known to ask if High Res will be using a generator.

We tell them we will be using a generator, Shane said, "a completely silent solar generator."

According to Anthony Benton, also a co-owner of High Res Media, the company was re-fueling its gas-powered generator two to three times a week. Now, the S.O.S. Solar generator is saving High Res Media approximately \$250 per month, Benton said.

"We can power all of our systems for a whole day," he said. "While you're out in the sun, it automatically recharges; you don't ever have to worry about it. In addition to our residential sunset-twilight photo shoots, the solar

generator is a lifesaver when we have a shoot in remote locations, or when access to electrical outlets is unavailable.

"We have a mobile, earth-friendly power source at our disposal," Benton explained. "It's just one less thing our crew has to worry about, and we're helping the environment."

Of course, one of the first things potential customers want to know is how much the solar-powered generators cost. Prices range from \$5,000 to \$40,000, depending on the generator's size and for what it will be used, Debra said.

High Res Media's 3,500-watt solar-powered generator cost approximately \$15,000. The cost of a 3,500-watt gas-powered generator would be approximately \$1,500, Dan said.

"The upfront cost is more than a gas-powered generator," Debra allowed, "but the long-term benefits are better — little maintenance, no more gas purchases and they're quiet. And if you've used a gas-powered generator, you can use a solar-powered generator. There isn't much of a learning curve. You simply plug the power cord into the unit."

Julia Hutton, S.O.S. Solar System's vice president of marketing, and a managing partner, said S.O.S. also offers its customers an option to brand the solar generator units with advertising. This way, the solar-powered generator can double as a temporary, unobtrusive, billboard.

Eco-friendly, of course. ☺



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