

## BUSINESS HIGHLIGHTS



This spring, we will enroll our 500th business customer in Green Power Switch (GPS)! While that may not sound like many—those 500 businesses purchase nearly 50 percent of the green power sold every month. GPS business customers range from small retail shops to manufacturing facilities and college campuses. For a complete listing of participating businesses—go to [www.greenpowerswitch.com](http://www.greenpowerswitch.com).

Once a business has made the switch to green power, they receive benefits such as window decals, certificates and the license to use the GPS logo on their materials. Help your business tap into positive public relations power by signing up and proudly displaying Green Power Switch's colorful window sticker. It shows that your business does more than just care about environmental issues—it puts its money where its mouth is to create a clean, green community where your customers and their children can shop, work and play.

### COMMENTS OR SUGGESTIONS

Let us hear from you!

We'd like to know if you're satisfied with our newsletter, and we're interested in what you would like to read in future issues. So e-mail us your comments today at [greenpowerswitch@tva.com](mailto:greenpowerswitch@tva.com).

■ Please recycle this newsletter by passing it on to a friend. Thanks for your help and your interest!



# Green Power Switch

spring 2007

# news

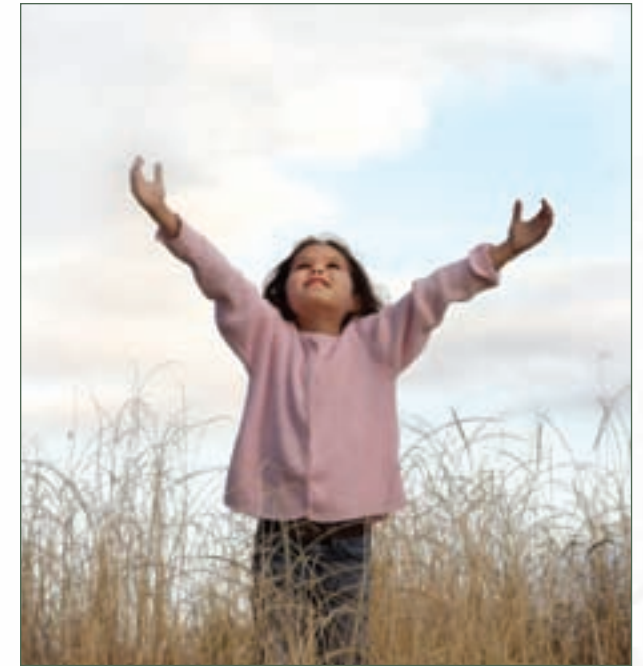
Dear Green Power Switch Subscribers,

Green Power Switch will reach a milestone this spring... our 10,000th residential customer! This exciting and reassuring news shows that our efforts to bring clean, green renewable energy to the Tennessee Valley are supported by the public. More and more people just like you are willing to make this goal a reality; not just a good idea.

More than 10,000 residents in the Tennessee Valley have shown that they are committed to making renewable energy a part of our lives. They have gone the extra mile and signed up for the program through their local power company. Not only that, but they also have told their neighbors about the program, attended informational meetings and organized their own events to promote renewable energy.

We are very proud of this accomplishment, and we know it would never have been possible without you. Congratulations on a job well done, and let's keep building momentum and reach that next milestone.

Jim West, Senior Manager  
Green Power Switch



## WINDS OF CHANGE



The Tennessee Wind Working Group held its 3rd annual residential wind workshop at Cleveland State Community College in February. TVA's Generation Partners Program was presented to approximately 40 attendees. This grassroots group promotes both residential and commercial wind power in the state of Tennessee.

The working group holds quarterly meetings, runs a small anemometer loan program for wind monitoring, hosts an annual fall wind workshop, holds regular public presentations, and is developing a school outreach program. The group works to promote small residential scale wind power and is working on a state action plan to promote more commercial scale development.

For more information about the group, contact Gil Melear-Hough at 865.637.6055.

TVA and your  
local power company  
P.O. Box 292409, OCP 2F  
Nashville, TN 37229-2409



TVA and local public power companies, working in cooperation with the environmental community, developed Green Power Switch as a way to bring green power—electricity that's generated by clean, renewable resources like solar, wind, and methane gas—to Valley consumers.

Presorted  
Standard  
U.S. Postage  
Paid  
Chattanooga, TN  
Permit No. 366

EARTH DAY EVENTS LISTING

**Gatlinburg**

4th annual Earth Day festival will be held at Ripley's Aquarium of the Smokies Plaza—call Ripley's for date and time.

**Knoxville**

EarthFest will be held at the World's Fair Park on Saturday, April 21, from 11:00 a.m. to 7:00 p.m.

**Memphis**

Shelby Farms to host "Hip to Be Green Day" on Sunday, April 22, from 9:00 a.m. to 5:00 p.m.

**Murfreesboro**


Celebrate Earth Day at Murfreesboro's Civic Plaza on Saturday, April 21, from 10:00 a.m. to 3:00 p.m.


**Nashville**


Join us for the Centennial Park celebration on Saturday, April 21, from 11:00 a.m. to 7:00 p.m.

GENERATION UPDATE  
JULY 2006–DECEMBER 2006

 **Solar Power**  
270,339 kWh

 **Wind Power**  
25,251,074 kWh

 **Methane Power**  
15,590,235 kWh

 **GP Total**  
41,111,648 kWh

For a complete listing of solar sites and their daily output, please visit [www.greenpowerswitch.com](http://www.greenpowerswitch.com)

## SOLAR GENERATION: ELECTRICITY FROM 93 MILLION MILES AWAY

The sun is an incredibly powerful source of energy. That's why TVA is using photovoltaic (PV) panel arrays to transform solar energy into usable electricity. When rays of sunshine strike a solar panel, they give some of the electrons inside it more energy, a process that creates an electrical current. PV systems use semiconductor cells, or modules, that convert sunlight directly into electricity. The systems also contain additional equipment like inverters, which change direct current to alternating current (the type that we use in our homes).

Solar energy constitutes a small but important part of Green Power Switch's energy resources. TVA selected solar installation sites providing high visibility and opportunities for public education. These included high-traffic facilities like visitor centers, museums, and schools. Of course, the sites also had to meet the necessary physical criteria: a southern orientation, good exposure to the sun, and the appropriate amount of structural support and space for placement of the PV panels.

Ijams Nature Center is one of 16 solar host sites for the Green Power Switch Program. The 80-acre park and environmental education center is located on the south shore of Fort Loudoun Reservoir in Knoxville, Tennessee. The center's woods, trails and gardens make it a perfect place for people of all ages to learn about the environment and simply enjoy nature.

According to Todd Witcher, School and Youth Programs Manager at Ijams, "Having the solar site is a great opportunity for education, which is what we are all about here at Ijams. The solar panels are something we love having here — they get people talking and asking questions about solar energy. We teach a series of adult classes titled 'Living Clean and Green' that teaches participants how to live more earth friendly—the solar panels are incorporated into these classes. Sustainability and solar energy are abstract terms to most people, so having the panels on site enables education to be hands on and real."

An interactive kiosk in the Visitor Center shows how much electricity the site produces and explains to students and visitors how solar energy works. Since becoming operational on September 15th, 2000, the solar arrays have generated 102,788 kWh of electricity (data through January 2007).



**FAST FACTS**  
**Site Location:** Knoxville, TN  
**Power Distributor:** Knoxville Utilities Board  
**Solar Energy Received (average):** 3.6kWh/m2/day  
**Peak Generating Capacity:** 15kWac (alternating current)



## A NEW GENERATION OF PARTNERS

 By: Laurie Parker, NES

The rooftop of Street Dixon Rick Architecture on Kenner Avenue in Nashville is drawing lots of attention...and sunlight. They've just installed 72 photovoltaic solar panels on top of their building.

Why'd they do it? The firm's co-owner, Steve Rick, says, "We've been telling our customers all along to 'think green', and we felt like it was time for us to do the same."

Street Dixon Rick Architecture is the first business in Nashville to become a GPS Generation Partner. The Generation Partners program provides support and incentives to homes or businesses for the installation of solar and wind generating facilities. Customers produce their own green energy and sell it back to TVA. The upfront cost to buy small installations can run anywhere from \$8,000 to \$20,000. The project at Street Dixon Rick was anything but small. It has the potential to generate 12 kilowatts per hour (kWh) of green energy. The architecture firm worked with Steve Johnson of Lightwave Electric, a local designer/installer of solar power systems.



Rick says, "We wouldn't have been able to do it without taking advantage of the Tennessee Clean Energy Technology grant program for businesses installing renewable energy. The grant will pay up to 40 percent of a qualified clean energy technology system. We know this will pay off in a reasonable amount of time."

Rick encourages other businesses to move forward with environmentally friendly initiatives. To learn more about becoming a GPS Generation Partner, contact your local power company or visit [www.gpsgenpartners.com](http://www.gpsgenpartners.com).

## HIGH SCHOOL STUDENT ANSWERS THE CHALLENGE TO HELP THE ENVIRONMENT

When Honor Schneider, a science teacher at Hiwassee Dam High School in Murphy, North Carolina, asked her advanced-placement environmental science class to encourage their family members to become more environmentally aware and use energy wisely, she probably had no idea how far one student would take the challenge.

Nicholas Chris, 16, a sophomore, did more than just ask his family; he approached everyone who would listen and asked them to buy renewable power through the Green Power Switch Program.

"We watched the movie *An Inconvenient Truth* at school and talked about what other countries, as well as ours, are doing to help our environment," Nicholas says. "The movie got me interested in renewable energy."

Nicholas learned about Green Power Switch from articles and Web site information available through his science class and became interested in seeing what he could do to spread the word about the program.

He created a petition for his teachers, peers and their parents to pledge their support for Green Power Switch. Armed with the petition, Nicholas got his recruiting effort underway.

"I'm interested in what we can do to help our world. It's about time that we tapped our renewable resources. The more people who buy green power blocks, the more money there will be to build more renewable energy resources."

"A lot of people, including my neighbors, had not heard much about Green Power Switch and were very interested."

Nicholas plans to continue promoting green power along with the importance of recycling. For her part, Ms. Schneider could not be happier about how her class and Nicholas have responded.

"I think the students learned much more about global warming as well as what they can do to help alleviate the problem," she says.

