SC Million Solar Roofs Initiative

Winter 2004

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History of MSR Initiative

Since its announcement in June 1997, the Million Solar Roofs Initiative has generated a major buzz in communities, cities, and states throughout the nation. Now, with more than 300,000 solar roof installations, the buzz is getting louder. But we're not finished yet. This initiative seeks to install solar energy systems on one million US homes and buildings by 2010.

Federal Commitment: The federal sector represents about 0.5% of the U.S. building inventory with its 500,000 buildings. These half-million buildings require the federal government to spend more than $3 billion each year for heating, cooling, lighting and powering the operations. During the past 20 years, actions have been taken to reduce that energy bill through energy efficiency investments and the application of renewable energy (including solar) systems on new and existing federal buildings.

The federal government is committed to installing solar electric and solar thermal energy systems on 20,000 federal buildings by 2010. In fact, a preliminary commitment of installing 2,000 systems on federal buildings by the year 2000 was met and exceeded.

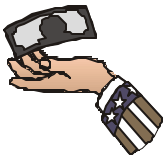
The South Carolina Energy Office (SCEO) submitted a grant proposal to the US Department of Energy in 2001 to develop a South Carolina MSR Initiative Partnership. In cooperation with York Technical College's Energy Resource Center, a MSR Implementation Plan was developed for the state. The Plan addresses means through which SC will achieve its goal of 500 or more solar systems installed in the state by 2010. It also identifies key barriers that the solar industry faces in South Carolina, and outlines a methodology for overcoming the barriers.

Members of the Partnership include educators, architects, builders, government officials, solar business owners and concerned citizens and consumers dedicated to the commitment.

South Carolina Energy Office and Grant Funding for 2003

The South Carolina Energy Office (SCEO) received funding for a second grant in 2003. Specific objectives for South Carolina's new MSRI grant include: development of a South Carolina Chapter of the American Solar Energy Society (ASES); creation and execution of an education and marketing program to increase knowledge and acceptance of solar technologies in South Carolina; and determination of means to finance solar systems.

The South Carolina Energy Office is exploring, as a vital part of our education and marketing program, the negotiation of a contract for a solar exhibit. This exhibit would be used across the state at selected home shows and public seminars to promote the South Carolina Million Solar Roofs Partnership, as well as the South Carolina Chapter of ASES. All members of the South Carolina MSR Partnership will have access to the display. To this end, we encourage the MSR Partnership members to volunteer their time to staff the display booths at shows throughout the state. We are very excited about the launch of this exhibit in helping us spread the word about solar.



More information will be forwarded to the MSR Initiative Partners regarding this project.

For more information on the South Carolina MSR Initiative Partnership, please visit: www.state.sc.us/energy/Renewable%20energy/solar_grant.htm.

Public Building Solar Initiative

The South Carolina Energy Office is introducing a Public Building Solar Initiative Program. Eligible applicants will be: state agencies, public colleges and universities, school districts and local units of government. The office would like to demonstrate solar in:

2 publicly-owned residences;
1 facility with kitchen needs;
1 facility with shower and bath needs;
1 facility with laundry needs; and
1 facility with swimming pool needs.

Economic criteria will be:

> a projected payback of eight years or less from savings;
> within categories, applications will be ranked in order of projected paybacks and projected project completion dates.

The South Carolina Energy Office will fund 75 percent of the cost with a 25 percent cost-share from the applicant. Applicants are required to separately meter the solar water system to make installations available for periodic educational tours, to allow on-site monitoring by the South Carolina Energy Office, and to report operational data for a period of 10 years.

Some benefits from this program are:

> Saving energy dollars for taxpayer-supported entities;
> Publicizing economics, technology and operations experiences;
> Establishing core foundation of technical expertise for installation, operation and maintenance of solar technologies;
> Placing state government on the leading edge as a model for energy efficiency; and
> Identifying and overcoming obstacles to encourage solar water heating in South Carolina.

We are excited about this program and will be providing more details soon!

Brief Updates from Other States in the Region

The Florida Department of Community Affairs/Florida Energy Office (DCA/FEO) is currently offering $600,000 in hardware funds toward the installation of photovoltaic (PV) solar systems on Florida schools. Rebates are expected to be in the range of $20,000 per installation or $5 per Watt based on system nameplate rating. An additional rebate of $1 per Watt is available for systems that include a battery back up component and can be used to provide electricity to a school disaster relief shelter.

This program strives to encourage the installation of grid-connected PV systems on schools through partnerships with the local school districts and communities, the state's electric utilities, corporate sponsors, and solar industry in order to increase public awareness of the benefits of this technology and provide an excellent educational opportunity to Florida's future leaders. It will provide several schools throughout the state with PV systems and multi-disciplinary solar education materials that can easily be incorporated into existing coursework. Each system will include a monitoring package that will collect weather and system performance data, and allow students to view this information using the internet.

For more detailed information, please visit: www.fsec.ucf.edu/pvt/Projects/pvforschools/index.htm.

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Brief Updates

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North Carolina's MSR Partnership is focusing on growth, increasing communication, tracking installations and partnership development. Recently, dedications were held at two schools for pv charging stations. On October 4, 2003, they sponsored a Green Building Tour.

North Carolina has launched a program with participation from multiple utilities called NC GreenPower. NC GreenPower is an easy and effective way to protect the environment. This nonprofit program is working to encourage the development of renewable energy sources for the state's power supply.

NC GreenPower is an independent, nonprofit program that uses voluntary contributions to purchase electricity generated from renewable energy sources to add to the state's power supply. Individuals may contribute as little as $4 per month to add one block of 100 kilowatt-hours of renewable energy to the grid. More contributions mean more renewable energy can be available, making North Carolina's environment healthier.

For more than two years, a committee representing consumers, electric utilities, the environmental community, technology suppliers, the North Carolina State Energy Office and Advanced Energy worked together to create a statewide program to add more renewable energy sources to the state of North Carolina. The North Carolina Utilities Commission approved the NC GreenPower program in January 2003. Customers began signing up for the program this past July and there was a public launch October 1, 2003. For more information, visit: www.ncgreenpower.com.

Southface Energy Institute, in Atlanta, Georgia , has announced a new addition to their facility, which will house an EcoOffice. With the combined talents and experience of Southface and all members of the design team, the EcoOffice can help transform the market for high performance, green commercial buildings. For more information, visit: www.southface.org.

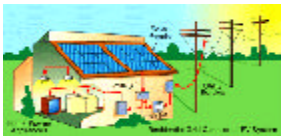
The Mississippi Development Authority is exploring opportunities by merging with other agencies to develop programs to promote the solar industry.

The Mississippi Million Solar Roofs Partnership received the Best Progress Award, Solar 2003, in the Atlanta Region from the U.S. Department of Energy.

Ten years ago, the Texas Energy Office established the Winston Solar Challenge to help motivate students in science and engineering. The Challenge, a part of the Winston School in Dallas, teaches high school students around the world how to build roadworthy solar cars. A safe environment is then provided for them to display their solar cars. On even-numbered years, they share the fun of the world-famous Texas Motor Speedway; on odd-numbered years, the teams drive cross-country to share their projects with millions of people.

The 2004 Dell-Winston Solar Challenge is a 4-day closed-track race at the Texas Motor Speedway. For more information, visit: www.winstonsolar.org/race/calendar2004.htm.

In Tennessee , The Green Power Switch Generation Partners program offers electric customers 150 kilowatt-hour "blocks" of green power for a small monthly premium. While TVA's green power program is already one of the largest and most successful in the nation, there is room for growth. TVA is committed to supporting this growth by including renewable generation as part of its power supply mix. For more information on this program, visit: www.gpsgenpartners.com.



In Kentucky , with interest from utilities and local companies, a tariff for net metering education for the state was submitted. The utilities are required by the Public Service Commission to track the meters. Workshops are conducted on hot water and grid intertying and videos and public service announcements are being done. Kentucky is also compiling a solar guidebook. For more information, visit the Kentucky web site at www.a-spi.org/solar/.

The Million Solar Roofs Initiative benefits every one of us by: reducing monthly utility bills; reducing emissions associated with power generation; creating high-tech jobs; keeping the US solar energy industry competitive; and providing secure and reliable sources of energy.

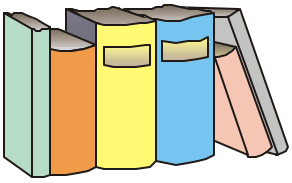
If you would like to highlight a solar installation for the Summer 2004 edition, please contact one of the following at the South Carolina Energy Office: D'Juana Wilson, 803/737-1706, dwilson@gs.sc.gov; or Jean-Paul Gouffray, 803/737-8038, jpgouffray@gs.sc.gov.

Be sure to visit our website at: www.energy.sc.gov.

Solar Publications Available through South Carolina Energy Office

The following publiciations are available from the South Carolina Energy Office:

Passive Solar Home Designs
Solar Water Heating Energy Briefs
SC Million Solar Roofs Brochure



The Energy Resource Center at York Technical College is developing a brochure on financing options for solar technologies.

The South Carolina Energy Office can also provide a listing of area solar dealers at your request. If you would like a listing of the South Carolina MSR Initiative Partnership, please contact the office.

Look for display booths on solar technologies at regional Home Shows in 2004.

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