

THE ADIRONDACK MUSEUM



THE BACKGROUND

Solar-electric power is generated from the conversion of sunlight into electricity through a photovoltaic (PV) or solar cell. Photovoltaics provide Power NaturallySM and reliably. While the initial system cost can be considerable, NYSERDA has introduced an innovative program to make PV systems

more affordable

and to encourage new PV installations through qualified system installers.

THE STORY

Located in the heart of the Adirondack State Park the Adirondack Museum (www.adkmuseum.org) is one of the premier destinations in upstate New York, hosting over 100,000 visitors a year. Called "the best of its kind in the world," by The New York Times, the Adirondack Museum at Blue Mountain Lake overlooks the lake of that same name. Six million acres of Adirondack Park surround the museum and act as the basis for its exhibits and programs that tell the stories of how people have lived, worked, played and traveled in the Adirondack region since the early 1800's.

The Adirondack State Park is extremely vulnerable to pollution from power plants. As a result of acid rain caused primarily by coal-burning power plants, more than 500 of the parks 2,800 lakes are rendered uninhabitable to the fish and plants that once thrived in them. And many of the forests at

higher altitudes are suffering as well. Because of this, public awareness about acid rain has increased dramatically in recent years. Unfortunately though, the public knows little about the benefits of solar energy.

The funding from NYSERDA gives the museum a unique opportunity to communicate to the public that renewable energy technologies are good for the environment and good for New York.

"NYSERDA was a partner to make it possible to install this environmentally friendly system on one of our buildings. The system helps us contribute to safe energy generating efforts that are good for the natural systems of the beautiful Adirondacks. Our visitors can see the benefits, first hand, of solar energy as an alternative energy source."

**- David Pamperin, Executive Director,
Adirondack Museum**

**For more information call 1-866-NYSERDA
or log on to www.PowerNaturally.org**

Thanks to the NYSERDA Photovoltaic Incentive program, places like the Adirondack Museum can install affordable PV systems. It's part of NYSERDA's commitment to help make New York State more energy efficient.

THE TEAM

- **NYSERDA:** funding and coordination of the photovoltaic incentive program, through the New York Energy \$martSM program
www.PowerNaturally.org
- **Solar Design Associates:** Responsible for the design and installation of the PV system
www.solardesign.com

THE SYSTEM

The 1,800 square foot PV system is integrated into the roof of the Special Exhibits Gallery building to become the weathering skin. Integrating PV into the building skin can reduce overall costs and improve the appearance. The system has the capacity to produce 24 kW DC. The electricity produced by this system is fed into 9 grid-tied inverters located in the electrical room where it is changed into utility-grade AC electricity to be consumed by the loads at the Museum. Solar Design Associates completed this project in time for the Summer 2004 tourist season. The total installed system costs are approximately \$218,000 and the NYSERDA incentive is \$118,800.

THE SAVINGS

The estimated annual output of the PV system is

23,400 kWh.

Emissions of CO₂ will be

reduced by 25,500 pounds annually.

