

## **Program Rebates Make Solar Electric System a Reality**

# "My electric meter is running backwards even as we speak."

Carol Conner, of Bridgeton, New Jersey, is enthusiastic about the solar electric system that was installed on her new barn in April - and understandably so! Assisted by over \$17,500 in rebates from the New Jersey Clean Energy Program, this 33-acre farm now has on-site capacity to meet approximately 60% of the total electricity needs for this 2500 square-foot horse barn, as well as the Conners' home 250 yards away. The solar electric system generates more power than is needed during sunny days, so the Conners are also taking advantage of Conectiv Power Delivery's net metering tariff. This allows their electric meter to run backwards — literally! — and credits them for the excess electricity produced by their system. These credits can accumulate and help offset the Conners' electricity needs during the evening and on cloudy days.

#### **Fulfilling a Long-Time Environmental Dream**

"I've been interested in renewable technologies since my teens," says Carol Conner. "The environmental advantage is the driving force behind it for me. Solar power was always in the back of my mind. Ten years ago, when I began looking for a property, the future incorporation of a solar generator was always a factor. When I looked at properties, I considered the orientation of buildings and their potential for solar generation. When we began plans to build a new barn, I knew we wanted to include solar technology. The New Jersey Clean Energy Program rebate played an enormous role in our ability to install a larger system - it really made the whole project feasible from a financial perspective."

Carol is a long-time advocate of renewable energy technologies and a strong supporter of this utility-administered program.



Rebates from the New Jersey
Clean Energy Program made
a unique project financially
feasible. Solar modules generate
electricity for this barn and the
adjacent home in Bridgeton,
New Jersey.





"Many consumers are very interested in the concept of solar, but can't afford it. Lots of people have asked about our system, and I've steered them to the NJCEP website. Program rebates really do make solar a financially feasible alternative, especially for people who are looking at it from the environmental perspective," says Carol. "If just four or five people in my area did the same thing, we'd have a community-based power generation system. Every kilowatt of clean energy that we produce is a kilowatt the utility doesn't have to produce from other sources."

#### **Contractor Interface with Conectiv Power Delivery Was Key**

Two contractors worked together and jointly coordinated with Conectiv Power Delivery to ensure that the system would qualify for the New Jersey Clean Energy Program rebate dollars. Jason Fisher of Solar Works, Inc. was responsible for system design. Mike Guglielmo of Fineline Energy Solutions, in conjunction with Jason and his team, handled the installation. (Contact information for Fineline Energy Solutions can be found in the solar installer listing on nicep.com.)

#### **System Specifications**

System Design: Solar Works, Inc.

Installation Contractor: Fineline Energy Solutions

Solar Electric System Size: 3.5 kW AC

Solar Electric Module Manufacturer Kvocera Solar, Inc.

Model Number: KC-120-1

Number of Solar Electric Modules: 32

Inverter Manufacturer: Advanced Energy, Inc.

Model Number: MM-5000 Inverter Efficiency: 92%

### **Enhancements Show True Commitment to Clean Energy**

In addition to fulfilling Carol's long-time dream of installing a solar electric system, the Conners installed a special solar slab in the barn's tack/utility room floor to collect and store heat during sunny days and radiate that warmth into the barn at night, further increasing their energy independence. Future plans include a solar hot water heater for the barn as well.



The inverter, batteries and control equipment for the solar electric system are located inside a utility room in the barn.

