

ATTEBERRY HOME

Solar Power with Battery Backup

By Christopher Dymond, *Oregon Department of Energy*



Ko and Patricia outside their solar home.
Photo Credit: Christopher Dymond, Oregon Department of Energy.

Patricia Smith Atteberry and Ko Atteberry live where power is not always reliable, but their solar power system ensures they are never without electricity.

Their home is located on Kiger Island in the Willamette River south of Corvallis where utility power fails about once a month. Unlike most utility-interactive systems currently sold, the Atteberrys chose a system that can operate with or without the presence of a utility. When the utility power is available the system will feed any surplus (unused) solar energy to the utility and be credited for the power at full retail. When the power goes out, their system automatically switches to provide power to all the home's critical loads.

"We didn't even know the power was out, until I went into the bathroom and the light didn't work. Everything that we needed still had power," said Ko Atteberry.

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The roof generates power from the sun.

FEATURES

- 64 sq ft solar water heater
- 2970 watt solar electric array
- Passive solar sunspace
- Energy Star Appliances
- Bio-diesel powered VW Jetta
- Compact fluorescent lights throughout
- Geothermal heat pump heating system
- Organic garden and native tree farm

TEAM

Owner

Patricia Smith-Atteberry
and Ko Atteberry

Solar Installers

Abundant Solar,
Pacific Solar and Rain, Inc.

James Reismiller of Abundant Solar installed the solar electric system and Luke Rabun of Pacific Solar and Rain Inc. installed the solar water heating system.

Ten days before Christmas 2006, the solar power system was being installed, when the power went out. It stayed out for five days. Without power the Atteberrys had no heat, no hot water, no refrigerator and Pat couldn't do any work.

The agony of almost having power was palpable. Pat, a digital artist, needs power to run her business and was in the middle of finals for an online computer animation course she was taking through the San Francisco Academy of the Arts.

"It was a crazy week for us, but this year we are prepared," said Pat. ■