

Western tests new PV technology

Story and photo by Dave Christy

A new solar photovoltaic technology that could significantly improve the economics of PV installations is being tested on the roof of Sierra Nevada's regional office in Folsom, Calif.

"PV panels use either crystalline silicon or thin film technology," said **Bob Parkins**, SN Energy Services manager.



SN Energy Services Manager **Bob Parkins**, kneeling, and Facilities Manager **Gene Mann** install a photovoltaic panel on the roof of the SN regional office.

Single and polycrystalline silicon panels generally produce about twice the energy of thin film panels, but are more expensive.

The Siemens 1-kW CIS panels being tested promise to combine the best of both technologies.

The panels are being tested at a number of sites to gather information on performance and durability in the field. Siemens tested the technology in a laboratory with good results. "The panels we have here are a preproduction commercial version," Parkins said.

Parkins will take monthly performance measurements—irradiance, module temperature and current, and voltage under various conditions—for the next three to five years. He has the option of using power generated by the system, which was provided at no cost to Western, for regional office needs. Parkins and **Gene Mann**, SN facility manager, installed the Siemens panels.

The Folsom facility now has four PV systems, each using a different technology, that generates a total of 28 kW. Another 78 kW of PV is on the roof of the Elverta warehouse near Sacramento.

(Note: Christy is a public affairs specialist in Folsom.)