



“The only way it would be easier to install is if it had a magnet and we could just drop it on the roof.”

Tom Price  
Black Rock Solar



**At A Glance:**



**Customer:**  
Black Rock Solar  
San Francisco, CA

**Location:**  
Lovelock, Nevada

**Industry:**  
Education

**Situation:**  
Under budgetary pressure, Lovelock Elementary School was forced to cut 6 of its 40 teachers in 2009. Desperate to save money, Lovelock Elementary School applied to the Nevada Energy's Solar Generation program for a grant to install solar panels.

**Results:**  
Using the S-5-PV Kit, the project saved 25% on labor and material costs on the first 50kW array. These savings were spent installing another 20kW array of panels. Lovelock will save \$18,000 a year on power costs.

**Stats:**

- 70 kW array on roof and ground
- Installation labor and material costs reduced 25%
- Projected annual savings: \$18,000

■ **A Quest to Save Cash**

Lovelock Elementary School is part of the Pershing County School District in rural northwest Nevada. A small school with a diverse student body, the demands on its meager budget strained it to the breaking point. In 2009, the school had to let 6 of its 40 teachers go. Desperate to save a few dollars somewhere, Lovelock applied to the Nevada Energy's Solar Generation program for a grant to install solar panels.

■ **What Worked?**

That summer, non-profit Black Rock Solar installed a 50 kW array on the roof of the elementary school. Using the S-5-PV Kit for the first time, Black Rock was unprepared for how quick it would be to attach the solar panels to the standing seam metal roof.

Tom Price, Executive Director of Black Rock Solar, believes the S-5-PV Kit saved the project 25% on the cost of installation materials and labor. Installing the same solar panels on a racking system was estimated to cost \$.35 per watt. Using the S-5-PV Kit instead, costs were reduced to a mere \$.17 per watt plus labor.

The S-5-PV Kit provides a strong attachment solution without piercing the roof panel!

Black Rock Solar plowed those savings back into the project by installing an additional 20 kW system on the ground. The combined 70 kW array is now generating \$18,000 in savings a year on Lovelock Elementary School's power costs. The school is using that money to hire a teacher's aid.

■ **Long Term Outlook**

Standing seam metal roofing is ideal for installing PV panels because the space between the roof and the panel create a natural path for convective cooling. Black Rock Solar is now recommending this combination to all its customers, along with the S-5-PV Kit for quick, secure, cost-effective installation. The Pershing County School District watched this project progress with great interest and has become convinced of its benefits as both a cost-saving measure and a tool for teaching students about power consumption and environmental stewardship. The District is already looking at recommending solar panels for other schools within its purview.