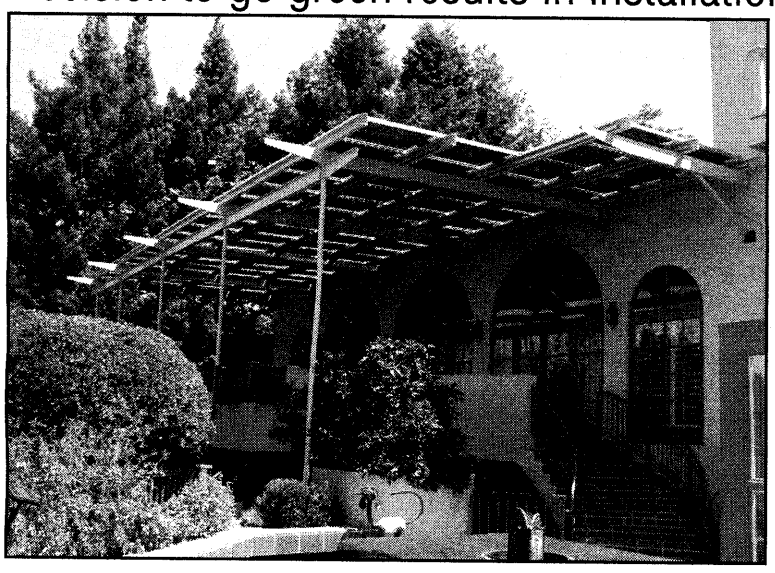
FEATURES & BUSINESS

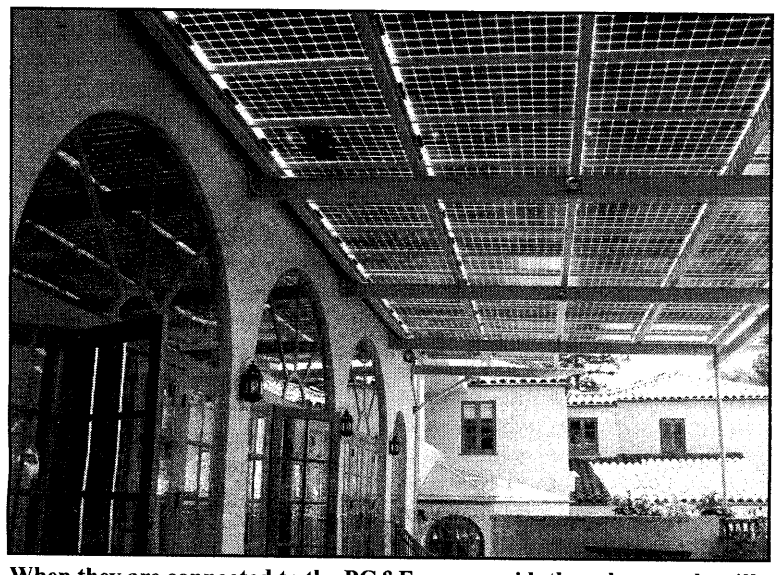
Libitzky home sets solar standard in Piedmont

Decision to go green results in installation of 100 solar panels



Staff photos

Moses and Susan Libitzky have erected 72 solar panels over the deck at their Inverleith Terrace home.



When they are connected to the PG&E power grid, the solar panels will produce about 50-percent of the Libitzky's electricity.

By Benjamin Bombard

Moses and Susan Libitzky were aghast when they received their first electric bill after moving into their 18,000-square foot home on Inverleith Terrace in 2005.

"I'd just as soon not say how much it was, but it was a lot," Moses admitted as he and Susan sat in their westward facing kitchen.

That first electricity bill got the Libitzkys thinking about ways to reduce their energy consumption. They wanted to reduce their carbon footprint and at the same time lower their PG&E bill.

They hired an energy consultant and started identifying items that would make their house greener. They put in energy-efficient lighting in every appropriate lighting fixture, installed a high-efficiency water heater, zoned all 21 rooms in the house into separate units, each with its own heating and air-conditioning controls, and installed new insulation throughout the house.

Even though all of those measures reduced the Libitzkys' energy bill by one third, they knew more could be done.

When the electronically retractable blinds that shade the kitchen from the hot mid-day sun are hidden, one has a clear view of Moses' solution to his energy concerns. Suspended over the deck outside the home's ballroom is a bare-bones metal structure supporting 72 black solar panels, each measuring three-feet by five-feet. The Libitzkys hope that those solar panels, and 28 others on the Spanish-tiled roof, will soon produce nearly 50-percent of the home's energy.

But the unusual configuration of the tile roof meant that the Libitzkys couldn't install enough solar panels to fully address their energy concerns. Creating a solar panel structure over the deck was Moses' solution to the problem, with Trachtenberg Architects in Berkeley completing the design work that would turn his vision into reality.

Various government tax credits sweetened the deal financially. The federal government currently provides a 30-percent tax credit for private solar panel projects, and the state government provides a 12-percent tax credit. The Libitzkys agreed that government financial support was instrumental in making their solar project feasible.

Moses said he anticipates "good savings," and expects the cost of the project to pay for itself in eight to 10 years.

But for now, the 72 solar panels over the deck have yet to provide a single watt of energy. That's because PG&E has to install a new energy meter on the home that will allow the company to better monitor the home's energy usage.

According to Moses, the panels should be activated within two to three weeks.

Moses and Susan spend a lot of time in their kitchen, and while they both agree that producing their own electricity makes sense financially and environmentally, they don't share the same affinity for Moses' structure.

"I like it," Moses said with pride as he looked at it from the window.

"I know you like it," Susan responded, "but we need to figure out how to make it work aesthetically as well as efficiently."

Previously, the house had blue awnings over the four arched doorways that opened from the ballroom onto the deck.

"Those were much more graceful," Susan declared.

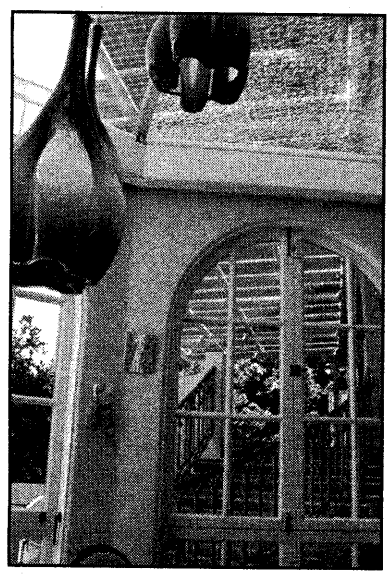
The structure has been wired for lighting to be installed in the future, and small gaps between each panel will be filled by thin aluminum T-bar to make it more water resistant.

GroSolar, built the metal supporting structure and installed the Libitzkys' solar panels over a period of several weeks earlier this year. The deck shaded by the panels lies at the back of the home, and transporting the metal I-beams necessary to build the structure proved to be complicated.

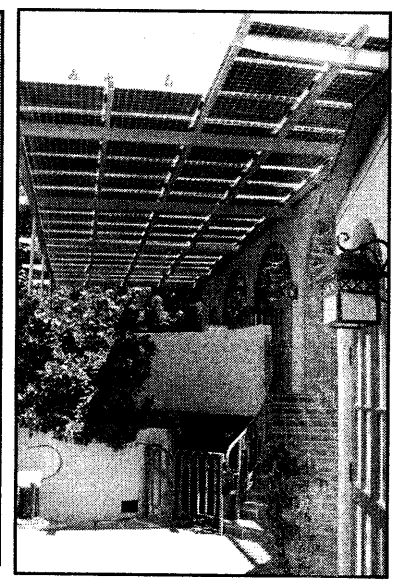
They first tried to have the beams lifted over the home with a giant crane, but when that didn't work, a dozen workers carried the long, heavy beams by hand through the Libitzkys' home.

Moses says the solar panel structure, which is hardly visible to neighbors and is screened by vegetation, breezed through the Piedmont Planning Commission's review process. The commission did, however, require the Libitzkys to hire an independent engineering firm to approve the plans and inspect the project after completion.

But after everything that they had gone through, that was the easy part.



A view of the solar panels from the kitchen, where the Libitzky's spend much of their time at home.



The solar panels shade a tiled deck outside the Libitzky's ballroom.