Santa Rita solar array starts making electricity

Jail's system will make 500 kilowatts

By Benjamin Pimentel
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Alameda County's main jail has begun drawing juice from the sun as workers lay out what will be the largest array of rooftop solar panels anywhere in the Western Hemisphere.

When the giant project is finished next month, Santa Rita County Jail in Dublin will resem-

ble a power plant, with one-third of its buildings covered with nearly 5,600 panels with photovoltaic cells -- generating enough energy to power 500 homes.

"We're producing clean, reliable power," Matt Muniz, Alameda County's energy program manager, said at a news briefing yesterday. "The real importance of this is reducing energy costs for the county."

The jail project highlights the growing popularity of solar energy, particularly in sunny Califor-

nia in the middle of a power crisis, said Daniel Shugar, an executive at PowerLight Corp. of Berkeley, which is installing the array.

Another big solar project is planned at the Neutrogena Corp's facility in Los Angeles, and last week PowerLight started up a huge rooftop system at the Tompkins County Public Library in Ithaca, N.Y., said company spokeswoman Susan DeVico.

At Santa Rita, the first batch of about 4,780, 4-foot by 4-foot panels were switched on at the 113-acre jail last week, and they generate about 65 kilowatts of power, Muniz said.

The system will produce about 500 kilowatts, Muniz said, saving the county about $300,000 a year in energy costs. It will also help the jail deal with the expected rolling blackouts in the coming hot months. Santa Rita is not exempt from blackouts.

Aki Nakao, director of the county's general services agency, said the sun-kissed community of Dublin was perfect for the $4.4 million project, which is being funded with the help of state grants.

"We're in the sunny side of the county," he said. "So it made sense."

Muniz said that of all county facilities, the jail also had the largest roof and is the largest user of electricity.

Shugar said the solar array will generate the most power during hours when the need is greatest.

"In Alameda County, you are blessed with a phenomenal solar resource," he said. "It's not just energy, but very high value energy. It's produced at a time of greatest need."

High costs once prevented the widespread use of solar energy, but new technology has paved the way for cheaper and more efficient systems that tap the sun as a main source of power, he added.

The world's largest rooftop system is in Germany, Shugar said.

In the United States, PowerLight also built some of the largest rooftop-mounted solar power systems anywhere, including one at a commercial building in Fountain Valley (Orange County) that produces about 400 kilowatts of power, he said.

In the Bay Area, the largest rooftop solar energy array can be found at the company's own manufacturiing plant in Berkeley, Shugar said.

Less than 1 percent of electricity generated in California came from solar sources in 1999, the latest year tabulated by the California Energy Commission. The vast bulk of that, more than 95 percent, came from solar thermal installations in deserts that heat a liquid core connected to steam generation.

Still, photovoltaic production worldwide has jumped dramatically in recent years, led by Japan, the United States and Europe.

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