

Sanger cranks up solar power for sewage treatment

By Tim Sheehan

On Earth Day 2015, April 22, the city of Sanger, CA, dedicates a new solar power plant that will generate most of the electricity for the city's sewage-treatment plant. THEFRESNOBEE

Sanger celebrated Earth Day on Wednesday by formally dedicating a new 6.6-acre solar power farm that is expected to provide more than 85% of the electricity used at the city's wastewater treatment plant.

Almost 3,800 individual solar photovoltaic panels comprise the facility, built at a cost of about \$4.4 million adjacent to the treatment plant at the southeastern edge of Sanger.

The city raised the money through the sale of municipal bonds, which will be repaid through money saved on power bills at the sewage plant and other city buildings, said John Mulligan, the city's public works director. Mulligan said the city paid about \$550,000 for electricity to operate the wastewater plant last year, and that was about 14% to 18% higher than the prior year.

Motors on the solar arrays turn the panels incrementally throughout the day, tracking the sun across the sky for maximum power production. The farm can produce almost 1.2 megawatts of electricity. "That's just about enough to power about 1,000 homes," Mulligan said.

"This is government gone right," Mayor Joshua Mitchell said, noting that Sanger was able to build the farm at no cost to residents and actually save money to fill other needs. "We're going to save so much money and not have to pass those costs on to our constituents."

Among other energy- and water-saving improvements undertaken by the city over the past year are new roofs, improved lighting and upgraded heating/air conditioning units at Sanger's City Hall, Police Department and other city buildings. The city also installed a new automated system for keeping tabs on water meters, freeing up members of the public works department for other projects.

Over the next five years, the solar project qualifies the city for state energy rebates that are expected to amount to \$800,000 to \$1 million.

City Manager Brian Haddix said that Sanger's performance-based contract with Johnson Controls to build the solar farm and handle the other energy-saving improvements guarantees that the city will save enough money on its energy bills to cover the debt service on the municipal bonds issued to pay for the projects. Before starting the work, the company conducted a comprehensive survey of the city's energy use and calculated how much could be saved. "If the savings fall short (of the debt service), then Johnson Controls is required to make up the difference," Haddix said.

The contract also required Johnson Controls to hire local workers from Sanger to perform 75% of the labor. Haddix and Mulligan said the company exceeded that goal, ultimately hiring local employees for about 83% of the labor.

Many of the workers received specialized training in solar power and energy work from Proteus Inc., a Valley-based job-training firm, and are now using those skills in other jobs in Fresno and elsewhere in the state and nation, said Proteus' Virginia Contreras.

Haddix said the city owns more property to the south of the new solar installation, giving Sanger plenty of room to add more solar panels in the future for increased power capacity.

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