

Bowerman Power Project occupies 2.6 acres of the 725-acre Frank R. Bowerman landfill.

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Orange County 3rd District Supervisor Todd Spitzer joined with government, business and project development officials for a ribbon-cutting to ceremonially open the Bowerman Power Project renewable energy facility.

The landfill gas-to-electricity plant at the [Frank R. Bowerman landfill](#), Irvine, California, will power thousands of local homes and businesses in Anaheim, generate millions of dollars in royalties for the county government system and provide other environmental and economic benefits.

“The Bowerman Power facility keeps the County moving in the right direction with additional green energy. Powering this plant adds 160,000 megawatt-hours annually to put into the grid, which is enough energy to power 26,000 homes. That brings the total production at Orange County’s landfills up to 380,000 megawatt hours, which is enough power for the households in Brea, Placentia, Yorba Linda,” says Supervisor Todd Spitzer, whose 3rd District includes the Frank R. Bowerman Landfill.

The \$60 million, 113,000-square-foot, facility occupies 2.6 acres of the 725-acre Bowerman Landfill, one of the largest on the West Coast. Financed by [Caterpillar Financial Services Corporation](#) (Cat Financial), the project was developed and is owned and operated by Bowerman Power, a subsidiary of Pennsylvania-based [Montauk Energy](#).

It generates electric power by capturing landfill gas created by the millions of tons of waste buried at Bowerman. A natural byproduct of solid waste decomposition, the gas contains high amounts of methane, a prevalent greenhouse gas. The operation also will prevent approximately 53,000 tons of CO₂ emissions annually.

The Bowerman Power Project is the first to combine three proven technologies in modern renewable energy project meeting all environmental requirements, the company says. It is the largest landfill gas-fueled reciprocating engine project in California and Montauk’s largest power project to date. Moreover, with the completion of this project, all large landfills in California now operate landfill gas-based, renewable energy plants.

“This is the largest project of its kind utilizing landfill gas that combines gas feedstock cleanup, large-scale Cat reciprocating engine-generators and selective catalytic reduction technology to meet the strict emission requirements here in Orange County,” says Montauk CEO David Herrman. “The result is efficient operations with high on-line availability, coupled with the ample and steady gas supply from the landfill, to ensure reliable production of renewable energy and all its benefits 24 hours a day, 365 days a

year.”

At the event, Spitzer, Bowerman Power/Montauk and Caterpillar executives as well as other officials discussed key benefits of the plant:

- Generation of an estimated 160,000 megawatt-hours of electricity, sufficient to serve the equivalent of 26,000 homes, sold to Anaheim Public Utilities to power residences, schools and businesses.
- Average annual royalty payment to the County of Orange projected at \$1.62 million, representing an estimated \$31 million over the 20-year life of the agreement.
- Provision by Bowerman Power to the County of \$1 million in annual landfill gas collection system operation and maintenance services
- Seven Cat reciprocating engine-generators with gas clean-up and emissions reduction technologies meeting all local-state-federal air quality requirements

This green project was championed by Spitzer and won approval from the full Board of Supervisors in October 2014 after a previous agreement for the facility was revised and updated. Ground was broken in January 2015.

The Bowerman Power Project is Orange County’s third landfill gas-to-energy facility. The other two are Olinda (Brea) and Prima Deshecha (San Juan Capistrano). Together, the three facilities produce approximately 380,000 megawatt-hours of electricity annually, enough to power some 56,000 homes in Southern California.