



**Chevron Energy Solutions**



# News Release

**FOR IMMEDIATE RELEASE**

## **First-of-its-Kind Smart Grid at Santa Rita Jail Completed by Alameda County and Chevron Energy Solutions**

*Jail Can Now Power Itself Without Connection to the Utility Grid*

**DUBLIN, Calif., March 22, 2012** – Alameda County and Chevron Energy Solutions joined federal, state and local officials today to unveil a microgrid that enables the county’s Santa Rita Jail to sustain power should its connection to the utility grid be interrupted. The \$11.7 million project, known as a smart grid, will allow Santa Rita Jail to ensure it has a supply of reliable electricity for its daily operations and security, and will save the county approximately \$100,000 per year in energy costs. Chevron Energy Solutions, a subsidiary of Chevron Corporation, designed, developed and built the project, which was funded in part by the U.S. Department of Energy, the California Energy Commission and the California Public Utilities Commission. The smart grid is the first of its kind in the country.

Santa Rita Jail houses as many as 4,000 inmates in 18 modern housing units and produces more than 12,000 meals per day. Covering 113 acres, the million-square-foot facility is considered a “mega-jail” and ranks as the third largest such facility in California and the fifth largest in the nation. The facility requires 3 megawatts (MW) of constant, reliable electricity to maintain daily operations and ensure the safety of the inmates and staff.

Interruptions to the jail’s power supply can create serious problems for the Sheriff’s Department staff and inmates housed there. The self-sustaining microgrid, also known as a smart grid, mitigates these concerns by integrating all of the jail’s onsite power generation with energy storage to ensure that power is never lost. When a disturbance to the utility grid occurs, the jail can now automatically disconnect from the grid and operate independently on clean power for up to eight hours until either local utility power is restored or conventional on-site emergency generators are engaged. The smart grid also allows the jail to buy power from the utility during the least expensive nonpeak hours and store it for use during the most expensive summer peak hours, which provides significant savings.

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“Throughout our history, Alameda County has worked to integrate pioneering technologies into our operations,” said Alameda County Sheriff Gregory J. Ahern. “The smart grid at Santa Rita Jail continues that tradition, improving the community’s grid stability while consistently providing a safe, secure and humane environment for inmates and staff.”

The smart grid project is the culmination of several renewable energy projects implemented at the jail, including solar photovoltaic panels, a 1 MW fuel cell cogeneration plant, and wind turbines, along with a 2 MW advanced energy storage system.

“Chevron Energy Solutions has been partnering with Santa Rita Jail for over a decade to help implement their clean energy goals,” said Jim Davis, president of Chevron Energy Solutions. “This project reinforces our commitment to improving grid stability while reducing carbon emissions and reducing energy costs for our customers.”

The California Energy Commission provided nearly \$2 million in funding for the project through its Public Interest Energy Research (PIER) program. PIER supports public interest research and development that helps improve the quality of life in California by bringing environmentally safe, reliable, and affordable energy services and products to the marketplace.

“This project is a major step forward in transforming California’s energy grid and making a cleaner energy future possible,” said Robert Weisenmiller, chair of the California Energy Commission. “Using the latest in renewable energy, Santa Rita Jail demonstrates California’s commitment to greening our state’s energy security. Once again, the Golden State is leading the way in clean technology by embracing technological innovation and public-private collaboration.”

The microgrid is a component of the U.S. Department of Energy’s plan to deploy an advanced, interconnected energy network capable of reducing congestion when energy demands peak on the utility grid. In addition to funding by the U.S. Department of Energy, the California Energy Commission, and the California Public Utilities Commission, the project benefitted from public-private partnerships including: Chevron Energy Solutions, Alameda County’s General Services Agency, Pacific Gas and Electric Co., California Independent System Operator, Lawrence Berkeley National Laboratory, the National Renewable Energy Laboratory and the University of Wisconsin. For a video explaining the project, visit: <http://www.youtube.com/watch?v=8DbFbPPq8K0>.

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### **About Chevron Energy Solutions**

Chevron Energy Solutions develops and builds sustainable energy projects that increase energy efficiency and renewable power, reduce energy costs, and ensure reliable, high-quality energy for government, education and business facilities. Its parent, Chevron Corporation, is investing across the

energy spectrum to develop energy sources for future generations by expanding the capabilities of alternative and renewable energy technologies. Chevron spent approximately \$4.4 billion on developing these technologies since 2002, and expects to spend more than \$2.7 billion in this area between 2009 and 2012.

### **About Alameda County**

Alameda County is California's seventh largest county, with more than 1.5 million residents. The County includes 14 cities as well as several unincorporated communities. Alameda County is governed by an elected Board of Supervisors, with each supervisor representing one of five geographical districts. County government is guided by a Strategic Vision, a far-reaching roadmap that integrates five priority areas including Environment and Sustainability. With a robust sustainability program Alameda County has established itself as a leader in areas including climate protection, ecosystem restoration, use of renewable energy and green building methods, recycling and waste reduction.

**Note to Editors:** In addition to the microgrid, photovoltaic panels on the jail's roof and grounds, a fuel cell cogeneration plant, five wind turbines and energy storage also help meet the jail's energy needs. A million-square-foot facility, the Santa Rita Jail campus covers 113 acres and serves about 4,000 inmates. Video can be found at: <http://www.youtube.com/watch?v=8DbFbPPq8K0>.

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This material is based upon work supported by the Department of Energy under Award Number DE-FC26-08NT02872.