

Kyocera America, Inc.

2013 ENERGY CHAMPION - MANUFACTURING



“We are extremely proud of the effective execution of both our HVAC and cogeneration projects. Working together with SDG&E and A.O. Reed & Co. we were able to complete these complex projects with a high degree of success.”

JOHN TANAKA,
PLANT ENGINEERING
MANAGER,
KYOCERA AMERICA, INC.

VFDs on 74 air handlers allow Kyocera America to greatly reduce the amount of energy used in the building. With the ability to remotely monitor and adjust the humidity levels in all clean rooms they can respond quickly to minimize, and even eliminate, production downtime.

Annual Savings: 2,703,543 kWh
SDG&E® Incentives: \$141,822

Highlights

- Comprehensive HVAC retrofit
- Variable frequency drives
- Wireless stat sensors
- 3.7 MW cogeneration facility
- JACE building management system with remote monitoring and scheduling

Energized by a powerful corporate philosophy

As a global company, Kyocera Corporation has a longstanding commitment to the ideals of social responsibility and sustainability. For the team at Kyocera America, Inc., transforming this corporate vision into reality has resulted in a comprehensive energy strategy that combines energy efficiency, demand response, renewable energy sources, and distributed generation. Notes Meridith Marquis, Kyocera America's Headquarters Manager, "As a corporation, we were environmentally sensitive long before it became fashionable, simply because it aligns with our corporate motto: Respect the divine and love people." With the significant energy demands that come with being a 24/7 manufacturing operation, Kyocera America has found energy efficiency and generating its own energy critical to meeting the company's environmental charter and to its continued business success.

(continued on back)





About Kyocera America, Inc.

San Diego-based Kyocera America, Inc. provides high-reliability ceramic packages, complex modules, and contract assembly services for a variety of microelectronics markets and applications. It is a wholly-owned subsidiary of Kyocera International, Inc., the North American holding company for Kyocera Corporation. When Kyocera's San Diego facility opened in 1971, it was the first Japanese-owned company with production operations in California. Today, Kyocera is still guided by the values instilled by the company's founder, Dr. Kazuo Inamori – hard work, quality, and the constant pursuit of excellence.

(continued from front)

Optimizing HVAC efficiency

In 2009, Kyocera began a comprehensive HVAC retrofit of half of its air handlers. The remaining units were completed in 2012. As part of this effort, the company installed updated HVAC controls, wireless stat sensors on DX units, variable frequency drives (VFD), and incorporated a Java Application Control Engine (JACE) building management system for remote monitoring and scheduling. With the ability to modulate air temperatures based on outside temperatures and change motor speed, facilities staff can remotely adjust HVAC operation and humidity levels to meet immediate demands. Kyocera America's Plant Operations Manager Drew Miller adds, "By being able to remotely monitor the condition of the HVAC system, we can take timely, corrective action to ensure optimal operation."

Strong collaboration between Kyocera America, SDG&E®, and HVAC contractor A.O. Reed & Co. made this project possible. John Tanaka, Plant Engineering Manager for Kyocera America, explains, "We asked SDG&E to help us assess how much we could save. Then we worked with A.O. Reed & Co. on the installation and application for the incentive program." Kyocera America received an SDG&E Energy Efficiency Business Incentive (EEBI) of \$141,822 and was able to use the SDG&E On-Bill Financing (OBF) program to pay for the project with 0% financing. The biggest reward, however, has been the efficiency results – Kyocera America's new HVAC equipment has delivered 2,703,543 kWh in annual electric savings, reducing the company's overall energy use by 10%. This also eliminated 888 metric tons of CO2 emissions.

Cooperation for cogeneration

In addition to its efforts to save energy, Kyocera America also recognizes the importance of supplementing its supply. The

company has a 235 kW photovoltaic array onsite, and in 2012 completed construction on a new 3.7 MW cogeneration facility. While Kyocera America had a 2.8 MW facility already in operation, the company wanted to replace this 17-year old facility to increase support of green power generation, further lower emissions, and reduce repair costs.

The project started in 2007 with a comprehensive feasibility study. After the project was approved by Kyocera Corporation headquarters in Japan, construction was completed in August 2012, with operation starting immediately after that. According to Nathan Justice, the Kyocera America Plant Engineer who led the effort, "This was an extremely complex project with many entities that had to be coordinated." As a result of the new plant, the company has reduced NOx emissions by 16.7 tons per year.

Approaching efficiency from many angles

By exploring energy efficiency from both the supply and demand sides, Kyocera America has made great progress towards sustainability and environmental stewardship. The company plans to continue these efforts by further improving the energy efficiency of its buildings through lighting upgrades, including LEDs and motion sensors. John Zwick, SDG&E Senior Account Executive for Kyocera America summarizes what makes the company a true Energy Champion, "Kyocera is very focused on minimizing operational energy use. SDG&E is excited to recognize the company for its ongoing accomplishments in this area."

For more information

To learn which SDG&E program is right for your business, contact your SDG&E Account Executive, call the Energy Savings Center at: **1-800-644-6133** or email businessenergysavings@sdge.com.

These programs are funded by California utility customers and administered by SDG&E® under the auspices of the California Public Utilities Commission. Rebates and incentives are provided on a first-come, first-served basis until program funds are no longer available.

P.O. Box 129831 | San Diego, CA 92112-9831 | Connect at sdge.com

©2013 San Diego Gas & Electric Company. All trademarks belong to their respective owners. All rights reserved. Some materials used under license, with all rights reserved by licensor.

