
$2.8 Million Award From the U.S. Department of Energy Advanced Manufacturing Office to Demonstrate Tri-Generation Capability of Stationary Fuel Cells for Industrial Applications

DANBURY, Conn., March 7, 2014 (GLOBE NEWSWIRE) -- FuelCell Energy, Inc. (Nasdaq:FCEL), a global leader in the design, manufacture, operation and service of ultra-clean, efficient and reliable fuel cell power plants, today announced further progress with developing the on-site distributed hydrogen generation market with a $2.8 million continuation of an award from the U.S. Department of Energy's Advanced Manufacturing Office to showcase the tri-generation capabilities of a Direct FuelCell® (DFC®) power plant for industrial applications. Versatile DFC power plants can provide hydrogen at the point of use in addition to ultra-clean electricity and usable high quality heat in a solution that is cost competitive, environmentally friendly and easy to site. FuelCell Energy will install a sub-megawatt fuel cell power plant at its manufacturing facility in Torrington, Connecticut, to generate hydrogen, electricity and heat, replacing hydrogen that is currently purchased and delivered to the facility via truck, and replacing electricity purchased from the electric grid. The tri-generation DFC-H₂® is expected to be operational by the end of 2014.

"The objective of this project is to demonstrate the technology and system that will enable market development for distributed hydrogen used for industrial purposes, delivered efficiently, cleanly and in an economically compelling manner by our existing technology," said Chip Bottone, President and Chief Executive Officer at FuelCell Energy, Inc. "In addition to offering ultra-clean electricity and usable high quality heat, this fuel cell installation will provide reliable on-site hydrogen production that has the potential to reduce costs associated with purchasing, transporting and storing hydrogen. We estimate a potential market size of $1.6 billion for our tri-generation DFC-H₂ fuel cell power plants serving the industrial and mobility markets in the United States alone."

This DFC-H₂ installation can generate about 135 kilograms of hydrogen per day which generally meets the daily requirements of many industrial hydrogen users. Once commercially available, the production cost of the hydrogen from DFC plants is expected to be competitively priced within a range of $5 to $7 per kilogram or even lower with increased production volumes. On-site hydrogen generation from DFC plants avoids the costs and pollutants associated with transportation while enhancing the reliability of supply.

"For this installation in Torrington, hydrogen will be used as an oxidation preventative to support the company's manufacturing process, replacing hydrogen we currently purchase and have delivered," said Neil Aiello, Vice President of Manufacturing at FuelCell Energy, Inc. "The high quality heat will contribute to facility heating while the ultra-clean baseload electricity will support our around-the-clock production."

While this industrial application is the first of its kind, a DFC-H₂ project has been operating for over two years, converting renewable biogas from the Orange County Sanitation District (OCSD) in Fountain Valley, California into renewable hydrogen for vehicle fueling as well as ultra-clean electricity. This installation generates 250 kilowatts of power which is enough to power about 250 average size homes and provide renewable hydrogen that can fuel approximately 25 vehicles per day.

FuelCell Energy power plants provide combined heat and power (CHP) capabilities, also known as cogeneration, by providing both high quality baseload power and thermal energy from a single fuel source. For this project, FuelCell Energy will configure the stationary fuel cell power plant to also produce and distribute useable hydrogen, making it a tri-generation system, or CHHP, and a valuable on-site resource for industrial applications.

Fuel cells electrochemically convert a fuel source into electricity and heat in a highly efficient process that emits virtually no pollutants due to the absence of combustion. The Direct FuelCell® (DFC®) stationary fuel cell power plants manufactured by FuelCell Energy utilize carbonate fuel cell technology and provide continuous baseload power located where the power is used, including both on-site applications and electric grid support. The combination of near-zero pollutants, modest land-use needs, and quiet operating nature of these stationary fuel cell power plants facilitates locating the power plants in urban locations. The power plants are fuel flexible, capable of operating on natural gas, on-site renewable biogas, or directed biogas.

About FuelCell Energy
Direct FuelCell® power plants are generating ultra-clean, efficient and reliable power at more than 50 locations worldwide. With more than 300 megawatts of power generation capacity installed or in backlog, FuelCell Energy is a global leader in providing ultra-clean baseload distributed generation to utilities, industrial operations, universities, municipal water treatment facilities, government installations and other customers around the world. The Company’s power plants have generated more than two billion kilowatt hours of ultra-clean power using a variety of fuels including renewable biogas from wastewater treatment and food processing, as well as clean natural gas. For more information, please visit www.fuelcellenergy.com

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